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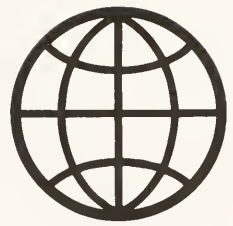
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The Institutional Environment of Financial Reporting Regulation in ASEAN

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Key Words: Accounting institutions in ASEAN; Financial reporting in emerging markets; Accounting in developing countries

Abstract: The growth of regional trading blocs and economic alliances such as the European Union (EU) and the North American Free Trade Agreement (NAFTA), has served to magnify interest in cross-national aspects of financial reporting regulation. While most of the extant literature has looked at developed industrialized countries, this article focuses on the principal features of the institutional environment for financial reporting in an economic bloc of developing countries—the Association of Southeast Asian Nations (ASEAN). These countries are currently the subject of much attention due to the Asian economic crisis. The article has several objectives. First, it highlights the principal features of the institutional structure of financial reporting regulation in ASEAN countries. Second, it helps understand how these features impact on and are affected by several issues, particularly the limits of private sector participation in regulatory affairs, and the need to improve the enforcement in these countries. Finally, it also studies the international dimensions of financial reporting regulation in ASEAN and considers whether ASEAN's institutional arrangements provide an auspicious environment in which to pursue accounting harmonization.

Most of the existing research dealing with financial reporting institutions has focused on the industrialized countries of North America and Western Europe. Research on other geographic regions has been sparse. This article studies the institutional environment of financial reporting regulation (accounting standard-setting and enforcement) in the ASEAN. Formed in 1967, one of the group's principal objectives is to create a robust economic alliance in the Southeast Asian region. The article focuses on the five charter members of the ASEAN—Indonesia, Malaysia, the Philippines, Singapore, and Thailand—because these countries have more developed accounting and regulatory institutions that lend themselves to examination. Brunei, Vietnam, Laos, and Burma, countries that were admitted to the ASEAN in the 1980s and 1990s, have yet to establish institutional and regulatory frameworks for their capital markets. The article discusses

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the domestic and international context of financial reporting regulation in the ASEAN because they affect and are affected by the institutions in these countries. At the domestic level, the article examines the roles played by government agencies and private sector agencies in regulating financial reporting practices in an effort to provide insights into how the broad aims expressed in legislation are translated into regulation. The article also relates the study of ASEAN's institutional environment to two key policy issues, specifically: the factors that hamper the participation of private sector agencies in the development of financial reporting and current limitations in the effectiveness of enforcement mechanisms in each country.

In view of the growing global momentum towards accounting harmonization, we also examine the extent to which international developments in accounting regulation have influenced policy-making in the ASEAN. In particular, we examine the role of the ASEAN Federation of Accountants (AFA) as the sole advocate of accounting harmonization in the region and discuss AFA's failure in convincing ASEAN policy-makers to choose regional harmonization¹ over the International Accounting Standards Committee's (IASC) global harmonization model.

The article is organized as follows. The succeeding section reviews the institutional structure of financial reporting regulation in the ASEAN, emphasizing the importance of relating institutional structures to the broad aims of financial reporting. This section studies and compares the process of formulating financial reporting standards and provides insights into the roles of private sector agencies and government bodies in each country. The second section discusses three key policy issues relating to the institutional environment of accounting regulation in the ASEAN, specifically: (1) the conditions limiting the participation of private sector bodies in regulatory affairs, (2) the need to improve the level of enforcement effectiveness in each country, and (3) the impact of regional and global trends on the development of financial reporting in the ASEAN. The last section concludes the article with a look at whether the ASEAN's institutional arrangements have provided an auspicious environment in which to pursue accounting harmonization given the standard-setting framework in the five countries reviewed.

THE STRUCTURE OF FINANCIAL REPORTING REGULATION IN THE ASEAN

Financial reporting regulation in the ASEAN encompasses existing legislation and requirements set by various regulatory agencies. According to Choi and Mueller (1992), the broad aims of accounting in each country can be discerned, to a large extent, from existing legislation dealing with private companies, securities markets, taxation, and national economic planning matters. However, the broad aims of financial reporting expressed in legislation need to be translated into specific requirements for practical implementation. Legislation plays two important roles in shaping the institutional environment. First, laws often specify the main criterion for preparing financial reports (e.g., to provide a true and fair view). Second, they designate responsibility for administering the law to a government agency empowered to formulate rules it considers necessary to achieve the legislation's aims. This is true to varying degrees in the five countries given that the task of realizing the broad aims of financial reporting rests on various *regulatory agencies*, defined here to mean government agencies and private sector

bodies involved in formulating authoritative accounting pronouncements and/or in enforcing these authoritative rules. Depending on the particular regulatory intent, different government agencies may take charge of formulating specific financial reporting requirements: company registrars for corporate governance aims; securities regulators for capital market-related aims; and taxation authorities for tax objectives. In addition, various private sector organizations in the ASEAN, including professional accounting bodies and stock exchanges, are also involved in realizing the regulatory aims. This section briefly describes the role of government agencies and private sector bodies in financial reporting.

Participants in the Regulatory Process

Government Agencies

Securities market regulators in the ASEAN have broad statutory powers to prescribe financial reporting rules. In Malaysia and Singapore, company registrars ensure that companies comply with specific disclosure requirements found in company laws. In general, company registrars do not specify additional financial reporting requirements beside those already found in company laws. Functions equivalent to a company's registrar are performed by various agencies in Indonesia, Thailand, and the Philippines. However, compared to company registrars in Malaysia and Singapore, government agencies in these three countries actively participate, usually in tandem, with private sector bodies, in formulating financial reporting requirements. Tax authorities specify accounting requirements for tax purposes and, in the case of Thailand, for financial reporting purposes as well. In addition to securities regulators, company registrars, and tax authorities, the government body in charge of licensing professional accountants also plays a crucial role in enforcing financial reporting regulations. This role is played in terms of certifying the qualifications of practitioners in accounting and/or auditing. Table 1 identifies the particular government agency responsible for implementing financial reporting rules associated with company law, securities market legislation, accounting legislation, and professional accounting legislation in each country.

Variations in company law administration are discernible among the five ASEAN countries. Indonesia's company law is administered by the Investment Coordinating Board (BKPM), whose principal mandate is to regulate all forms of investment activities in the country. The registration function is incidental to its main objective, although the BKPM uses its statutory powers over financial reporting to monitor the nature and level of foreign ownership of Indonesian-based enterprises. In Malaysia and Singapore, the principal task of the company registrar is to maintain records of domestic companies, as stipulated by company laws. The Philippines' Securities and Exchange Commission (SEC) monitors the securities markets and maintains records of companies according to the corporation law. In Thailand, the Ministry of Commerce is in charge of various functions, including company registration. Overall, administration of company laws is combined with other tasks in ASEAN countries, except in Malaysia and Singapore, where company administration is handled exclusively by designated company registrars.

Table 1. Key ASEAN Government Agencies in Financial Reporting Regulation

	<i>Indonesia</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>
Company law administrator	Investment Coordinating Board (BKPM)	Registrar of Companies	Securities and Exchange Commission	Registrar of Companies and Businesses	Ministry of Commerce—Commercial Registration
Securities market regulator	Capital Market Supervisory Agency (Bapepam)	Securities Commission	Securities and Exchange Commission	Monetary Authority of Singapore	Securities and Exchange Commission
Accounting law administrator	—	—	—	—	Ministry of Commerce—Accounts Registration
Accountants registering body	Ministry of Finance	Malaysian Institute of Accountants	Professional Regulation Commission—Board of Accountancy	Public Accountants Board	Ministry of Commerce—Board of Supervision of Auditing Practice

Securities market regulation in the ASEAN is administered by a designated securities markets agency, except in Singapore where the country's de facto central bank (Monetary Authority of Singapore or MAS) also regulates the securities markets. Notably, as well, the Philippines' SEC is both company law administrator and securities market regulator. These securities agencies monitor whether companies prepare financial reports in accordance with securities market regulations.

Thailand is the only country among the five that has an accounting law administrator. The Ministry of Commerce—Accounts Registration Department performs functions similar to company registrars in other ASEAN countries. However, Thailand has a separate accounting law that specifies the format and content of financial statements for companies in particular industries. These requirements are simplified "accounting plans," which assist in aggregating financial information for government purposes.

The registration and the licensing of accountants are performed by various agencies ranging from those concerned mainly with professional accountancy matters (e.g., Public Accountants Board in Singapore) to those charged with a broad portfolio of functions (e.g., Ministry of Commerce in Thailand). In Indonesia, licenses to practice accounting are issued by the Ministry of Finance, although in practice, membership in the Indonesian Institute of Accountants (IAI) is sufficient to obtain a license. In Malaysia, although the Malaysian Institute of Accountants (MIA) is the government-based licensing agency, membership in the Malaysian Association of Certified Public Accountants (MACPA) provides a way of obtaining a professional license from MIA. In the Philippines, the Board of Accountancy (a statutory body under the Professional Regulation Commission) licenses accountants, although it obtains advice from the Philippines Institute of Certified Public Accountants (PICPA) in setting its licensing examinations and continuing requirements. The Public Accountants Board (PAB) in Singapore is the government

Table 2. ASEAN Private Sector Bodies in Financial Reporting Regulation

Organization	Indonesia	Malaysia	Philippines	Singapore	Thailand
Accounting Standard Setting Agency	Indonesian Institute of Accountants (IAI) ^a	Jointly—MIA and Malaysian Association of Certified Public Accountants Kuala Lumpur Stock Exchange	Accounting Standards Council ^a	Institute of Certified Public Accountants of Singapore	Institute of Certified Accountants and Auditors of Thailand ^a
Stock Exchange Authority	Jakarta Stock Exchange and Surabaya Stock Exchange		Philippine Stock Exchange (Manila and Makati)	Stock Exchange of Singapore	Securities Exchange of Thailand
Professional Accounting Body	Indonesian Institute of Accountants (IAI)	Malaysian Association of Certified Public Accountants (MACPA)	Philippine Institute of Certified Public Accountants (PICPA)	Institute of Certified Public Accountants of Singapore (ICPAS)	Institute of Certified Accountants and Auditors of Thailand (ICAAAT)
Private Sector Body Involved in Standard-Setting	Indonesian Chamber of Commerce and Industry (KADIN)	Malaysian Chamber of Commerce and Industry	Financial Executives Institute of the Philippines (FINEX)	Singapore Federation of Chambers of Commerce and Industry	Thai Chamber of Commerce
Audit Standard-Setting	Indonesian Institute of Accountants (IAI)	Joint MIA and MACPA	Auditing Standards and Practices Council (ASPC)	Institute of Certified Public Accountants of Singapore (ICPAS)	Institute of Certified Accountants and Auditors of Thailand (ICAAAT)

Note: ^aRequires co-approval by government agency, viz: Indonesia (Bapepam); Philippines (Board of Accountancy); Thailand (Ministry of Commerce).

body that licenses practicing accountants. In Thailand, the Ministry of Commerce—Board of Supervision of Audit Practice (BSAP) licenses accountants, while the Institute of Certified Accountants and Auditors of Thailand (ICAAT) plays an advisory role to the Ministry of Commerce.

Private Sector Organizations

Table 2 lists the private sector organizations involved in financial reporting regulation in the ASEAN. The organizations presented are those in charge of: (1) accounting standard-setting, (2) stock exchanges, (3) registered accountants, (4) users/preparers (in relation to corporate financial reporting matters), (5) audit standard-setting.

Accounting standards are promulgated by professional accounting bodies in Indonesia, Malaysia, Singapore, and Thailand. However, in the Philippines, accounting standards are set by a private sector body with representatives from outside of the accounting profession (e.g., from the Financial Executives Institute of the Philippines) and can therefore be described as following a “mixed private sector” approach.

A similar pattern is observed in regard to the establishing of auditing standards. Professional bodies figure prominently in setting auditing standards in Indonesia, Singapore, and Thailand. However, in the Philippines, such standards are set by the Auditing Standards and Practices Council (ASPC), a joint private sector–government body. While in Malaysia, auditing standards are promulgated jointly by MIA (government) and MACPA (private sector).

Stock exchanges also participate in regulating financial reporting practices. They promulgate listing requirements for companies seeking to have their securities traded in the exchange.² Stock exchange administrators also monitor whether listed companies comply with continuing reporting requirements after such companies have been qualified to list their securities in the exchange.

In comparison with more developed equity-oriented capital markets such as those in the US and UK, the participation of users and preparers of financial statements in the ASEAN financial reporting is less formal. In most ASEAN countries, national chambers of commerce and industry provide comments regarding proposed financial accounting regulations. It is only in the Philippines where the participation of preparers of financial statements in standard-setting activities is formalized. The Financial Executives Institute of the Philippines (FINEX), a private sector body comprising of chief financial officers of companies, is represented in the Accounting Standards Council (ASC), the designated standard-setting agency.

Accounting Standard-Setting: Arrangements and Processes

After briefly describing the role of various ASEAN government agencies and private sector bodies in financial reporting regulation, this section provides an overview of the institutional process and arrangements for setting accounting standards in these five countries. Accounting standard-setting is defined here as the process by which rules on account measurement and disclosure (financial and non-financial) are specified.³ The purpose of accounting standards is to assist in carrying out the intention of various

company, tax, and economic planning legislation. For example, where company laws in the ASEAN prescribe the preparation of general purpose reports, accounting standards define, in fairly specific terms, what should be contained in the reports and how accounts ought to be measured. The distinctive features of standard-setting in ASEAN countries are analyzed here in terms of the authority to set standards, sources of domestic standards, internal structure of standard-setting agency, due process requirements, and influence of government and other private sector groups.

Authority to Promulgate Accounting Standards

Accounting standard-setting in the ASEAN is characterized by a visible, often dominant, role played by professional accounting bodies. This characteristic reflects a relatively high degree of professionalization consistent with a micro-user-oriented accounting system (Gray, 1988). That is, where accounting standards are professionally derived, such standards offer a wider latitude in the exercise of individual judgment compared to a regulatory regime characterized by government-mandated rules.⁴

Starting in the 1960s, there was a shift in Indonesia from Dutch accounting to US accounting.⁵ In Indonesia, IAI first promulgated a set of accounting principles, Indonesian Accounting Principles (*Prinsip Akuntansi Indonesia*) in 1973 in response to government calls to revive the domestic securities market. These standards were revised in 1984 and have been replaced when IAI issued *Indonesian Financial Accounting Standards* (IFAS) in 1994.

In 1972, MACPA issued Malaysia's earliest accounting pronouncements, called *Recommendations on the Presentation of Accounts*. MACPA's official aim was to help ensure that financial reports meet the requirements of the *Malaysian Companies Act 1965*. MACPA also published a so-called *Specimen Accounts* in 1976 to supplement the guidelines issued earlier. In 1977, MACPA began issuing *Approved Accounting Standards* based on IAS and *Malaysian Accounting Standards* (MAS).⁶

In the Philippines, PICPA has issued *Accounting Principles Board Opinions* (APBs) (Accounting Principles Board (APB), 1970) and *Special Bulletins* (SBs) on specific accounting issues since the early 1970s to provide recommended guidelines on financial reporting.⁷ Since 1981, the ASC has exercised standard-setting functions. It has also issued *Statements of Financial Accounting Standards* (SFAS) that are mandatory for all CPAs.

In Singapore, ICPAS has been at the forefront of standard-setting activities, issuing a *Statement of Recommended Accounting Practice* in 1970. This statement provides guidance to companies on complying with the disclosure requirements found in the *Singapore Companies Act 1967*. In 1977, ICPAS began issuing *Statements of Accounting Standards* (SAS), which are mandatory, and *Recommended Accounting Practices* (RAP), which are voluntary.

Thailand's ICAAT has issued *Recommended Accounting Concepts and Principles* (1972), which discusses the fundamental bases for preparing financial statements. Since 1979, ICAAT has also promulgated Thai Financial Accounting Standards (TFAS), which addressed specific accounting areas.

While professional accounting bodies are active in standard-setting, most do not receive direct statutory support for their standard-setting activities. The exception is in Indonesia,

where IFAS receive legislative backing through the *Capital Market Law (1995)*. This law requires companies to comply with accounting standards promulgated by IAI, although government agencies such as *Bapepam* and Bank Indonesia must approve such standards. In the other countries, professional accounting standards are imposed directly on registered auditors or members of the professional body, but not on reporting entities. In Malaysia, AAS and MAS are mandatory on all registered accountants by virtue of the *Accountants Act (1967)* and *Rules (1972)*. In the Philippines, SFAS are mandatory on all accountants through the *Revised Accountancy Law (1975)*. In Singapore, ICPAS' rules require its members to ensure compliance with SAS.⁸ While SAS are not mandatory on companies, ICPAS (1994) has indicated that compliance with these standards is necessary for financial statements to provide a *true and fair view*, in accordance with the *Singapore Companies Act*. In Thailand, ICAAT's standards are mandatory only on its members.⁹ ICAAT (1993) has stated, however, that following TFAS is necessary to achieve compliance with the Ministry of Commerce rules.

Sources of Domestic Accounting Standards

Contemporary accounting standards in the ASEAN draw heavily from foreign sources, mainly UK, US, and IASC standards. The earliest Indonesian Accounting Principles (PAI) are based on Grady's (1965) *Inventory of GAAP for Business Enterprises*. In 1984, the PAI were revised slightly to incorporate some Indonesian business concepts. In addition, between 1987 to 1991, several statements of accounting principles that drew upon US accounting treatments were issued in Indonesia. Finally, in September 1994, Indonesia adopted 21 International Accounting Standards (IAS), renamed "Indonesian Financial Accounting Standards" and made them mandatory for all publicly listed companies.

Accounting standards in the Philippines and Thailand also draw heavily from US accounting sources. Philippine accounting standards follow treatments recommended by the US standard-setting bodies (SGV and Andersen, 1983). Thailand's *Recommended Accounting Concepts and Principles* are based generally on US GAAP, although they also incorporate concepts from the UK and Germany (especially the concept of *prudence*). In the 1980s, however, the Philippines began to develop domestic standards based on the pronouncements of the US. While Thailand continues to draw upon US pronouncements, it also gradually began to adopt IAS promulgated by the IASC. Currently, 17 of 23 Thai accounting standards are based on the IAS.

Malaysia and Singapore have historically looked to the UK in setting their domestic accounting standards. After the IASC's formation in 1973, Malaysia and Singapore have been the two earliest countries in the ASEAN to adopt IASC standards. Both announced their support for the IASC's efforts in the mid-1970s, unlike Thailand's ICAAT, which adopted the *content* of some international standards but did not explicitly announce its support for the IASC. In Malaysia, most IAS are adopted as Approved Accounting Standards. In Singapore, adopted IAS are referred to as SAS. Each country prefaces the pertinent IASC standards with some guidelines on their application to domestic circumstances. Overall, the recent trend in the ASEAN is towards the adoption of the IASC standards. Malaysia, Singapore, and Thailand are among the earliest adopters of IASC

standards. In Indonesia, *Bapepam*, the country's securities market agency, has encouraged the move towards IAS.

Structure of the Standard-Setting Agency

Standard-setting agencies in the ASEAN are generally dominated by professional accountants. In Indonesia, the IAI's Commission on Accounting Principles, which prepares the recommended accounting standards for consideration by the IAI Council, has seven members from public practice, government, commerce and industry, and education, all of whom must be IAI members. Similar arrangements exist in Malaysia, Singapore, and Thailand, where a particular committee of the professional body takes charge of preparing proposed accounting standards.¹⁰ These committees generally comprise representatives from public practice, government, commerce and industry, and education, all of whom must be members of the professional accounting body. The Singaporean and Thai structure are more formal. In Singapore, the ICPAS Council consists of eight members from public practice and eight members from other areas (e.g. commerce, industry, education) and three members appointed by the Minister of Finance. In Thailand, the ICAAT Sub-Committee consists of 15 members from public practice, commerce and industry, the government (Ministry of Commerce), and major Thai universities. The Philippine's ASC has eight members from the Board of Accountancy,¹¹ the SEC, *Bangko Sentral ng Pilipinas* (i.e., Central Bank), and FINEX, who do not necessarily have to be members of PICPA. However, four of the posts, including the Chair, are reserved for PICPA representatives, thus ensuring a predominant influence by the accounting profession.

Adherence to Due Process

Another common feature of accounting standard-setting in ASEAN countries is the observance of some notion of due process, apparent, for example, in the need to release proposed standards for public comment and to consult with various constituents in government and the private sector. Due process is aimed at fostering acceptance of professional standards, although steps followed in each country vary in their degree of formality and the extent to which government agencies participate in the process.

In Indonesia, the IAI's Commission on Accounting Principles (CAP) circulates draft accounting standards among IAI members, selected government agencies (i.e., *Bapepam*, Bank Indonesia, Investment Coordinating Board, Ministry of Finance, Directorate of Taxation), and company representatives (Indonesian Chamber of Commerce) for comment. The exposure period (no less than 6 months) allows CAP to revise the draft based on comments received. The revised draft is then endorsed by CAP to the IAI board of directors whose approval makes the standards mandatory for all IAI members.¹²

The standard-setting process in Singapore is similarly straightforward. ICPAS' Accounting Standards Committee, whose members are appointed by the Institute's Council, examines current IAS to determine their relevance to Singapore. If deemed suitable, the Committee distributes the IAS for comment to various government and private sector

organizations including the Stock Exchange of Singapore (SES), the Association of Banks of Singapore, and the Chambers of Commerce. Modifications to IAS are made by the Committee using the comments received, as well as various legal and regulatory considerations. The revised standard is sent to the ICPAS Council for approval, which is not automatic. For example, the Council demurred approval of IAS 4 and 25 (Han, 1994) and has not adopted IAS 6, 15, and 29.

Standard-setting in Malaysia is slightly more complex because consensus of two accounting bodies is needed. The joint committee of MIA and MACPA determines whether a particular IAS is suitable and what changes, if any, are warranted. In comparison, MAS are drafted after the technical committees of both organizations have identified a specific area of accounting (e.g., aquaculture, insurance) requiring an accounting standard that is not addressed by an existing IAS. Proposed IAS-based accounting standards and MAS are circulated to members of both bodies, pertinent government agencies, and private sector groups, with the exposure period generally lasting 6 months. The proposed standards are revised based on responses received. Standards are then approved by the respective Councils of MIA and MACPA and issued as approved accounting standards, to be implemented 6 months from the approval date.

Standard-setting in Thailand is broadly similar to that adopted in Indonesia, Malaysia, and Singapore, with one important difference: formal approval is required from the Ministry of Commerce BSAP for all accounting standards. In the process of preparing standards, drafts are sent to ICAAT members and presented in public seminars or hearings. In addition, questionnaires are sent to individuals occupying senior positions in public practice, government, commerce, industry, and academia, who are selected by the Sub-committee on Accounting Principles. Changes are made in response to feedback received. The revised draft standard is then presented to the ICAAT Board of Directors and Ministry of Commerce for approval, whereupon the Thai Financial Accounting Standards become binding on registered auditors.

In the Philippines, the government formally approves new standards, too. However, the approval process is more elaborate. The ASC first establishes a project committee to determine whether an accounting standard in a particular area is needed. If so, the project committee prepares a draft accounting standard. A draft approved by at least five of the eight ASC members is then released officially to PICPA members, FINEX members, pertinent government agencies and interested parties in commerce and industry for comment. After a 60-day exposure period, responses are evaluated by the project committee and changes made, if necessary. If a majority of ASC members approve the revised draft, it is issued as a formal accounting standard; otherwise, a review process is initiated. The ASC-approved standard is submitted to the Board of Accountancy for endorsement and then to the PRC for approval, usually a formality. Once approved by the government, the standard becomes effective for all licensed accountants.

Overall, arrangements in the ASEAN appear to be rudimentary and far less complex than those found in industrialized Western countries. Accounting standards, in general, are adopted on the strength of the professional bodies' recommendations. The intense lobbying and contention over proposed standards, increasingly experienced in the US and other industrialized countries, is rare in the ASEAN.

LIMITATIONS OF AND PROSPECTS FOR THE INSTITUTIONAL ENVIRONMENT OF FINANCIAL REPORTING REGULATION IN THE ASEAN

After describing the key characteristics and processes of financial reporting regulation in the ASEAN, this section discusses the impact of government agencies and private sector bodies, within and outside of the ASEAN, on the development of financial reporting in these countries. Some of the policy implications of the interaction between government and private sector are highlighted. This section also highlights the need to improve the system of enforcement in the ASEAN to bolster the quality of financial reporting in these countries. This need for better enforcement and greater transparency in financial reporting has been driven home by the failure of many large companies and financial institutions in a number of ASEAN countries during the recent Asian economic crisis.

Factors Limiting Private Sector Participation

The relative degree of influence of government agencies and private sector bodies on a country's financial reporting institutional environment can be summarized in terms of one of four predominant approaches to regulation: (1) legalistic; (2) hybrid; (3) professional; and (4) market (Puxty et al., 1987). A legalistic approach means that the government's influence over financial reporting is paramount. This contrasts with the professional approach where the professional accountants set the pace for regulation. A hybrid approach is characterized by roughly equal participation by government and private sector in regulation, while market means that firms are generally free to select whatever financial reporting practices best suit their needs. Following this method of classification, the accounting standard-setting arrangements in Indonesia, Malaysia, Singapore, and Thailand may be described as adopting a professional approach, while that in the Philippines uses a hybrid approach.

While these categories draw attention to the *predominant* and *official* regulatory approach adopted in each country, they do not adequately capture the complex structure of domestic standard-setting arrangements (e.g., Puxty et al., 1987; Bloom and Naciri, 1989; Gorelik, 1994). For example, McKinnon and Harrison's (1985) study of Japanese corporate financial reporting regulation stressed the importance of informal consultative arrangements between government agencies and private sector bodies. This dimension of regulation is not reflected in the broad approaches listed above. Moreover, evidence in Western industrialized countries shows that the potential for government takeover of the regulatory process often strongly influences the deliberation and outcome of private sector regulatory processes (Johnson and Solomons, 1984; Dyckman, 1988; Gorelik, 1994).

Two factors appear to be significant in encouraging the active participation of private sector agencies in accounting regulation. The first is a government policy supportive of innovation in financial reporting and characterized by the absence of rigid measurement and disclosure rules. The second is the presence of well-organized private sector bodies capable of formulating and implementing financial reporting rules. However, the evidence to support these conditions is mixed among the five ASEAN countries studied.

On one hand, while most ASEAN governments have refrained from imposing uniform reporting requirements, they have nonetheless exercised a relatively high degree of control over disclosure practices in their respective jurisdictions. In Indonesia, *Bapepam*¹³ is involved strongly in disclosure regulation. Since 1987, it has issued *Directives Regarding the Form and Content of Financial Statements of Indonesian Listed Companies*, which are mandatory on all listed companies.¹⁴ *Bapepam*'s influence is evident in that it requires companies to prepare financial statements in accordance with IFAS and requires that an audit be conducted by a *Bapepam*-registered accountant. *Bapepam*'s statutory powers have been further strengthened by the *Capital Markets Law 1995*, although the agency has so far delegated the task of formulating accounting standards to the IAI. *Bapepam* accepted IAI's promulgation of IFAS in 1994 and made them mandatory for all publicly listed companies in 1995. Other government agencies, which have lent support to IAI standards, are the Directorate General of Taxation and Bank Indonesia, which generally require companies under their jurisdiction to use IFAS. Moreover, reports submitted to these agencies must be audited by public accountants registered with the Ministry of Finance. Pertamina, the state petroleum agency, is the sole exception. It regulates all aspects of the oil and gas industry in Indonesia, and prescribes reporting requirements for the industry independent of the IAI and other government agencies.

In Malaysia, government agencies are generally supportive of the efforts of the profession. The government Capital Issues Committee (CIC), which regulated securities offerings prior to 1992, generally required companies to comply with MIA/MACPA accounting standards. Subsequently, the Malaysian Securities Commission, established in 1992, endorsed the use of MIA/MACPA accounting standards by companies under its jurisdiction. It has also issued its own disclosure requirements for companies listed on the stock exchange. The Kuala Lumpur Stock Exchange, while not strictly a government body, requires listed companies to comply with accounting standards issued by MIA/MACPA and requirements of the Malaysian *Companies Act*. Other government agencies that recognize professionally-derived accounting standards include Bank Negara Malaysia (Central Bank) and the Directorate General on Insurance. Bank Negara Malaysia issues its own set of financial reporting rules for banks and financial institutions, in accordance with the *Malaysian Banking Act 1973*.

The general level of support of private sector initiatives is likewise high in the Philippines where official endorsement is given to SFAS by the Board of Accountancy and PRC. The SEC and the Central Bank also require companies to comply with SFAS and to undergo an audit by a licensed CPA. The Philippine SEC, modeled on its US counterpart, plays a strong role in defining financial reporting regulation. Similar to Indonesia, the Philippine SEC issues its own regulations, which are based on the US SEC Regulation S-X. Though the SEC allows the ASC to formulate accounting principles, which should be adhered to in all financial reports submitted to the SEC, it has reserved the right to impose additional financial reporting requirements.¹⁵ The Central Bank has participated in formulating GAAP for the banking industry, together with representatives from the ASC and the Bankers Association of the Philippines. Nonetheless, the Central Bank also issues its own set of *Regulatory Accounting Policies*, which are to be complied with in all submissions to it. In practice, differences between SFAS and Regulatory Accounting Policies have been minimized through a joint task force between the ASC and the Central Bank.

In Singapore, government influence on financial reporting and support of professional accounting initiatives is directly evident in legislation and, indirectly, through audit requirements. The 1990 amendments to the Ninth Schedule of the *Singapore Companies Act* have incorporated directly most of the accounting standards and recommended accounting practices issued by ICPAS. In addition, government agencies such as the Registrar of Companies and Businesses and the MAS require companies to be audited by a licensed CPA. Apart from ICPAS, several state and private sector organizations have also developed standards applicable to companies under their jurisdiction. The MAS, based on its mandate under the *Banking Act* and the *Securities Industry Act*, has specified disclosure requirements for financial institutions and companies issuing their own securities to the public. The SES also issues its own *Listing Manual* and *Disclosure Policy Guidelines* containing requirements beyond those specified by the *Companies Act*.

Of the five ASEAN countries, the Thai government exercises a significantly more interventionist role in regulating financial reporting. Thailand is the only ASEAN country that has promulgated *Accounting Acts* to regulate financial reporting practices. In 1976, the Ministry of Commerce issued regulations, which provide uniform formats and a detailed list of disclosures for companies. The Thai Internal Revenue Department also exercises strong influence on accounting practice by requiring companies to use the same accounting policies for financial and tax reporting purposes. Thus, deliberations on proposed accounting standards always take into consideration the potential tax effect on companies. Moreover, the opinion of the tax department is sought specifically before accounting standards are approved. Other agencies that influence financial reporting practices are the Thai SEC, Stock Exchange of Thailand (SET), and the Bank of Thailand. The Thai SEC (established 1993), similar to its counterparts in Indonesia, Malaysia, and the Philippines, has the authority to promulgate financial reporting rules for public companies. So far, it has delegated this task to ICAAT and the SET. The SET imposes comprehensive disclosure requirements on listed companies. While these requirements exceed those prescribed by the Ministry of Commerce and ICAAT, they do not deal specifically with accounting measurement issues. Finally, the Bank of Thailand (Central Bank) sets disclosure and measurement rules applicable to banks and financial institutions.

Overall, government agencies appear to have been reluctant to specify accounting measurement rules. However, these agencies actively prescribe disclosure rules. Stock exchange administrators have been given quasi-regulatory status. As such, they also prescribe disclosure requirements. Central banks in the ASEAN provide account measurement rules for banks and financial institutions under their jurisdiction. The Indonesian state petroleum agency, Pertamina, promulgates its own rules for companies in the oil and gas industry. Finally, Thailand's tax authority has influenced accounting practices in the country. These exceptions suggest that government agencies are more likely to regulate measurement practices in specialized industries or in situations where tax considerations are paramount.

Another condition that partially precludes private sector bodies from fully participating in regulatory affairs is the limited government support they receive. While the participation of the private sector in the ASEAN financial reporting regulation is bolstered by the presence of a duly recognized professional accounting body in each country, the level of influence exerted by such bodies differs significantly (Morse, 1993), and depends largely

Table 3. Profile of Professional Accounting Bodies in the ASEAN

	<i>Indonesia</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>
Professional accounting body	IAI	MACPA	PICPA	ICPAS	ICAAT
Year established	1959	1958	1929	1963	1948
Membership ^a	4,500	2,067	21,000	8,000	3,000
Membership required for practice	Yes	No ^b	Yes	Yes	No ^b

Notes: ^aIFAC membership statistics.

^bIn Malaysia, an accountant has to be a member of MIA (government licensing body) in order to practice. In Thailand, there is no government requirement for an accountant to be a member of ICAAT.

on the relative prestige and political clout of the accounting profession. Other factors affecting the profession's ability to influence regulatory matters include the professional body's degree of organization, the profile of its members, and the government's attitude towards the accounting profession. Some characteristics of ASEAN professional accounting bodies pertinent to explaining their level of influence in standard-setting are presented in Table 3.

Most of the professional bodies in the ASEAN (apart from in Thailand) were established during the post-war, post-colonial era of each country. The exception is PICPA in the Philippines, an agency established during the period of US colonization and which continued to operate well into the post-colonial era. The longevity of these organizations suggests their success in attaining institutional legitimacy (Johnson and Solomons, 1984; Gorelik, 1994). However, membership sizes are small relative to populations, except in Singapore and the Philippines. Differences in size could indicate the vocational appeal enjoyed by the accounting profession and the relative difficulty in obtaining professional certification.

The level of government support for the professional body can also be gauged by whether government rules require practicing accountants to be members of the professional organization. Malaysia and Thailand differ from the other countries in this regard. In Malaysia, the government-backed professional body (MIA) licenses accountants. Practitioners, therefore, have to be members of MIA, but not necessarily of MACPA.¹⁶ In Thailand, accountants need only to be licensed by the BSAP to exercise their profession. Notably, the status of the accounting profession in Thailand parallels closely that of some countries in Continental Europe (e.g., Germany, Belgium) and Northeast Asia (e.g., Japan, South Korea), where the professional body plays a relatively minor role in financial reporting regulation. Despite these limitations in the strength of private sector bodies in the ASEAN, consultations between private sector bodies and government agencies, whether official or unofficial, still occur frequently. In Thailand, while ICAAT sets accounting standards, government officials form a significant bloc of the committee, which studies and proposes new accounting standards. In Indonesia, Malaysia, and Singapore, consultations are built into the exposure period for draft standards or in the preparation of accounting standards related to specific industries such as banking and

insurance. In some cases, the government agency “prompts” or “encourages” the professional body to develop appropriate standards to address a perceived need. An example of this is Bank Indonesia’s sponsorship of standard-setting activities by the IAI as part of the Indonesian government’s capital market development initiative from 1970–1975. Government agencies retain veto power over professional accounting standards, which while not being exercised directly, could be decisive in determining the outcome of accounting deliberations.

The role of other private sector groups in accounting standard-setting, particularly preparers of financial statements and user groups, appears minimal. However, it would be incorrect to conclude that these groups do not influence standard-setting activities. The consultative process adopted by professional bodies is designed, in part, to accommodate the concerns of the business community. For this reason, drafts are often sent to national chambers of commerce and industry groups. The case for business consultation is particularly strong in Thailand where accounting standards have direct tax implications for companies. The other route by which preparers of financial statements could influence standard-setting outcomes, albeit indirectly, are through representations made by public accountants who, in view of their association with their clients, are aware of the likely impact of new accounting standards on companies.

In order to formally include the various constituents that are affected by the financial reporting regime, a possible next step in the development of institutional mechanisms relating to financial reporting in ASEAN might be to adopt a hybrid approach wherein the independent regulatory body includes members of the private sector and government in it. Only the Philippines has taken steps toward this direction, whereby the ASC includes representatives from key government agencies, the accounting profession, and corporations. This agency, however, is still seen largely as being dominated by the accounting profession. One variation of this institutional approach is that adopted in the US where the private standard-setter, the FASB, includes full-time appointed members with public accounting, industry, and academic backgrounds. Another approach would be the Dutch Council for Annual Reporting (*Raad voor de Jaarverslaggeving*), which includes representatives from employer groups, employees, accounting professionals, and financial statement users. It is important that the approach ultimately adopted by individual ASEAN countries be based on a careful consideration of each country’s political, economic, and socio-cultural circumstances.

Effectiveness of Enforcement and Quality of Financial Reporting

Another key policy issue in the ASEAN’s financial reporting environment is the level of effective enforcement in these countries. The credibility of professional accounting bodies as standard-setters could be tarnished irreparably if companies resist or do not comply with standards set by the profession (Johnson and Solomons, 1984; Gorelik, 1994). However, the evidence supporting the effectiveness of enforcement in the ASEAN indicates an acute need to improve current levels of compliance in most member countries. Financial reporting regulations can be enforced using a combination of preventive (ex ante) and punitive (ex post) methods. Responsibility for enforcement could also be predominant in the public sector or private sector. These variations in

Table 4. Enforcement Methods Adopted in the ASEAN

<i>Type of method</i>	<i>Indonesia</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>
Preventive					
(a) Audits by government-certified auditors	Yes	Yes	Yes	Yes	Yes
(b) Government licensing of auditors	Yes	Yes	Yes	Yes	Yes
(c) Continuing professional education requirements	Yes	Yes	Yes	Yes	Yes
(d) Periodic government review of audit function	No	No	No	Yes	Yes
(e) Supervisory boards for companies	Yes	No	No	No	No
(f) Audit committee requirements	No	No	No	Yes	No
(g) Legal requirement for adequate internal controls	No	No	No	Yes	No
(h) Securities market rules requiring unqualified audit report	Yes	No	No	Yes	Yes
Punitive					
(a) Prosecution of auditors	No	No	No	Yes	No
(b) Censure or suspension of licensed auditors	No	Yes	Yes	Yes	Yes
(c) Prosecution of company officers of directors	Yes	Yes	Yes	Yes	Yes
(d) Fines or penalties imposed on company or its officers for reporting violations	Yes	Yes	Yes	Yes	Yes
(e) Suspension or delisting from securities markets	Yes	Yes	Yes	Yes	Yes
(f) "Watch lists" of violating companies	No	Yes	No	Yes	No

Sources: ASEAN Company and Securities Legislation; ASEAN Stock Exchange Regulations; discussions with ASEAN accounting practitioners.

ASEAN countries are evident in Table 4. Commonalties are exhibited in requiring audits by licensed auditors only; requiring an examination and work experience for all auditors; requiring continuing professional education for accountants; imposing penalties on auditors and companies for violation of legislation or standards; and delisting securities of companies for non-compliance.

Differences are apparent in that an independent government review of auditors' performance is adopted only in Singapore and Thailand. In Singapore, the PAB reviews auditors' compliance with provisions of the *Accountants Act*. In Thailand, the BSAP regularly evaluates the performance of auditors. In terms of corporate governance structures, Indonesia requires a supervising board of non-executives to oversee the board of directors.¹⁷ Moreover, Indonesia, Singapore, and Thailand all have laws that require companies to submit clean audit reports before issuing securities to the public. In general,

Singapore has a more elaborate approach to prevention, requiring listed companies to form an audit committee (composed mainly of non-executive directors) and ensuring that an adequate system of internal controls exists.

Incidents of punitive measures being applied in the ASEAN are infrequent. Apart from Singapore, there have been no cases of judicial actions against auditors. In Singapore, the publicly listed Pan Electric collapsed in the mid-1980s and auditors were sued by its receivers. Instances of penalties imposed on companies for violating legislation have occurred occasionally in the ASEAN. These penalties are often imposed by the securities regulator or the stock exchange on companies that fail to provide adequate disclosures in accordance with existing regulations.

In terms of enforcement responsibility, varying degrees of emphasis exist on self-regulation by professional accounting bodies. Self-regulation appears to be most highly developed in Malaysia, Singapore, and the Philippines where professional accounting bodies have their own disciplinary and investigative arms to deal with possible violations of accounting and auditing standards by members. A comparable concept of self-regulation has yet to develop in Indonesia and Thailand where the onus is on government agencies to pursue possible violations of accountancy laws. This is particularly so in Thailand where less than 50 percent of certified accountants and auditors are members of ICAAT. Also, the professional accounting bodies in Malaysia and Singapore appear to be more concerned with reviewing the financial reporting behavior of companies; they have a Financial Statements Review Committee, which annually reviews a sample of company annual reports for compliance with legislation and accounting standards.¹⁸ Departures from standards are brought to the attention of the auditors and executive officers of companies. Violating companies are placed on a watch list and monitored carefully in subsequent periods.

The structure of regulation in developing countries has many general weaknesses in terms of compliance. The World Bank (1989, p. 90) observed that "in developing countries, accounting and auditing practices are sometimes weak, and financial laws and regulations do not demand accurate and timely reports." Given the diversity of conditions in developing countries, the primary interest here is to determine the extent to which these views appropriately describe conditions in individual ASEAN countries.

Evidence regarding the strength of enforcement in the ASEAN is anecdotal and generally reveals differences in perceived or actual effectiveness of regulation. Euromoney (1993) canvassed the views of global investors regarding the perceived quality of the financial accounting systems in developing capital markets, which are rated from 1 (lowest quality) to 10 (highest quality). The results for the ASEAN (excluding Singapore) were as follows: Malaysia (9.17), Thailand (7.14), Philippines (5.33), and Indonesia (5.00).

Table 5 summarizes findings of studies conducted by the International Finance Corporation (1994), the private sector financing arm of the World Bank, and the Asian Development Bank (1995) on the perceived quality of accounting regulations in ASEAN.¹⁹ The IFC assessments did not define the categories of "good," "adequate," and "poor." However, only Malaysia rated good in terms of accounting standards, investor protection, and effectiveness of securities regulators. Indonesia rated poor in terms of accounting standards, partly because it had not adopted a comprehensive set of accounting standards by 1993 when the survey was conducted. The Philippines was classified as having good accounting standards while Thailand was rated as having

Table 5. IFC and ADB Assessments of Financial Reporting Regulation in the ASEAN

<i>Criteria</i>	<i>Indonesia</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Thailand</i>
IFC				
● Accounting standards	Poor	Good	Good	Adequate
● Investor protection	Adequate	Good	Adequate	Adequate
● Securities regulator	Adequate	Good	Adequate	Adequate
ADB				
● Investor protection	Credit rating agencies exist; small capital markets reduce role of securities and exchange supervision.	Credit rating agencies exist; fairly strong and effective securities and exchange supervision.	Credit rating agencies exist; securities and exchange supervision active in recent years.	Credit rating agencies exist; securities and exchange supervision vigilant and active.
● Information disclosure	Problems with disclosure and solvency of government banks.	Rules much improved recently but still inadequate.	Some problems with disclosure and insolvency of government banks; rules need improvement.	Disclosure much improved in recent years after some insolvency episodes.
● Legal and accounting framework	Weak framework; limited recent attempts at improvement.	Technically adequate and developed; quite effective in exercising controls.	Relatively sophisticated systems; overly active legal system sometimes an impediment.	Reasonably developed; weaknesses in the legal framework.

Sources: International Finance Corporation (1994); Asian Development Bank (1995).

adequate accounting standards, although the basis for such determinations was not clear. The study implied the need for substantial improvement in Indonesia, Thailand, and the Philippines in implementing accounting standards. This view was reinforced by the study by ADB (1995), which identified problems relating to disclosure adequacy and reliability in Indonesia and the Philippines. In Thailand, disclosure quality was perceived to have improved after the government implemented regulatory reforms to relieve the financial distress suffered by some listed companies in the 1980s. The ADB provided further information on the state of accounting in Indonesia and the Philippines (no information was provided on Malaysia and Thailand). With regard to Indonesia, the ADB observed that:

Present corporate and tax laws in Indonesia require that adequate financial records be kept, but do not impose accounting requirements and standards to ensure financial disclosure. (1995, p. 227)

In the Philippines, it noted that

Auditors certify the accuracy of the accounting information and methods used, not necessarily the veracity of the information . . . much depends on the willingness of the firm to disclose pertinent information about itself and the project . . . audited financial statements are as good as the amount and quality of information provided by the firm. In this environment, the problem of asymmetric information persists. (1995, p. 227)

The observation made with regard to the Philippines also applies to Indonesia, Malaysia, and Thailand, where cultural attitudes pose barriers to full disclosure of the reporting entity's affairs. In Singapore, the overall level of compliance is considered high although ICPAS declined to disclose details of compliance rates.²⁰ Unless resolved through more effective regulatory measures, these differences in enforcement effectiveness will continue to hamper the quality of financial reporting among the five countries.

International Dimensions of Accounting Regulation in the ASEAN

A third policy aspect of the institutional environment for financial reporting in the ASEAN is the increasingly visible impact of external developments on domestic matters. One key issue is whether each country should be aligned with a regional or global model of financial reporting. The AFA has been the main proponent of regional accounting harmonization in the ASEAN. The impact of global developments on the ASEAN is highlighted by the participation of ASEAN accounting bodies in IASC activities. These two international dimensions of regulation in the ASEAN are discussed below.

ASEAN Federation of Accountants (AFA)

AFA was formed by the professional accounting bodies of the five original ASEAN members in March 1977 (ASEAN Federation of Accountants (AFA), 1977). Membership in AFA is open to a duly recognized professional accounting body from each ASEAN country, except for Malaysia, which is represented by both MIA and MACPA. Representatives from the member bodies form AFA's governing council, which sets its agenda and overall policy direction.

Accounting harmonization was one of the main reasons for establishing AFA (Kondo, 1992). In an address preceding AFA's formation, then chairman of the International Federation of Accountants, SyCip asserted

The formation of an ASEAN accountants organization . . . will make it easier to harmonize the accounting principles and practices in the region. We will thus be complementing the efforts of the ASEAN private and government sectors in the economic development of the region. (SyCip, 1977)

However, AFA has achieved little success in its efforts to pursue regional harmonization. The initial effort at regional harmonization was manifested in the formation of a Committee on Accounting Principles and Standards (CAPS), whose charge included undertaking programs to develop accounting principles and auditing standards applicable

to conditions in the ASEAN. Following a survey of accounting principles and practices in the ASEAN, CAPS issued an exposure draft called *ASEAN Accounting Standard (AAS) No. 1 Fundamental Accounting Principles* (ASEAN Federation of Accounts, 1978a,b). The disclosure and measurement rules in AAS 1 provided a benchmark against which to compare accounting standards and practices in the region. In most cases, no substantial differences were expected between AAS and domestic standards. Where differences existed, AAS were not intended to override domestic accounting standards and regulations. However, little was done after AAS 1 was published. Notably, CAPS did not issue any other AAS, leading one observer to opine that AFA's impact on regional accounting harmonization "has been zero" (Donleavy, 1991, p. 306).

Regional harmonization suffered a further setback following the publication in 1984 of a comprehensive survey, which analyzed a wide range of accounting standards and practices in ASEAN (SGV, 1984). It pinpointed the sources of regulation for each accounting issue, and concluded that two groups of accounting practices were clearly discernible in the ASEAN. The first group, comprising of Indonesia, the Philippines, and Thailand, were influenced in various degrees by US accounting practices, albeit the Philippines more strongly so than Indonesia and Thailand. The second group, consisting of Malaysia and Singapore, generally adopted practices in the UK.

The SGV (1984) survey prompted a rethink of AFA's harmonization program by underscoring the practical difficulties of pursuing regional harmonization among the (then) five ASEAN members. It identified significant differences in institutional mechanisms and regulations among ASEAN countries, which served as barriers to regional harmonization. More importantly, it provided strong evidence that these environmental and institutional level differences were associated with differences in financial accounting practices. The SGV study also drew attention to the significant influence of each country's colonial history, government agencies (whose objectives diverge from professional bodies in some cases) and IAS on financial reporting standards and practices. These long-standing and influential sources of accounting difference cannot be ignored in AFA's pursuit of regional harmony. Although no public documents were ever published to this effect, it appears that AFA's policy-makers determined that the effort and resources needed to achieve regional harmonization exceeded the benefits of such harmonization. With the EU's decision in 1995 to essentially abandon regional harmonization and cast its lot with the IASC, it appears highly unlikely that regional accounting harmonization will be seriously pursued in the ASEAN.

ASEAN and the International Accounting Standards Committee

Support for the IASC among the five ASEAN countries has generally been strong. To varying degrees, Malaysia, Singapore, Thailand, and Indonesia have endorsed IAS for domestic reporting purposes and their professional accounting bodies have also participated in IASC Steering Committees. The strong support for IASC initiatives in ASEAN is significant because it indicates that a majority of ASEAN professional accounting bodies favor the global model of harmonization. However, it does not follow that individual ASEAN countries unquestioningly accept IAS. In Malaysia and Singapore, while IAS provide the principal basis for domestic standards, their professional accounting bodies review the applicability of IAS for local use. In Singapore, some IAS (e.g., IAS 6, 15, 29)

have not been adopted because they were considered inappropriate. In Malaysia, IAS dealing with inflation accounting, government grants, business combinations, related party disclosures, and accounting for financial institutions have not been adopted. Instead, MACPA and MIA have developed their own standards on these matters as well as on insurance and aquaculture. Thailand has been rather deliberate in adopting IAS, having adopted only 17 IAS thus far. Indonesia has adopted 21 IAS and is developing its own standards in other areas. The Philippines primarily relies on US GAAP although standards issued after 1990 make some reference to IAS.

Overall, the strong support accorded to IAS is attributable partly to features of financial reporting regulatory systems in the ASEAN. First, standard-setting agencies in the ASEAN have historically lacked the resources necessary to research accounting issues. IAS are attractive to ASEAN countries because of their ready availability, the perception that such standards are based on substantial research, and the fact that IAS are the product of a supranational body. Second, IAS allow alternative accounting treatments, which are mostly accepted in countries that have strongly influenced accounting practice in the ASEAN (UK and US). As such, IAS are highly compatible with the predominantly micro-user orientation of accounting in the ASEAN. Notably, it is the professional accounting bodies and accounting standard-setters in Indonesia, Malaysia, Singapore, and Thailand, with the tacit or official support of their respective governments, which have adopted IAS. Institutionally, it is easier to adopt IAS if standard-setting is firmly in the hands of professional accounting bodies. The process of adopting IAS is procedurally more complex in the Philippines, where a mixed government-private sector body sets accounting standards.

The level of support given to IAS in the ASEAN may be affected by the IASC's Comparability Project. The aim of this project is to recommend accounting standards that reduce the number of options in current IAS (International Accounting Standards Committee, 1989, 1990; Chandler, 1992). It is unclear to what extent Indonesia, Malaysia, Singapore, and Thailand will support the changes proposed in the IASC's Comparability Project. Thus far, Malaysian, Singaporean, and Thai accounting standard-setting bodies have not revised or announced their intention to revise existing accounting standards to conform to the more restrictive standards. ASEAN policy-makers are likely waiting to see what impact the revised IAS will have on the perceived quality of company financial reports. If the revised IAS are supported and accepted by major capital markets, particularly those in the UK and US, policy-makers in ASEAN will probably be inclined strongly to adopt these revised standards. Conversely, the domestic resistance of preparers, users, and/or auditors of financial accounting reports could hamper the adoption of the more restrictive IAS.

CONCLUSIONS

This article analyzed and compared similarities and differences in the institutional environment for accounting regulation in the ASEAN. Whether these institutional features suggest that accounting harmonization is feasible in the ASEAN depends on the concept of accounting harmonization adopted. The analysis suggests a movement away from a regional approach and towards a global approach to harmonization. The current institu-

tional structure of accounting regulation in the ASEAN appears to impede the progress towards regional harmonization. First, there are significant differences in the relative importance of company laws, securities regulation, and tax legislation influencing accounting standards and practices. For example, material differences exist in the level of detail provided in the company laws in the British-influenced countries (Malaysia and Singapore) and the non-British-influenced group (Indonesia, the Philippines, and Thailand). These statutory differences lead to divergence in the role played by securities market regulators, company registrars, tax administrators, and other government agencies in each country.

Second, marked differences exist in the composition of the standard-setting agency and the level of statutory support it receives from the government. Indonesia, Malaysia, Singapore, and Thailand have professionally based accounting standards that incorporate a large proportion of IASC standards. In contrast, the Philippines has a mixed government-private sector body, which draws its standards mostly from the US. Moreover, only in Indonesia do company laws and securities legislation specifically mention professional accounting standards. In other countries, professionally derived standards are applicable only to practicing accountants or, in the case of Thailand, to members of ICAAT.

Third, AFA, so far, has been unsuccessful in pushing a regional harmonization agenda. The organization appears hampered by resource constraints and the realization that achieving regional harmony is difficult, given deep-seated differences in the financial accounting systems of its member countries. Moreover, AFA does not appear to have enlisted the help of crucial public and private sector groups (e.g., securities market regulators, stock exchange administrators, chambers of commerce) in the ASEAN.

Evidence suggests that the institutional structure in the ASEAN has, until now, favored each country's unilateral alignment of its domestic standards against some global benchmark, be these IASC or US standards. In general, one can divide the five countries into two groups consisting of those that have adopted IAS (Indonesia, Malaysia, Singapore, and Thailand) and the sole non-adopter (Philippines). In the adopting countries, the professional accounting bodies have the leadership role in determining detailed accounting standards. Consequently, the national professional bodies in those countries can concentrate on gaining acceptance for IAS as a basis for national standards. In contrast, accounting standard-setting in the Philippines is not exclusively in the hands of the accounting profession. Rather, it includes representatives from various government and preparer groups. Given the colonial and economic ties of the Philippines with the US, it is not surprising that the Philippines depends on US GAAP as the model for its accounting standards.

The IASC's ongoing attempt to restrict the number of accounting options in its standards could affect the level of support for IAS among ASEAN countries based on how regulators and professional bodies in developed countries respond to the tighter IASC standards. Widespread international acceptance of these standards will probably result in government regulators and professional bodies in the ASEAN supporting the revised IAS, despite possible negative reaction from business groups. This appears all the more likely given the region's ongoing economic crisis, which has heightened the need to attract foreign capital from a variety of sources all of whom will demand greater transparency in financial reporting.

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NOTES

1. See Saudagaran and Diga (1997) for an analysis of how the relative lack of economic interdependence among ASEAN countries has resulted in their opting for global rather than regional harmonization.
2. These generally include size criteria (i.e., capitalization, assets, or revenues); financial performance record (i.e., profitability and revenues); and audited financial statements for a specified number of years.
3. The definition excludes rules on account format and presentation. Notably, in the EU, presentation rules are an important aspect of accounting harmonization (Van Hulle, 1992; Thorell and Whittington 1994).
4. This is particularly the case in Malaysia and Singapore where the "true and fair view" is an overriding criterion for preparing financial statements.
5. Saudagaran and Diga (1998) study the colonial influence on accounting in post-colonial ASEAN.
6. Accounting standards issued by MACPA were subsequently approved by MIA. Since 1987, accounting standards were issued jointly by these two accounting organizations.
7. Some of these APBs and SBs are still in effect. Examples include *Accounting for Earnings per Share* (APB 15) and *Accounting for "Dacion en Pago" Arrangements* (SB July 1981). *Dacion en pago arrangements* refer to transactions that transfer chattel or real property to the creditor to satisfy the debt.
8. Under the *Accountants Act 1987*, those applying to become certified public accountants must first be members of ICPAS. Consequently, SAS apply to all licensed accountants in Singapore.
9. ICAAT's total membership constitutes less than 50 percent of practicing accountants in Thailand.
10. These committees are: Joint body of MIA Technical Sub-committee on Accounting Standards and MACPA Committee on Accounting and Auditing Standards (Malaysia); ICPAS Accounting Standards Committee (Singapore); ICAAT Sub-committee on Accounting Principles (Thailand).
11. This body regulates the accountancy profession in the Philippines. It is one of the boards under the Professional Regulation Commission (PRC), the latter being the supra-government agency charged with overseeing all professional occupations in the country, except the legal profession.
12. This process has been varied slightly in September 1994 when the proposed Indonesian standards were presented to IAI's National Congress of Members for ratification.
13. Formed in 1976, *Bapepam* is the sole government body that oversees the development of Indonesia's securities markets. Its powers are modeled on the US SEC and include, *inter alia*,

evaluating whether companies meet all listing requirements: ensuring that the stock exchange is run efficiently and effectively; and monitoring the performance of listed companies.

14. Patterned after US SEC's Regulation S-X, which specifies required disclosures for public companies.
15. In 1990, for example, it required companies to disclose reasons for not declaring as dividends surplus profit in excess of 100 percent of paid-in capital stock.
16. MACPA is a privately incorporated body while MIA is a statutory body under the Malaysian *Accountants Act 1967*. Issuance of a license is predicated on being a member of a recognized association including: MACPA; Institute of Chartered Accountants in Scotland; Institute of Chartered Accountants in England and Wales; Institute of Chartered Accountants in Ireland; Association of Certified Accountants (UK); Institute of Chartered Accountants in Australia; Australian Society of CPAs; New Zealand Society of Accountants; Canadian Institute of Chartered Accountants; Institute of Chartered Accountants of India.
17. Indonesia's corporate governance structure resembles that in Germany. Comparative approaches to corporate governance have been analyzed by Macdonald and Beattie (1993), Tricker (1994), Fukao (1995), and Prowse (1995).
18. Singapore's ICPAS established its committee in 1973. MACPA established its counterpart in 1978. MACPA selects around 30 publicly listed companies for review. ICPAS examines around 150–170 reports annually from listed companies, private limited companies, and other companies required to publish reports.
19. These studies excluded Singapore, which was classified as a newly industrialized economy (NIE).
20. Authors' communication with ICPAS dated 30 May 1995 on the findings of its Financial Reporting Review Committee.

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Assessing the Acceptability of International Accounting Standards in the US: An Empirical Study of the Materiality of US GAAP Reconciliations by Non-US Companies Complying with IASC Standards

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Key Words: IASC; US GAAP reconciliations; Net income; IOSCO; SEC

Abstract: With the International Accounting Standards Committee (IASC) reaching the completion of its core standards program, the International Organization of Securities Commissions (IOSCO) is considering its response to the IASC's application for endorsement of International Accounting Standards (IASs). A critical aspect of IOSCO's acceptance of IASs is likely to be the extent to which such standards are compatible with US Generally Accepted Accounting Principles (US GAAP). This issue is explored by an empirical study of US GAAP reconciliations by non-US companies complying with IASC standards. The results indicate that the impact of accounting differences between IASs and US GAAP is narrowing and suggest that the Securities Exchange Commission (SEC) should consider accepting IASC standards without condition. Alternatively, an SEC endorsement could include a short list of IASs where acceptance is subject to additional disclosures.

With the International Accounting Standards Committee (IASC) reaching completion of its core standards program, the International Organization of Securities Commissions (IOSCO) is considering its response to the IASC's application for endorsement of International Accounting Standards (IASs). Given the significance of the US capital market in the global context, a critical aspect of IOSCO's acceptance of IASs is likely to be the extent to which such standards are compatible with US Generally Accepted Accounting Principles (GAAP). It is unlikely that significant differences from US GAAP will be easily accepted by the Securities Exchange Commission (SEC) in the US, a key IOSCO member, without the requirement for non-US companies to continue to provide a reconciliation to US GAAP.

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The purpose of this project is to respond to the call for research to assist the SEC in assessing IASs for cross-border offerings of securities in the US (Turner, 1999a). Specifically, the research aims to identify the most important differences between IASC standards and US GAAP in practice and to assess the significance and materiality of these accounting differences with particular reference to the measurement of net income. To the extent that such accounting differences are not significant or material, the argument for accepting IASs without reconciliation to US GAAP will be supported. On the other hand, the contrary is likely to strengthen the argument for retaining the status quo.

THE IOSCO PERSPECTIVE

An important aspect of IOSCO's overall commitment to facilitating cross-border offerings and listings by multinational enterprises is the Technical Committee's participation in the IASC project to develop a core set of IASs (IASC, 1999). Following the March 1999 publication of the IASC interim standard on financial instruments, which resulted in the IASC substantially completing all key parts of the core standards, the IOSCO Technical Committee began its assessment of the core standards. The assessment will focus on whether the core standards are of sufficiently high quality to warrant permitting foreign issuers to utilize them to access a country's capital markets as an alternative to domestic standards.

In recent years, the IOSCO Technical Working Group on Multinational Disclosure and Accounting devoted substantial resources to participating in the development of the core standards. This process included providing commentary on key proposals in each standard. As part of the assessment, the Working Group is evaluating whether its concerns were addressed in the final core standards, whether the IASC's standards work together to form an operational whole, and the potential impact of the standards on investors, issuers, and the markets.

The Working Group has completed an analysis of its comment letters and has created a comprehensive inventory of outstanding issues on individual IASs. Currently, the Working Group is analyzing those comments to identify IASC standards that may be recommended for use on a cross-border basis without condition and those standards where acceptance may be subject to additional disclosures or other conditions.

After the Working Group has completed its analysis, the group will make a recommendation to the IOSCO Technical Committee. The Technical Committee will then decide whether to recommend that IOSCO members permit foreign issuers to use IASs in lieu of national standards for cross-border offering and listing purposes. The Technical Committee considers completion of the IOSCO assessment as a matter of great urgency.

THE SEC PERSPECTIVE

As a key member of IOSCO, the SEC has stated its commitment to support the IASC but, in line with the IOSCO agreement, has indicated (SEC, 1996) there are three key elements in the acceptance of IASC Standards. First, the standards must include a core set of standards that constitute a comprehensive generally accepted basis of accounting. Second, the standards must be of high quality and result in comparability, transparency, and full disclosure. Third, the standards must be rigorously interpreted and applied. As Zeff (1999)

has pointed out, "The SEC is truly a control agency, and it has a low tolerance for ambiguity." The SEC requires non-US companies to report in the same way as US companies and thus, all foreign registrants must either use, or reconcile to, US GAAP. However, pressure on the SEC has been growing to adopt a more conciliatory approach to non-US companies. The New York Stock Exchange (NYSE) has been concerned for some time that many non-US companies have been deterred from seeking a listing in New York by the SEC's reconciliation requirement (Cochrane, 1992). In 1996, the US Congress (1996) charged the SEC to support the development of IASs and to report on "the outlook for successful completion of a set of IASs that would be acceptable to the Commission for offerings and listings by foreign corporations in United States markets." While the SEC is yet to decide on the acceptability of IASC standards, it seems clear that the key question will be whether these standards will be considered close enough to US GAAP to be acceptable.

THE IMPACT OF US GAAP RECONCILIATIONS

In order to investigate this issue further, the significance and materiality of recent US GAAP reconciliations by non-US companies claiming to comply with IASs are examined. These reconciliations, currently required by the SEC to be supplied on Form 20-F for non-domestic companies listing on a US stock exchange, provide a reliable source of information about the nature and impact of differences between IASC standards and US GAAP in practice. While recent research has endeavored to assess the nature of such accounting differences, this has been limited to an evaluation of their incidence in the case of US companies (Street and Gray, 1999).

At the same time, previous research analyzing the impact of accounting differences using US GAAP reconciliations has been limited to an assessment of country differences including the UK, the Netherlands, Sweden and Australia (e.g., Weetman and Gray, 1990, 1991; Weetman et al., 1998; Hellman, 1993; Norton, 1995). While the differences between UK and US GAAP have been reported as material and becoming larger in recent years, the significance of differences in the case of the Netherlands, Sweden and Australia is somewhat less clear. Further, the value relevance of US GAAP reconciliations (i.e., the impact on share prices and returns) is also not clear with mixed results from recent studies on this issue (see Amir et al., 1993; Bandyopadhyay et al., 1994; Rees, 1995, 1996; Barth and Clinch, 1996; Fulkerson and Meek, 1998).

The research reported in this article extends earlier research by incorporating an assessment of how IASC-US GAAP differences impact quantitatively on the measurement of net income and provides an analysis of whether or not these differences are significant or material in the case of non-US companies complying with IASC standards.

METHODOLOGY

Sample

Companies that comply with IASs and provide US GAAP reconciliations in Form 20-F were identified based on a list supplied by the SEC. The list included the names of 41 SEC

registrants believed to follow IASs. Eleven companies were dropped from the SEC list based on the following criteria:

- Use US or UK as opposed to IASC GAAP (Adecco, Ashanti Goldfields, Huaneng Power International, Logitech International, Shangdon Huaneng Power Development);
- Acquired by another company (Basic Petroleum International);
- Italian companies that use IASs only in the absence of Italian guideline (Benetton, ENI);
- Auditors opinion and accounting policy footnote make no mention of IASs (Emco, CICB);
- Delisted (ISS International Service Systems).

The researchers also reviewed a list of companies appearing on both the IASC's "Companies Referring to Their Use of IAS" and "The Complete Depository Receipt Directory" of the Bank of New York to identify any additional IAS companies that file Form 20-F. This step identified BHP as a 20-F company. A collection of over two hundred 1997 annual reports of IASC companies were also reviewed to identify companies that voluntarily provide reconciliations to US GAAP. This step added Atlas Copco and Scania to the sample. The sample of 33 companies consists of:

- Twenty-seven using IASs and filing form 20-F (the audit opinion states that the financial statements comply with IAS);
- Four stating their financials comply with IAS in all material aspects (in the accounting policy footnotes) and filing form 20-F; and
- Two stating their financials comply with IAS in all material aspects and voluntarily providing a reconciliation to US GAAP in their annual report.

The sample comprises seven companies from China; three each from Canada, the Netherlands, and Sweden; two each from Bermuda, France and Switzerland; and one each from Australia, the Cayman Islands, Finland, Germany, Hungary, Italy, Mexico, Papua New Guinea, Poland, Portugal, and Russia. A list of the sample companies is provided in Appendix A.

While the sample companies are not necessarily representative of all companies complying with IASs, they would appear to be a sample relevant to the SEC for the purposes of assessing US GAAP compatibility and the significance of the 20-F reconciliation requirement.

IAS/US Accounting Differences

Measurement practices of IASs that differ from US GAAP are described in several sources such as FASB's (1996) *The IASC-US Comparison Project* and Pricewaterhouse-Coopers' (1998) *International Accounting Standards: Similarities and Differences IAS, US GAAP, and UK GAAP*. The key differences that result in 20-F reconciliation adjustments for the sample companies are listed in Table 1. Panels A through M describe differences

where compliance with IAS in 1997 will force or allow divergence from US GAAP. In some areas, such as measurement of deferred taxes (Panel B) and property, plant, and equipment (Panel C), IASs provide two options, one being compatible with US GAAP (i.e., comprehensive allocation/historical cost) and the other allowing for divergence (i.e., partial allocation/revaluation). As reflected in Table I, disharmony may also arise in areas where US GAAP is more detailed or provides more guidance than IASs, for example, in selecting the method for foreign currency translation (Panel F) and accounting for associates (Panel L). Another area of concern lies in the absence of IASs addressing industry practices. While the US provides guidelines on general R&D and industry specific guidance for software development costs and oil and gas exploration, IASs cover only basic R&D (Panel M). Panels AA through DD illustrate another problematic area where, in the absence of an IAS, companies may adopt accounting practices that vary from US GAAP (i.e., restructuring provisions/Panel AA).

In recent years, the IASC has revised several standards and issued additional standards as part of its core standards project which was completed in December 1998 with the issuance of IAS 39 (*Financial Instruments*). Thus, the last column of Table I provides an update of the extent to which IASs have changed since the period covered by the study (1995–1997). In that many of the modifications to IASs have been in line with US GAAP, reconciling items arising from these areas will disappear or become less significant/material in forthcoming years. An SEC decision regarding IASs should consider the impact of these revised standards and new standards, which the IASC has just completed.

The Index of Comparability

In order to understand the significance of IASC–US GAAP differences in practice, it is necessary to have a methodology that will facilitate the assessment of how such differences impact on accounting results. Gray (1980) introduced an “index of conservatism” to compare profit measurement practices across countries. Weetman and Gray (1990, 1991), Weetman et al. (1993), Adams et al. (1993), Cooke (1993), Hellman (1993), and Norton (1995) utilized the index in a similar manner. Weetman et al. (1998) renamed the index to focus on “comparability” and to place more attention on relative accounting treatment without requiring a judgement regarding which accounting treatment is more or less conservative. The “index of comparability” indicates the measurement impact of accounting differences. The index may thus be differentiated from alternative harmonization measures such as the H, I, or C indices which quantify the *incidence* of accounting differences but not their bottom-line impact (van der Tas, 1988).

Formula of the Index of Comparability

Where IAS reported income is compared to US GAAP income, the index is expressed by the formula:

$$1 - \frac{(\text{Net income}_{\text{USA}} - \text{Net income}_{\text{IAS}})}{|\text{Net income}_{\text{USA}}|}$$

Table 1. Key Differences between US and IASC GAAP as Reflected in 1997 20-F Reconciliations

<i>Item and companies</i>	<i>US GAAP</i>	<i>IASC GAAP</i>	<i>Comments</i>
Panel A: Inventory Impairment: Hoechst	ARB 43: inventories carried at lower of cost or market	IAS 2: inventories carried at lower of cost and net realizable value	
Costing: Hoechst, Nova	Under certain circumstances idle capacity costs may be absorbed into inventory costs	IAS 2: allocation of fixed production overhead based on normal capacity levels, with unallocated overheads expensed as incurred	
Measurement: Hoechst	ARB 43: permits FIFO, weighted average, and LIFO	IAS 2: benchmarks FIFO and weighted average Allowed alternative LIFO	Although US and IASC GAAP are comparable, LIFO is not acceptable in some countries
Panel B: Deferred tax	FAS 109: liability method with comprehensive allocation	Old version IAS 12: (effective 1995-1997) allows full or partial allocation of timing differences	IAS 12 Revised (effective years beginning on or after 1 January 1998)
Method: Asira (partial), Banco Comercial Portuges, Beijing Yanhai (deferred tax asset), BioChem Pharma, BHP (based on announced tax rate), Fiat (partial), Hoechst (1995 only), Ispat (partial), Mexican Maritime (partial), Nelia (1995 and 1996 only), New Holland, Nokia (partial), Nova (deferred method), Scandia (partial), Usinor (deferred tax asset), Yanzhou Coal Mining (deferred tax asset)	Tax benefit from operating loss carry forward recorded if "more likely than not" to be realized Change in tax rate not recognized until enacted	Allows deferral or liability method Deferred tax assets only carried forward when reasonable expectation of realization Under liability method, change in tax rate may be recognized when announced	Accrue deferred tax liability for nearly all taxable temporary differences Accrue deferred tax asset for nearly all deductible temporary differences if probable a tax benefit will be realized Accrue unused tax losses and tax credits if probable will be realized Use tax rates expected at settlement

<p>Panel C: Property, plant, and equipment</p>	<p>Measurement: Atlas, Beijing Yanhau Petrochemical, BHP, China Eastern, China Southern, Fiat, Guangshen Railway, Ispat, Jilin Chemical, New Holland, Shanghai Petrochemical, Yanzhou Coal Mining</p>	<p>Measurement after initial recognition must be at historical cost</p>	<p>IAS 16 benchmark: property, plant, and equipment at historical cost following initial recognition Allowed alternative: revaluation of classes of assets</p>	<p>Most revaluations not voluntary (i.e., all Chinese companies related to restructuring during mid-1990s associated with privatization; Fiat compliance with specific laws; New Holland in accordance with laws of certain countries in which the Company operates) A future IAS may reduce options in this area</p>
<p>Investment Properties: Banco</p>		<p>Treated same as property, plant, and equipment</p>	<p>Treated as property per IAS 16 or as long-term investments per IAS 25</p>	
<p>Impairment: China Southern, Nova</p>		<p>FAS 121: impaired PPE written down to fair value</p>	<p>IAS 12: impaired PPE written down to recoverable amount</p>	<p>IAS 36: (effective for years beginning on or after 1 July 1999) addresses impairment of PPE FAS 121 and IAS 36 differ in key respects and G4 + 1 is working to minimize such differences</p>
<p>Panel D: Leases</p>	<p>Sale and leaseback accounting: China Southern, Mexican Maritime, Nokia</p>	<p>FAS 13: defer and amortize profits up to certain limits Immediately recognize losses</p>	<p>IAS 17: defer and amortize profit arising on sale and finance leaseback If operating lease arises, profit recognition depends on sale proceeds compared to fair value of asset</p>	<p>The G4 + 1 members are discussing proposed revisions to leasing standards based on the discussion paper, <i>Accounting for Leases: A New Approach</i>.</p>

(continued)

Table 1. (Continued)

Item and companies	US GAAP	IAS/ GAAP	Comments
Panel E: Retirement benefits Pensions: Banco (gain amortization), Hoechst, Matav (OPEB), Mexican Maritime (pensions and compensated absences), New Holland	FAS 87: accrued benefit method Use of current market assumptions Actuarial gains/losses which exceed "corridor" amortized over expected remaining working lives of participating employees FAS 106: similar rules for other post employment benefits	IAS 19: permits accrued benefit valuation (benchmark) and projected-benefit (alternative) methods Use of long-term assumptions Actuarial gains/losses recognized systematically over remaining working life of employees Does not specifically address other post employment benefits (para 4) or employee benefits such as compensated absences	1998s IAS 19 Revised (effective for years beginning on or after 1 January 1999), compatible with FAS 87 Accrued benefit method Use of discount rate based on market yields on high quality corporate bonds Actuarial gains/losses exceeding "corridor" amortized over expected remaining working lives of employees Accrual basis for other employee benefits
Panel F: Foreign currency translation Method: Astra	FAS 52: current rate method when functional currency is foreign currency Temporal method when functional currency is reporting currency	IAS 21: similar to US GAAP but sparse guidance may create diversity in practice (i.e., only four brief paragraphs provide guidance for determining the functional currency for foreign operations)	SEC has endorsed IAS 29 for foreign issuers
Hyperinflation: Ispat	FAS 52: reporting currency used as the functional currency and the temporal method used for translation	IAS 21: statements restated to current purchasing power (via IAS 29) prior to translation into the reporting currency of the reporting enterprise	SEC has endorsed IAS 29 for foreign issuers

<p>Translation of foreign goodwill and fair value adjustments: LVMH, Mexican Maritime</p>	<p>FAS 52: closing exchange rate used</p>	<p>FASB comparison notes this aspect of IAS 21 as a significant difference with US GAAP likely to impair comparability</p>
<p>Panel G: Goodwill Goodwill amortization: Atlas, Scandia, Usinor</p>	<p>IAS 21: either historical exchange rate or closing rate may be used</p>	<p>IAS 21: either historical exchange rate or closing rate may be used</p>
<p>Negative goodwill: Ispat</p>	<p>IAS 22: amortization period may not exceed 5 years unless a longer period not to exceed 20 years can be justified</p>	<p>IAS 22: amortization period may not exceed 5 years unless a longer period not to exceed 20 years can be justified</p>
<p>Negative goodwill: Ispat</p>	<p>APB 16: reduces proportionately values assigned to noncurrent assets (other than marketable securities) in determining their fair values, any excess recognized as a deferred credit</p>	<p>IAS 22 benchmark: fair value non-monetary assets acquired reduced proportionately until excess eliminated, any excess negative goodwill and treated as deferred income</p>
<p>Negative goodwill: Ispat</p>	<p>Alternative: any excess of acquirer's interest in fair values of identifiable assets/liabilities over cost is negative goodwill and treated as deferred income</p>	<p>Alternative: any excess of acquirer's interest in fair values of identifiable assets/liabilities over cost is negative goodwill and treated as deferred income</p>
<p>Negative goodwill: Ispat</p>	<p>Amortize negative goodwill over period not exceeding 5 years, unless period not exceeding 20 years can be justified</p>	<p>Amortize negative goodwill over period not exceeding 5 years, unless period not exceeding 20 years can be justified</p>

(continued)

Table 1. (Continued)

Item and companies	US GAAP	IAS/ GAAP	Comments
Miscellaneous: Netia		IAS 22 may be ambiguous where items are covered in the form of background material and implementation guidance (para 23-26)	
Panel H: Old goodwill standard Capitalize or Charge to Reserves: Banco Comercial Portugues, Fiat, Hoechst, New Holland, Mexican Maritime	APB 16: goodwill must be capitalized	IAS 22: (as revised in 1993) goodwill must be capitalized However, original version allowed goodwill to be charged to reserves	Goodwill on acquisitions prior to 1995 may give rise to reconciling adjustments in that companies were not required to reinstate goodwill previously charged to reserves
Panel I: Minority interests Minority interests: Credicorp (not specified), Hoechst, Mexican Maritime	APB 16: stated at acquirer's share of pre-acquisition carrying value of assets APB 17: allocate value to all intangibles based on appraised values, including acquired in-process R&D In-process R&D with no alternative future use is immediately expensed	IAS 22: stated at either the acquirer's share of the pre-acquisition carrying value of assets or fair value of the net assets Following an acquisition, only record intangibles as an acquired asset if they meet the definition of and recognition criteria for an intangible asset, otherwise, intangibles subsumed within goodwill and amortized accordingly	Minority interests may differ for US and IAS GAAP due to differences in assignment of costs to intangible assets such as in-process R&D FASB is considering a new standard that would wipe out instant write-offs for the value of as-yet-undeveloped products picked up in an acquisition

<p>Panel J: Borrowing costs Atlas, Hoechst, Ispat, Netta, Swisscom, and Unisor</p>	<p>FAS 34: under certain conditions <i>interest</i> capitalized as part of acquisition cost of an asset</p>	<p>IAS 23 benchmark: expense all borrowing costs in the period incurred</p>	<p>Under allowed alternative, bor- rowing costs are defined broad- er than FAS 34, i.e., foreign currency exchange gains/losses capitalized to extent regarded as adjustment to interest costs</p>
<p>China Southern, Jilin, Shanghai Petrochemical</p>	<p>Alternative: capitalize borrowing costs if attributable to acquisition of qualifying asset</p>	<p>Alternative: capitalize borrowing costs if attributable to acquisition of qualifying asset</p>	<p>Alternative: capitalize borrowing costs if attributable to acquisition of qualifying asset</p>
<p>Panel K: Accounting for investments Credicorp, LVMH, Rostelecom</p>	<p>FAS 115: investments in market- able debt/equity securities carried at market except for held to maturity debt securities that are carried at amortized cost Holding gains/losses on trading securities (current) charged to net income, while holding gains/ losses on available for sale secu- rities (non-current) charged to stockholder's equity (comprehen- sive income, effective for 1998 financial statements)</p>	<p>IAS 25: current investments at either: market or lower of cost or market Holding gains/losses on current investments carried at market recognized as income/expense or per paragraph 32 Long-term investments carried at either: cost, revalued amounts, or for marketable securities, lower of cost and market value Per paragraph 32, holding gains on revaluation of long term invest- ments credited to equity Holding losses may be charged against existing revaluation sur- plus, if valuation of security falls below cost the charge must go to income</p>	<p>IAS 39 (effective for periods beginning on or after 1 January 2001): all financial assets re- cognized on the balance sheet Subsequent to initial recognition, all financial assets (with limited exceptions including held to maturity debt securities) remea- sured to fair value</p>

(continued)

Table 1. (Continued)

Item and companies	US GAAP	IAS/GAAP	Comments
Panel L: Accounting for associates Equity Method: Banco, Hochtst, Netia	APB 18: equity method (investor should present its share of the associate's profit/loss at a post-tax level)	IAS 28: equity method (not clear at what level investor should report its share of the associates' profit/loss, pre-tax or post-tax)	Equity method as described in IAS 28 essentially the same as APB 18, but IAS 28 is not as detailed and may provide for variation in interpretation
Panel M: Research and development Development: Banco Commercial Portugues, Nokia, Nova	FAS 2: expense all research and development costs as incurred	IAS 9: expense research cost as incurred and must capitalize/amortize development costs if stringent criteria (i.e., satisfy definition of asset) met	1998's IAS 38 (effective for years beginning on or after 1 July 1999) reaffirms IASC position on R&D
Industry Practice: BHP (area of interest method for oil exploration), Libir Gold, Swisscom (software)	Some software development costs must be capitalized For oil and gas exploration may use successful efforts or full cost	No industry specific standards	1998's IAS 38 (effective for years beginning on or after 1 July 1999) does not apply to mineral rights and expenditure on exploration for, or development and extraction of, minerals, oil, natural gas and similar non-regenerative resources

Item	US GAAP	Note on IAS coverage	Comments
<p>Panel AA: Restructuring provisions The G4 + 1's <i>Provisions: Their Recognition Measurement, and Disclosure in Financial Statements</i> states there is little published guidance on recognition/measurement of provisions in general and outlines group's view on restructurings: BHP; Fiat, Hoechst, Isopat, LVMH, New Holland, Swisscom, Usinor</p>	<p>FAS 5: allowed if management is committed and process has effectively begun EITF 94-3 allows setting up of reserves only if certain conditions met For employee termination, employees must be informed regarding key provisions of plan prior to period end Certain costs may be accrued as a part of restructuring charge under IAS are not allowed Restructuring plan must be scheduled within a period of time which indicates significant changes to plan are not likely</p>	<p>IAS 10 addresses contingent liabilities (record if probable and a reasonable estimate of the amount can be made) but does not specifically address restructuring costs No limit on the period of time to complete are restructuring plan</p>	<p>IAS 37 (effective for periods beginning on or after 1 July 1999): a provision for restructuring costs should be recognized only if a formal plan for the restructuring exists and management has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it Based on G4 + 1 Discussion Paper</p>
<p>Panel BB: Employee stock compensation Employee stock compensation (including stock options): Cayman Water, Gucci, Matav, Netia, (Usinor also had a violation but there was no income effect)</p>	<p>Cost of share awards/options charged over period of employee's performance via one of two options: APB 25, cost measured based on intrinsic value or FAS 123, cost based on fair value using an option pricing model For companies electing APB 25, FAS 123 requires disclosure of amount of compensation expense that would be recorded if stock options were carried at fair market value</p>	<p>Disclosures are required, but there is no standard or proposals on measurement</p>	<p>IAS 30 (effective for years beginning on or after 1 January 2001): financial assets/liabilities recognized on balance sheet After initial recognition most financial liabilities measured at original recorded amount (less principle repayments and amortization)—only derivatives and liabilities held for trading remeasured to fair value</p>

(continued)

Table 1. (Continued)

<i>Items appearing in 20-F reconciliations that are not covered by IAS</i>		
<i>Item</i>	<i>US GAAP</i>	<i>Note on IAS coverage</i>
<p>Panel CC: Accounting for forwards Accounting for forward ex- change contracts and hedging: Astra, LVMH, Scandia</p>	<p>FAS 52: hedged foreign currency receivables/payables translated at exchange rate at balance sheet date, with unrealized exchange gains/ losses recorded in income</p> <p>Difference between amount of for- ward exchange contract translated at forward rate and exchange rate at date of inception amortized over life of contract</p> <p>Forward contract translated at ex- change rate at balance sheet date and any unrealized exchanges gains/losses recognized in income</p>	<p>Accounting for forward exchange contracts and hedging excluded from the scope of IAS 21</p> <p>However, IAS 21 does not preclude hedge accounting</p>
<p>Panel DD: Accounting for intangibles/deferred costs See below</p>	<p>Strict criteria for asset recognition and amortization</p>	<p>Per IAS 39 (effective for years beginning on or after 1 January 2000) hedging means designat- ing a derivative or (for hedges of foreign currency risks) a non-derivative financial instru- ment as an offset in net profit/ loss, in whole or in part, to the change in fair value or cash flows of a hedged item</p> <p>Hedge accounting is permitted in certain circumstances, pro- vided hedging relationship is clearly defined, measurable, and effective</p>
	<p>No specific IAS addressing intan- gible assets</p>	<p>IAS 38 (effective periods begin- ning on or after 1 July 1999) prescribes accounting for in- tangible assets and establishes specific criteria for asset recog- nition</p>

<p>LVMH capitalized brands with no amortization</p>	<p>APB 17: maximum life of intangibles 40 years</p>	<p>IAS 38 will require that depreciable amount of an intangible asset be allocated on a systematic basis over estimated useful life</p>
<p>Banco Comercial Portugues includes costs of publicity campaigns in sundry assets Scandia capitalized preoperating expenses Banco Comercial Portugues capitalized issuance costs</p>	<p>Advertising and publicity costs expensed as incurred Organizational costs expensed under US GAAP Issuance costs expensed as incurred</p>	<p>IAS 38 will require that expenditure on advertising and promotional activities be expensed as incurred IAS 38 will require that start-up costs be expensed as incurred No IAS on capital transactions</p>
<p>China Southern incremental costs directly attributable to equity securities offering deferred and later charged against proceeds from initial offering</p>	<p>The deferred amount would be expensed in an earlier accounting period (upon the postponement of the earlier proposed offering of equity securities)</p>	<p>In August 1998, the G4 + I agreed that the most appropriate treatment of share issuance costs is to account for them as a reduction in the proceeds of the capital raising</p>

(continued)

Table 1. (Continued)

Companies that violate IAS		
Policy followed/company	IAS requirement	Comments
Panel AAA: Retirement benefits Astra: do not take future salary increases into account	IAS 19 (like US GAAP): future salary increases taken into account in calculation of future pension commitments	Some sample companies might argue IAS 19 is not applicable for their pension plans; however, the IASC argues that several such companies are not complying with IAS 19
BHP: charges to income contributions to pension plans	IAS 19: use either accrued benefit valuation (benchmark) or projected-benefit (alternative) method	The IASC (1998) states that some argued that the old IAS 19 did not work well for plans in countries such as Germany, Japan, and the Netherlands
Nokia: various pension schemes in accordance with local conditions/practices and the schemes are funded through payments to insurance companies or to trustee-administered funds as determined by periodic actuarial calculations	Nokia and Scandia do not appear to adhere to the measurement criteria of IAS 19 (post Comparability Project), nor do they provide the significantly expanded disclosures which include:	IASC now holds that as these countries were represented on the Retirement Benefits Steering Committee, such arguments will have little force in the future
Scandia: provisions based on actuarial-projections, the Swedish plan administered by Pension Registration Institute	<ul style="list-style-type: none"> • Accounting policies including a description of the actuarial valuation methods used • Actuarial present value of promised retirement benefits at the date of the most recent actuarial valuation • Fair value of the plan assets • Principle actuarial assumptions used in determining the cost of retirement benefits 	

<p>Panel BBB: All inclusive income Banco Commercial Portugues charges "bonus to employees" against reserves Fiat does not charge entire tax on equity and substitute equalization tax to income</p>	<p>IAS 8: all items of income/expense included in profit/loss unless prohibited by an IAS</p>	<p>Canadian Handbook acknowledges this as a difference between Canadian GAAP and IASs</p>
<p>Panel CCC: Foreign currency transactions Biochem Pharma: part of foreign currency translation adjustment recognized in earnings on repatriation of capital from foreign operations</p>	<p>IAS 21: a pro rata portion of exchange gains/losses accumulated in equity recognized in income upon disposal of an investment in a self-sustaining operation Only a dividend constituting a return of the investment is considered a disposal IAS 21 benchmark: on settlement of monetary items or on reporting monetary items at rates different from those at which initially recorded, resulting gains/losses recognized in period they arise (allowed alternative not applicable)</p>	<p>Method followed by these companies eliminated as part of IASC Comparability Project Canadian Handbook acknowledges as a difference between Canadian GAAP and IASs</p>
<p>Panel DDD: Accounting for associates BHP only discloses effect of accounting for associates on an equity basis</p>	<p>IAS 28: equity method used for investments in associates when there is significant influence</p>	<p>Legal impediment has been removed in Australia and new standard will require that investments in associates be recognized on an equity accounting basis Usinor states that under US GAAP the equity method would be used to account for these investments</p>
<p>Usinor states that some investments in non-consolidated subsidiaries are carried at lower cost or fair value as defined by the COB</p>		<p>Hence, it appears that Usinor exercises significant influence and should also use equity method under IASC GAAP</p>

(continued)

Table 1. (Continued)

<i>Companies that violate IAS</i>		
<i>Policy followed/company</i>	<i>IAS requirement</i>	<i>Comments</i>
Panel EEE: Treasury stock LVMH: carried as asset on balance sheet; recorded a loss associated with sale of treasury stock Usinor: treated as a cash equivalent and valued at 1 cm	Under IASC and US GAAP when a company's own shares are repurchased, the shares are shown as a deduction from shareholder's equity	Fiat carries treasury stock as a fixed asset, but there were no entries to income for the year related to treasury stock
Panel FFF: Capitalization of costs Usinor: charged change in accounting policy for furnace relining costs in 1994 to income to conform with French accounting princi- ples	IAS GAAP requires capitalization of such costs	In 1996 financial statements Usinor acknowl- edges that the nonrecurring charge is in violation of IASs

The denominator is US net income because 20-F reconciliations are addressed to investors accustomed to US GAAP (Weetman et al., 1998). Consequently, these investors view differences as departures from US net income rather than as departures from IAS net income. Net income is chosen for the denominator rather than a scale factor, such as sales or market value, because the research seeks to evaluate the materiality of accounting differences.

ISA 320, *Audit Materiality*, provides general guidance regarding an assessment of materiality. However, like the publications of other professional bodies and standard setters, the International Federation of Accountants' (IFAC) ISA 320 does not provide specific materiality guidelines to practitioners. In practice, auditors assessing materiality in relation to the impact on users make reference to percentages. Audit practice indicates a useful guideline as being 5–10 percent of income before taxation (Grant Thornton, 1990). As firm policy, Ernst and Young (1998) states that audit differences require consultation whenever the gross or net unrecorded differences exceed 5 percent of pretax income. While the SEC asserts that both qualitative and quantitative factors must be considered in determining materiality, SEC Chief Accountant Turner has stated that traditionally, 5 percent of earnings is believed to be the cut-off point for determining if an item is material or not (Burns, 1999). The current research provides findings based on bands at 5 percent and 10 percent of net income.

The neutral value of 1.0 is utilized for consistency with previous literature. An index value exceeding 1 indicates the IAS net income is greater than that reported according to US GAAP (or an IAS loss is not as large as a US loss). An index value less than 1 indicates that the IAS reported net income is less than that reported under US GAAP (or an IAS loss is larger than a US loss).

Since the 20-F reconciliation contains considerable detail, partial index values may be determined based on the formula:

$$1 - \frac{(\text{partial adjustment})}{|\text{Net income}_{\text{USA}}|}$$

The partial index values measure the contribution of each 20-F reconciling item. The neutral value of 1 is retained for consistency. The indexes of partial adjustments sum to the total index by the formula:

$$\text{Total comparability index} = \sum_1^n \text{adjustment}_n - (n - 1)$$

Evaluation of Index

The comparability index carries the disadvantage of reporting extreme index values if US net income/loss approaches zero. Fortunately, such occurrences are rare in the current data set and do not seriously affect interpretation. The presence of outliers must be weighed against the association of the “index of comparability” with the accounting concept of materiality that is usually judged in relation to profit. Such outliers result in comparable problems in practical interpretation of their impact on financial statement users. Further, it has been asserted that materiality cannot be judged on a relative value

basis when net income is small or the item causes a change from a small net income to a small net loss.

Use of the index to evaluate annual data may carry the risk of including in any given year a short-term timing difference that reverses in the following year due to a difference in recognition criteria. Fortunately, in that the 20-F provides 3 years of data, it allows for consideration of this aspect. An examination of the 3-year comparisons within each 20-F revealed two reversals (both associated with restructuring) in reconciling items that are observable for each of the separate adjustments analyzed. The impact of the two reversals on the overall index and the appropriate partial index was considered. The impact on the overall index of comparability was less than 1 percent in all years, and the impact on the restructuring partial index was less than or equal to 1 percent in all years.

RESULTS

Data were pulled from the 1997 20-Fs (or annual reports) of the 33 sample companies. Hence, the data cover the years 1995–1997. This section presents the (1) frequency of, and (2) tests of materiality for the 20-F reconciling adjustments and discusses the main causes of adjustments. Table 2 reports the relevant index of comparability measured as a mean and a median over the group as a whole (after excluding outliers) and for each type of reoccurring adjustment. Table 2 also reports the number of reconciling adjustments overall and by category. Each category in Table 2 represents a grouping of more than one type of adjustment (as reflected in Table 1), so that the total number of adjustments presented by companies in their 20-F reconciliations are considerably greater than the number of line items indicated in Table 2.

Index of Comparability for IAS Income

The *overall* index of comparability reveals that in 1995, 1996, and 1997, the adjustment to profit under IASs represents 7 percent (increase in IAS income), 20 percent (increase in IAS income), and 8 percent (increase in IAS income) of profit under US GAAP, respectively. *T*-tests (Table 3a) indicate that the mean index of comparability for IAS Income is significantly greater than 1 only in 1996 ($p = 0.01$). The median values are 1.03, 1.01, and 1.00 for 1995, 1996, and 1997, respectively, and the non-parametric Wilcoxon tests (Table 3b) indicate no statistically significant differences (at $p < 0.05$). Throughout Table 3, outliers are eliminated from the calculation of the *t*-statistics but not the Wilcoxon test.

According to Table 2, in all 3 years, the most frequently occurring sources of adjustments representing differences in US GAAP and IASs were associated with property, plant, and equipment; deferred taxes; goodwill; and capitalization of borrowing costs. Less frequently occurring adjustments are due to restructuring; research and development; foreign currency translation; retirement benefits/pensions; employee stock compensation; intangibles; minority interests; investments; accounting for associates; sale leasebacks; and inventory. In each year, a few adjustments are associated with adoption of new IASs or FASs (i.e., accounting changes). Of particular concern in each year is that several adjustments are associated with what appears to be violations of IASs.

Table 2. Excluding Outliers. Number of Companies Making Each Category of Adjustment to Net Income Including Mean and Median Index of Comparability for 1997, 1996, and 1995

Description of adjustment	1997		1996		1995	
	Count	Mean	Count	Mean	Count	Mean
Overall	31	1.08	33	1.20	28	1.07
Revised	31	1.06	33	1.18	28	1.11
Violations of IASs	11	1.07	10	1.06	10	0.90
PP&E Revaluations	14	0.91	11	0.95	8	0.97
Deferred Taxes	11	1.06	13	0.99	16	0.93
Goodwill	10	1.08	9	1.21	7	1.03
Capitalized Borrowing Costs	8	0.93	6	0.99	6	1.01
Restructuring	6	1.03	6	1.06	5	0.64
Research and Development	4	1.00	6	1.14	5	1.27
Foreign Currency Translation	5	1.03	5	1.13	5	1.32
Retirement Benefits/Pensions	4	1.02	4	1.12	4	1.29
Accounting Changes	4	0.97	3	1.10	3	0.50
Employee Stock Compensation	4	1.06	3	1.09	2	1.63
Intangibles	3	1.01	3	0.98	4	1.09
Minority Interest	3	1.23	3	1.03	2	0.96
Investments	3	1.02	3	1.01	3	1.01
Accounting for Associates	3	1.38	3	1.28	2	0.65
Sale leasebacks	3	1.11	3	0.98	3	0.93
Inventory	2	1.04	2	0.98	2	1.03
Other	11	1.04	12	1.07	13	1.11

Notes: The following outliers were excluded from calculations of the mean and median values with regard to:

- Hoechst (1997 overall index of comparability and 1995 overall index of comparability and partial index of comparability for goodwill and minority interest);
- Swisscom (1997 overall index of comparability and partial index of comparability for restructuring and research and development);
- Ispat (1995 overall index of comparability and partial index of comparability for goodwill) (full sample only);
- Magyar (1995 overall index of comparability and partial index of comparability for other);
- Lihir (1997 partial index of comparability for research and development).

Table 3. Index of Comparability for Net Income

3a. Mean value and <i>t</i> -statistic						
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>t</i>	<i>p</i> value
Net Income 1997	31	1.083	0.3509	0.0630	1.318	0.197
Net Income 1996	33	1.197	0.4381	0.0762	2.588	0.014
Net Income 1995	28	1.073	0.3317	0.0627	1.172	0.252
Revised net income 1997	31	1.057	0.3305	0.0594	0.964	0.343
Revised net income 1996	33	1.179	0.4278	0.0744	2.409	0.022
Revised net income 1995	28	1.109	0.02843	0.0809	2.036	0.052
Partial Adjustments						
IAS Violations 1997	11	1.072	0.1776	0.0535	1.361	0.203
IAS Violations 1996	10	1.059	0.1315	0.0416	1.434	0.185
IAS Violations 1995	10	0.899	0.3117	0.0985	-1.021	0.334
PP&E Revaluations 1997	14	0.905	0.1607	0.0429	-2.198	0.046
PP&E Revaluations 1996	11	0.955	0.1562	0.0471	-0.959	0.360
PP&E Revaluations 1995	8	0.970	0.0581	0.0205	-1.439	0.193
Deferred Taxes 1997	11	1.060	0.0991	0.0298	2.009	0.072
Deferred Taxes 1996	13	0.993	0.0948	0.0263	-0.275	0.787
Deferred Taxes 1995	16	0.934	0.4076	0.1019	-0.649	0.526
Goodwill 1997	10	1.076	0.2088	0.0660	1.149	0.279
Goodwill 1996	9	1.211	0.4207	0.1402	1.503	0.171
Goodwill 1995	7	1.025	0.0428	0.0162	1.573	0.166
Capitalized Borrowing Costs 1997	8	0.926	0.1029	0.0364	-2.025	0.082
Capitalized Borrowing Costs 1996	6	0.989	0.0334	0.0136	-0.747	0.488
Capitalized Borrowing Costs 1995	6	1.008	0.1468	0.0599	0.137	0.896

3b. Actual median and Wilcoxon statistic

	1995				1996				1997			
	N	Median	Wilcoxon statistic	p value	N	Median	Wilcoxon statistic	p value	N	Median	Wilcoxon statistic	p value
Net income	31	1.03	184	0.104	33	1.01	201	0.077	33	1.00	266	0.398
Revised net income	31	1.02	162	0.046	33	1.01	207	0.094	33	1.00	250	0.293
IAS Violations	10	0.99	15	0.101	10	1.01	30	0.399	11	1.02	31	0.430
PP&E Revaluations	8	0.99	9	0.104	11	0.98	8	0.013	14	0.94	30	0.079
Deferred taxes	16	0.93	41	0.081	13	0.99	31	0.155	11	1.06	29	0.361
Goodwill	9	1.04	31	0.157	9	1.03	35	0.069	10	1.01	46	0.030
Capitalized Borrowing costs	6	0.95	12	0.377	6	1.00	13	0.300	8	0.99	8	0.080

Overall Materiality of Adjustments

The mean and median data in Table 2 provide summary indicators for the group of companies as a whole, but, when making investment decisions, investors are concerned with individual companies. Thus, the findings are presented as distributions of adjustments in bands of materiality in Tables 4 and 6. Discussion is in terms of adjustment to net income but could also apply to adjustments to net loss. Tests of statistical significance are again reported in Table 3.

In regard to overall net income, Table 4 presents the distribution bands of net income that an accountant might view as “immaterial” (i.e., differences less than 5%) or “material at 10 percent or more” or “material at 5–10 percent.” In 1995, 1996, and 1997, respectively, three (of 31 or 10%), two (of 33 or 6%) and two (of 33 or 6%) companies report IAS income less than US income where the adjustment represents 5–10 percent of US income. One (of 31 or 3%), two (of 33 or 6%) and four (of 33 or 12%) report IAS income exceeding US income by 5–10 percent of US income. In 1995 and 1996, four (of 31 or 13%) and five (of 33 or 15%) report IAS income lower than US GAAP where the adjustment is at least 10 percent of US income. In 1997, eight (of 33 or 24%) report IAS income lower than US GAAP where the adjustment is at least 10 percent of US income. In 1995 and 1996, 11 (of 31 or 35%) and 12 (of 33 or 36%) companies report IAS income exceeding US GAAP income by 10 percent or more. This drops to nine (of 33 or 27%) companies in 1997. These trends suggest recent revisions and additions to IASC standards may be limiting the ability of companies to report materially higher profits in relation to US GAAP.

Violations of IAS—IAS Income Revised

Panels AAA through FFF of Table 1 describe areas where some sample companies appear to be violating IASs. The panels describe the accounting policies followed by these companies and review the appropriate accounting treatment as prescribed by IASs. In considering the materiality of differences between IASs and US GAAP, an argument can be made that IAS income should be adjusted for these violations. Alternatively, statistical tests may indicate significant differences between IASC and US income, where in the absence of violations of IASC accounting guidelines, there are no material differences.

For most items listed in panels AAA through FFF, IASC standards are very similar to US GAAP. For the adjustments listed in Panels BBB through FFF, the companies’ adjustments to arrive at US GAAP reported in Form 20-F would also be required to arrive at a more accurate measure of IASC GAAP. While the differences between US GAAP and IAS 19 are more pronounced, the companies’ explanations of their 20-F adjustments (see Panel AAA) clearly reveal they are also violating IASC GAAP. Adjusting reported income for the 20-F adjustments associated with retirement benefits for these companies does not provide an exact measure of IASC income; however, it does provide a more accurate measure than that reported by the companies. Thus, “IASC Income Revised” is calculated by starting with IASC income as reported by the companies and adjusting for the items described in Panels AAA through FFF of Table 1.

Table 4. Frequency Table of Distribution of Values of Index and Revised Index of Comparability for Net Income

Level of materiality	Index values	Index of comparability			Revised index of comparability		
		1997	1996	1995	1997	1996	1995
Adjustment to IAS profit is -10% or more of the amount of US profit	≤ 0.90	8	5	4	7	5	2
Adjustment to IAS profit between -5% and -10% of the amount of US profit	0.91-0.94	2	2	3	3	2	3
Adjustment to IAS profit within ±5% of US profit	0.95-1.04	10	12	12	11	12	12
Adjustment to IAS profit is between +5% and +10% of the amount of US profit	1.05-1.09	4	2	1	4	2	3
Adjustment to IAS profit is +10% or more of the amount of the US profit	≥ 1.10	9	12	11	8	12	11
Total		33	33	31	33	33	31
Range:							
Lowest value		-16.60	0.76	0.21	-16.60	0.76	0.86
Highest value		3.56	2.89	31.98	3.56	2.89	31.98

Table 5. Summary of Violations of IASs

Company name	Violations as a percentage of IAS reported income		
	1995 (%)	1996 (%)	1997 (%)
Astra Group	0.1369	-0.5185	0.0588
Banco Comercial Portugues	-3.1196	-9.0912	2.1893
Biochem Pharma	-54.8419	0.9702	-4.5705
Broken Hill Proprietary	0.9868	3.2504	-0.7317
Fiat	-4.4247	-4.4285	-7.6127
IPL	5.9815	0.6655	-4.4178
LVMH			0.7287
Nokia	5.9589	-0.5822	2.3006
Nova	-4.2735	-2.0881	-35.3846
Scandia	0.7012	1.0600	0.6045
USINOR	2.0541	-27.2666	-1.8004

Table 2 reports the mean and median values of the index of comparability for IAS Income Revised. The difference between IAS Income Revised and US GAAP represented 11 percent, 18 percent, and 6 percent of net income under US GAAP in 1995, 1996, and 1997, respectively. *T*-tests (Table 3a) indicate the mean index of comparability for IAS Income Revised is significantly greater than 1 in 1995 ($p = .05$) and 1996 ($p = .02$) but not 1997. The median values are 1.02, 1.01, and 1.00, for 1995, 1996, and 1997, respectively. The Wilcoxon tests (Table 3a) indicate a statistically significant difference only in 1995 ($p = .05$).

According to Table 4, IAS Income Revised is less than US income for three (of 31 or 10%), two (of 33 or 6%), and three (of 33 or 9%) companies in 1995, 1996, and 1997, respectively, where the adjustment represents 5–10 percent of US income. IAS Income Revised exceeds US income by 5–10 percent for three (of 31 or 10%), two (of 33 or 6%), and four (of 33 or 12%) companies in 1995, 1996, and 1997, respectively. In 1995, 1996, and 1997, IAS Income Revised is less than US income for two (of 31 or 6%), five (of 33 or 15%), and seven (of 33 or 21%) companies, where the adjustment represents at least 10 percent of US income. IAS Income Revised exceeds US income by 10 percent or more for 11 (of 31 or 35%) and 12 (of 33 or 36%) companies in 1995 and 1996. This drops to eight (of 33 or 24%) companies for 1997. Again, the trend suggests revisions and additions to IASs in recent years are limiting companies' ability to report higher profits in relation to US GAAP.

Table 5 provides information regarding the materiality of the IAS violations for each of the relevant companies. While several of the violations may be viewed as immaterial, some of the violations fall in the 5–10 percent range and others exceed 10 percent of income for the company. Items representing 5–10 percent of the company's income include:

- Banco Comercial Portugues' charging of bonuses to employees against reserves as opposed to observing the IASC's all inclusive income philosophy (overstated IAS income by 9 % in 1996);
- Fiat's not charging the entire tax on equity and substitute equalization tax to income—the policy followed is allowed by Italian law (overstated IAS income by 8 % in 1997);

Table 6. Frequency Table of Distribution of Values of Comparability for PP&E Revaluations, Deferred Taxes, Goodwill, and Capitalized Borrowing Costs

Level of materiality	Index values	PP&E revaluations			Deferred taxes			Goodwill			Capitalized borrowing costs		
		1997	1996	1995	1997	1996	1995	1997	1996	1995	1997	1996	1995
Adjustment to IAS profit is -10% or more of the amount of US profit	≤ 0.90	5	4	1	0	3	3	0	1	0	1	0	1
Adjustment to IAS profit between -5% and -10% of the amount of US profit	0.91-0.94	3	0	1	0	0	3	1	0	0	3	0	0
Adjustment to IAS profit within ±5% of US profit	0.95-1.04	5	6	6	8	7	7	6	3	5	4	6	4
Adjustment to IAS profit is between +5% and +10% of the amount of US profit	1.05-1.09	1	0	0	0	2	0	2	2	1	0	0	0
Adjustment to IAS profit is +10% or more of the amount of the US profit	≥ 1.10	0	1	0	3	1	3	1	3	3	0	0	1
Total		14	11	8	11	13	16	10	9	9	8	6	6
Range (excluding outliers):													
Lowest value		0.41	0.68	0.84	0.97	0.83	-0.40	0.93	0.88	0.97	0.68	0.95	0.83
Highest value		1.06	1.31	1.02	1.31	1.17	1.68	1.66	2.24	9.79	1.01	1.03	1.28

- IPL's use of Canadian guidelines for foreign currency translation (understated IAS income by 6% in 1995);
- Nokia's decision to follow local practices in accounting for pensions (understated IAS income by 6% in 1995).

Violations that exceed 10 percent of income include:

- Biochem Pharma's use of Canadian guidelines for foreign currency translation (overstated IAS income by 55% in 1995);
- Nova's use of Canadian guidelines for foreign currency translation (overstated IAS income by 35% in 1997);
- Usinor's (all violations combined overstated IAS income by 27% in 1996):
 1. utilization of lower of cost or market accounting for some investments as defined by the Commission des Operations de Bourse—per IAS GAAP investments in associates where the company exercises significant influence should be accounted for using the equity method—(overstated IAS income by 14%),
 2. decision to carry treasury stock as an asset (overstated IAS income by 5%),
 3. and expensing (as opposed to capitalizing) furnace relining costs in order to conform to French accounting principles as interpreted by the Commission des Operations de Bourse (overstated IAS income by 8%).

Most of the above "violations" yield an overstatement of IAS income.

The above descriptions reveal that one violation representing between 5 percent and 10 percent of income is associated with Fiat following national law as opposed to IASs. Further, Usinor's 1996 violations, which exceed 10 percent of income, are associated in part with following practices approved by the Commission des Operations de Bourse in France as opposed to IASs.

Following Canada's guidelines for foreign currency translation results in IPL deviating from Revised IAS Income by an amount falling in the 5–10 percent range and Biochem Pharma and Nova deviating from Revised IAS Income by an amount exceeding 10 percent of income. The Canadian Handbook acknowledges some deviations from IASC GAAP in regard to foreign currency translation (see Table I, Panel CCC). In January 1998, the Canadian Accounting Standards Board (AcSB) discussed the status of a project aimed at eliminating such differences. The AcSB re-affirmed the position taken in an Exposure Draft to eliminate Canada's unique standard of deferral and amortization of exchange gains/losses relating to foreign currency items having a fixed or ascertainable life extending beyond the end of the following fiscal year. However, the AcSB decided that the status of this project should remain unchanged until completion of the IASC's Financial Instruments Project that is targeted for mid-year 2000.

These findings suggest that national regulators and standard setters need to work with the IASC with an aim toward convergence of national GAAP and IASs. Differences between IASC requirements and national guidelines will be even more troublesome under IAS 1 Revised (effective for periods beginning on or after 1 July 1998), which will prohibit companies from stating that they follow IAS unless they comply without

exception. In 1999 financial statements, legislated conflicts with IASC GAAP will prohibit companies from noting compliance with IASs.

It is important to note that none of the violations exceeding 10 percent of income are associated with companies whose audit opinion asserts compliance with IASs (see Appendix A). However, two violations representing 5–10 percent of income are attributable to companies whose audit opinions claim that the financial statements are prepared according to IAS. While Nokia's audit opinion makes no note of the violation, Banco Comercial Portugues' auditor notes the exception to IAS in the audit opinion. This suggests auditors may not place as much significance on a claim in the accounting policy footnotes that the statements comply with IASs or comply with IASs in all material aspects as they do to stating compliance with IASs within the audit opinion. Indeed, this is in line with a recent comment by the SEC Chief Accountant.

SEC Chief Accountant Turner has noted that in some situations where a foreign registrant's *footnotes* assert that the financial statements "comply in all material aspects with IAS" or "are consistent with IAS" the company may have applied only certain IASs or omitted certain information without giving any explanation of why the information was excluded (Turner, 1999b). Chief Accountant Turner indicates that the SEC staff has challenged such assertions and will continue to do so. He warns that where such an assertion cannot be sustained, the SEC will require either changes to the financial statements to conform with IASs or removal of the assertion of compliance with IASs. Hence, when auditing SEC foreign registrants claiming to follow IASs, auditors must begin to place more emphasis on identifying and requiring corrections of violations such as those identified by the current research.

Measurement Practices where IAS GAAP is Not Compatible with US GAAP

Panels A through M of Table 1 list the measurement practices where IASs differ from US GAAP for the sample companies between 1995 and 1997. Panels AA through DD lists the areas where the absence of guidance from the IASC allows for material departures from US GAAP for the sample companies. Table 2 reveals the areas where differences as described in Table 1 occur frequently (property, plant, and equipment; deferred tax; goodwill; and capitalization of borrowing costs). The other types of adjustments appear in the 20-F reconciliations on an infrequent basis. Thus, only the former items are discussed in terms of materiality.

Property, Plant, and Equipment

Table 2 reports all the accounting consequences of IASC policy for accounting for property, plant, and equipment that differ from US GAAP as reflected in the 20-F reconciliations (eight in 1995, 11 in 1996, and 14 in 1997). As shown in Panel C, these differences are associated primarily (12 companies) with the existence of IASC options for the measurement of property, plant, and equipment following initial recognition. Other differences include: IASC options for accounting for investment properties (one company) and IASC rules for impairment (two companies).

While the IASC benchmark is consistent with US GAAP for measurement of property, plant, and equipment after initial recognition, the allowed alternative provides for revaluation of classes of assets. It is important to note that most revaluation adjustments are not a function of companies "electing" the IASC-allowed alternative. All of the Chinese companies in the sample revalued fixed assets as part of a restructuring/reorganization associated with privatization during the mid-1990s. Furthermore, two companies' (Fiat and New Holland) revaluations were associated with compliance with company law or tax regulations. Only three companies (Atlas, as permitted by Swedish GAAP; BHP, as permitted by Australian GAAP; and Ispat as permitted by IASs) voluntarily chose the IASC allowed alternative.

Table 2 reports the mean and median partial indices for property, plant, and equipment and indicates they represent 3 percent (reduction in IAS income), 5 percent (reduction in IAS income), and 9 percent (reduction in IAS income) of US profit in 1995, 1996, and 1997, respectively. *T*-tests (Table 3a) indicate that overall mean adjustments are significantly less than 1 in 1997 ($p = .05$). The median values are 0.99, 0.98, and 0.94 in 1995, 1996, and 1997, respectively. The Wilcoxon tests (Table 3b) indicate the overall adjustments are significant only in 1996 ($p = .01$). The significance of these adjustments may be explained by the relatively large number of Chinese companies in the sample that were subject to large restructuring/reorganization revaluations associated with privatization and Hong Kong Stock Exchange listing requirements. Insignificant differences in 1995 may be linked to some of the companies with revaluations:

1. not providing data for 1995 (China Eastern Airlines), or
2. revaluing assets during the 3-year period (Beijing Yanhai Petrochemical, April 1997; China Southern 31 December 1996; Guangshen Railway March 1996; and Ispat 31 December 1996).

Table 6 reveals that the individual adjustments for property, plant, and equipment tend to either yield immaterial differences with US income or result in IAS income being less than US income. For one (of eight or 13%), none, and three (of 14 or 21%), in 1995, 1996, and 1997, respectively, IAS income is lower than US income, where the adjustment represents between 5 percent and 10 percent of US income. The adjustment exceeds 10 percent of US income and IAS income is lower for one (of eight or 13%), four (of 11 or 36%), and five (of 14 or 36%) companies in 1995, 1996, and 1997, respectively. These adjustments are the result of higher depreciation charges on the revalued assets. The one instance in 1996 where IAS income is more than 10 percent higher than US income is also associated with revaluations of property, plant, and equipment. Fiat's adjustment to reverse revaluations of property, plant, and equipment reduces the company's net assets (as reflected in the reconciliation of IAS to US stockholder's equity) and the depreciation adjustment increases net income. Neither the IASC or FASB are considering proposals to modify the measurement basis of property, plant, and equipment following initial recognition. Thus, adjustments of this nature will likely continue into the foreseeable future.

The sole 1997 adjustment associated with higher IAS profit, where the adjustment represents between 5 percent and 10 percent of US income, is due to differences in

accounting for impaired assets under IASC and US GAAP. Nova states that US accounting principles require impaired assets to be written down to fair market value whereas Canadian (and IAS) principles require assets to be written down to recoverable value. The G4+1's *International Review of Accounting Standards Specifying a Recoverable Amount Test for Long-Lived Assets* (Paul, 1997) details the primary differences between IASC and US GAAP in this area. And, the G4+1 is working on converging existing standards of the member bodies. Hence, it is possible that differences between IASC and US GAAP may be minimized in the not so distant future.

Accounting for Deferred Taxes

Table 2 reveals the occurrence of adjustments associated with accounting for deferred taxes (16 in 1995, 13 in 1996, and 11 in 1997). Table 1 (Panel B) shows that the differences are associated with the flexibility in IAS 12 (prior to its recent revision) which allows use of partial or comprehensive allocation (US GAAP requires comprehensive allocation) and the deferral or liability method (US GAAP requires the liability method). Under the deferral method, the tax rate in effect when the timing difference originates is utilized to measure the amount of deferred tax liability. Under the liability method as reflected in FAS 109, the enacted rate for the periods in which the temporary differences are expected to reverse is utilized to measure the deferred tax liability. However, under the liability method as defined by the IASC, a change in tax rate may be recognized when announced, while US GAAP delays such recognition until the change in rate has been enacted into law. IASC standards also differ regarding when a tax benefit from an operating loss carry forward may be recorded.

Table 2 reports the mean and median partial indices for deferred taxes and indicates they represent 7 percent (reduction in IAS income), 1 percent (reduction in IAS income), and 6 percent (increase in IAS income) of profit under US GAAP in 1995, 1996, and 1997, respectively. The median values are respectively 0.93, 0.99, and 1.06 in 1995, 1996, and 1997. The *t*-tests and Wilcoxon tests (Table 3) indicate no significant differences (at $p < .05$).

Table 6 reveals that, while several of the individual deferred tax adjustments are immaterial, some are material. IAS profit is lower and the adjustment exceeds 10 percent of US GAAP for three (of 16 or 19%) and three (of 13 or 23%) in 1995 and 1996. In 1995, an additional three (of 16 or 19%) report IAS income less than US income where the adjustment represents 5–10 percent of US income. And, in 1995, 1996, and 1997, three (of 16 or 19%), one (of 13 or 8%), and three (of 11 or 27%) report IAS income exceeding US income by 10 percent or more. In 1996, two (of 13 or 15%) additional companies report IAS income that exceeds US income by an amount in the 5–10 percent range.

Reconciliation items associated with deferred taxes will be minimized, and perhaps almost eliminated, beginning with the filing of 1998 20-Fs. In 1996, IAS 12 was revised along the lines of FAS 109 and effective for years being on or after 1 January 1998 requires the use of the liability method and comprehensive allocation. The decline in the occurrence of reconciling differences over the 3-year period studied may be associated with the early adoption of the new requirements of IAS 12 Revised by some sample

companies. Upon adopting IAS 12 Revised, Hoechst and New Holland reported no adjustments for deferred taxes.

Accounting for Goodwill

Table 2 reports the overall occurrence of adjustments associated with goodwill (seven in 1995, nine in 1996, and 10 in 1997). Panels G and H of Table 1 reveal that the adjustments are primarily associated with:

1. charging goodwill to reserves prior to 1995 which yields no goodwill amortization charge to IAS net income (five companies), and
2. differences in the maximum amortization period which yield higher goodwill amortization charges to IAS income (three companies).

Given that the index of comparability exceeds 1 in each year, the former appears to be the driving factor. As revised during the Comparability Project, IAS 22 now prohibits the write-off of goodwill to reserves and, like US GAAP, requires capitalization and amortization. However, in that companies were not required to reinstate goodwill charged to reserves prior to 1995 when the revision became effective, these adjustments may continue for years. Adjustments arising from the varying amortization periods for goodwill may also continue. While the IASC has dropped the 20-year maximum amortization period with the 1998 revision of IAS 22, the US is considering moving from a 40-year to a 20-year ceiling. However, it is possible that the G4 + 1 convergence project on accounting for business combinations (see *Recommendations for Achieving Convergence on the Methods of Accounting for Business Combinations*) may result in the US and IASC attempting to minimize differences in regard to the goodwill amortization period. However, the G4 + 1 members view the convergence of guidelines concerning the goodwill amortization period to be secondary to the convergence of methods of accounting for business combinations.¹

Table 2 reports the mean partial indices for goodwill that represent 3 percent (increase in IAS income), 21 percent (increase in IAS income), and 8 percent (increase in IAS income) of profit under US GAAP in 1995, 1996, and 1997, respectively. The *t*-tests (Table 3a) indicate that the overall differences between IAS and US income associated with goodwill are not significant ($p < .05$). The medians are 1.04, 1.03, and 1.01 in 1995, 1996, and 1997. The Wilcoxon tests (Table 3b) indicate the goodwill adjustments are significant for 1997 ($p = .03$).

Table 6 indicates that several of the adjustments for goodwill over the 3-year period are immaterial. However, in 1996, one (of nine or 11%) adjustment reflects IAS income being less than US income, where the adjustment represents at least 10 percent of US income. This is related to Usinor amortizing goodwill over 5–20 years under IAS GAAP and over 40 years for US GAAP. In 1997, one (of 10 or 10%) adjustment reflects IAS income being less than US income where the adjustment represents 5–10 percent of US income. In 1995, 1996, and 1997, one (of nine or 11%), two (of nine or 22%), and two (of 10 or 20%) adjustments are associated with IAS income exceeding US income by an amount that represents 5–10 percent of US income. IAS income exceeds US

income and the adjustments exceed 10 percent of US income for three (of nine or 33%), three (of nine or 33%), and one (of 10 or 10%) companies in 1995, 1996, and 1997, respectively. Differences where IAS income exceeds US GAAP by more than 10 percent are associated with:

- Hoechst (1995, 1996, and 1997) and Banco charging goodwill to reserves prior to 1995 (1995 and 1996),
- Ispat's treatment of negative goodwill (1995 and 1996).

Capitalized Borrowing Costs

Table 2 shows the occurrence of adjustments associated with capitalized borrowing costs (six in 1995, six in 1996, and eight in 1997). According to Table 1 (Panel J), the differences are a function of six companies following the IAS 23 benchmark whereby all borrowing costs are expensed in the period incurred. Differences for the three Chinese companies are associated with the broad definition of borrowing costs provided by the IAS allowed alternative that provides for the capitalization of more costs than does US GAAP.² In respect to the IASC benchmark, Atlas (Sweden) and Usinor (France) state that national GAAP excludes the capitalization of interest. Shanghai Petrochemical, which uses the allowed alternative, states that in years prior to those presented, adjustments arose with regard to capitalization of interest; however, no material adjustments are related to the capitalization of construction interest for the years presented. Accordingly, the adjustments for 1995, 1996, and 1997 represent the amortization effect of differences originating prior to 1995.

Table 2 indicates that the mean partial indices represent 1 percent (increase in IAS income), 1 percent (reduction in IAS income), and 7 percent (reduction in IAS income) of US income in 1995, 1996, and 1997. The *t*-tests (Table 3a) reveal no significant differences. The medians are 0.95, 1.00, and 0.99. Wilcoxon tests (Table 3b) also indicate no significant differences.

Table 6 reveals that in 1995 one (of 6 or 17%) company reports IAS income lower than US income where the adjustment is at least 10 percent of US income, and one (of 6 or 17%) reports IAS income at least 10 percent higher than US income. All 1996 adjustments were immaterial. In 1997, one (of eight or 13%) company reports IAS income lower than US income where the adjustment is at least 10 percent of US income and three (38%) others report lower IAS income where the adjustment represents between 5 percent and 10 percent of US income. The difference that exceeds 10 percent in 1997 arises from Swisscom's use of the IASC benchmark.

SUMMARY AND CONCLUSIONS

The purpose of this research was to identify important differences between IASC standards and US GAAP and to assess the significance and materiality of these differences by means of an empirical analysis of data from the US GAAP reconciliations provided by non-US companies complying with IASs. This is a critical issue as the SEC and IOSCO consider eliminating the requirement that companies using IASs provide a 20-F US GAAP reconciliation to achieve access to US capital markets.

The results show *overall* that the adjustments to net income from IASC Standards to US GAAP in 1995–1997 were significant, without adjusting for IAS violations, *only* in 1996 with adjustments of 7 percent, 20 percent and 8 percent, respectively. However, when violations of IASs were taken into account, the differences were significant in 1995 and 1996, but *not* in 1997. The mean adjustments were 11 percent, 18 percent, and 6 percent of profit under US GAAP, respectively. Instances of IAS violations highlight the need to work toward the convergence of certain national regulations that currently impede the implementation of IASs, which is the case with respect to certain items in some countries (e.g., Canada, Finland, France, and Sweden).

The findings associated with violations of IASs also raise very important issues for the international auditing profession. Our analysis reveals that for a few sample companies, the 20-F reconciliations (prepared by US audit partners of then Big-6 firms) required adjustments (and disclosures) that would also be necessary for compliance with IAS. Yet, audit partners based in the country of domicile (representing the same auditing firm) had signed opinions where the audit opinion and/or accounting policy footnotes indicated the financial statements complied in all material aspects with IASs. This finding supports the IFAC's concern that auditors are asserting that financial statements comply with IASs when the accounting policies and other notes show otherwise (Cairns, 1997). The SEC and World Bank have expressed similar concerns about the quality of corporate audits performed by Big Five subsidiaries in Asia (Schroeder, 1998). Turner, Chief Accountant of the SEC, has noted that accounting firms are lending their credibility to foreign financial statements that do not measure up to US standards. Turner (1999b) has also stated that if SEC staff identify violations of IASs in financial statements claiming to comply with IASs, then the SEC will require either changes to the financial statements to conform with IASs or removal of the assertion of compliance with IASs. Hence, it logically follows that if the SEC drops the reconciliation requirement for companies using IASs, the audit profession must be prepared to provide assurance that the statements indeed comply with IASs regardless of domicile of the office signing the opinion.

The most important research finding of this study is that the differences between IASs and US GAAP are narrowing. Indeed, in 1997 such differences were not statistically significant. Given the changes implemented following the recent completion of the IASC core standards work program, differences are also likely to be reduced even further by 2000 and beyond. Thus, it could be argued that IASC standards, in terms of their overall impact on net income, are sufficiently close to US GAAP to be acceptable to the SEC and IOSCO.

Alternatively, the SEC may consider it necessary that disclosures be provided where companies utilize certain IASC alternatives that have historically yielded significant/material deviations from US GAAP. The IOSCO's Technical Working Group is now in the process of identifying IASs that may be acceptable for cross-border offerings without condition as well as IASs where acceptance may be subject to additional disclosures or other conditions. The current research findings are likely to assist in identifying candidates for the latter group. For example, the findings reveal that use of the IASC allowed alternative for property, plant, and equipment, tends to yield a significant deviation from US income. Yet, in some countries such as China, it may not be feasible to utilize the IASC benchmark. Hence, the SEC could require that companies utilizing the IASC allowed alternative for property, plant, and equipment measurement disclose the impact on US net income and net assets of using the alternative as opposed to the IASC benchmark.³ Based

on the current research and recent international developments, it appears that, if deemed necessary by the IOSCO Working Group, the list of IASs recommended for cross-border listings subject to additional disclosures could feasibly comprise quite a short list.

APPENDIX A

Company Names, Country, and Indication of IAS Compliance

<i>Company Name</i>	<i>Country</i>	<i>Indication of IAS Compliance*</i>
Aramex International	Bermuda	AR, Footnote
AB Astra	Sweden	Footnote
Atlas Copco	Sweden	Footnote
Banco Comercial Portugues	Portugal	AR, Footnote
Beijing Yanhau	China	AR, Footnote
Biochem Pharma	Canada	Footnote
Broken Hill Proprietary	Australia	Footnote
Cayman Water	Cayman Islands	AR, Footnote
China Eastern Airlines	China	AR, Footnote
China Southern Airlines	China	AR, Footnote
Credicorp	Bermuda	AR, Footnote
Fiat	Italy	Footnote
Guangshen Railway	China	AR, Footnote
Gucci Group	Netherlands	AR, Footnote
Hoechst	Germany	AR, Footnote
IPL Energy	Canada	Footnote
ISPAT International	Netherlands	AR, Footnote
Jilin Chemical Industrial	China	AR, Footnote
Lihir Gold	Papua New Guinea	Footnote
LVMH	France	Footnote
Magyar Távközlési Rt. (MATAV)	Hungary	AR, Footnote
Mexican Maritime Transportation	Mexico	AR, Footnote
Netia Holdings	Poland	AR, Footnote
New Holland	Netherlands	AR, Footnote
Nokia	Finland	AR, Footnote
NOVA	Canada	Footnote
OAQ Rostelecom	Russia	AR, Footnote
Scania	Sweden	Footnote
Shanghai Petrochemical	China	AR, Footnote
Sulzer Medica	Switzerland	AR, Footnote
SwissCom	Switzerland	AR, Footnote
USINOR	France	Footnote
Yanzhou Coal Mining	China	AR, Footnote

AR: Compliance with IAS indicated in audit opinion.

Footnote: Compliance with IAS indicated in accounting policy footnote.

NOTES

1. Only one company reported an adjustment associated with different accounting methods utilized to account for a business combination.

2. Ispat did not have an adjustment in 1997.
3. IAS 16 requires that companies carrying items of property, plant, and equipment at revalued amounts disclose the carrying amount of each class of property, plant, and equipment that would have been included in the financial statements had the assets been carried under the benchmark treatment.

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The Effect of Accounting Diversity on International Financial Analysis: Empirical Evidence

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Key Words: International comparability; Accounting diversity; International financial analysis; Financial ratios; Empirical evidence

***Abstract:** Business activity has expanded in recent years, crossing national borders to acquire an international dimension. As a result, financial information, as a communication vehicle, is used internationally and needs to be understood both inside and outside its country of origin. The analysis and interpretation of this information at international level is hindered by a multitude of factors, such as the international diversity in accounting principles.*

This paper seeks to ascertain, on an empirical basis, whether the existence of diversity in accounting principles has significant consequences for the interpretation of financial reporting at an international level and, therefore, for the decisions which may be taken on the basis of the conclusions drawn from an analysis of such information. To that end, we have examined the financial statements of a sample of Spanish listed companies and reformulated them using the GAAPs of other countries so as to understand how financial ratios derived from the Spanish GAAP would be affected as the basis of financial statement changes from Spain to other countries or by diverse national GAAPs.

We have found important differences in the situation of companies (liquidity, solvency, indebtedness and profitability) under different accounting principles. Consequently, accounting diversity can be considered as an important barrier for the international comparability of financial reporting.

The growth of the international financial markets, the activities of multinational companies and investor behavior, among other factors, have contributed to the internationalization of economic activity. Such a phenomenon has meant that financial reporting has itself extended beyond national frontiers.

However, the analysis and interpretation of this information at international level is hindered by a multitude of factors. One of them is the variety of accounting principles and rules governing their preparation.

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In recent years, considerable effort has been made by different organisations (IASB, EU, etc.) to harmonize the accounting rules enforced in different countries, with the aim of improving the comparability of companies located in different parts of the world. Nevertheless, there are still many differences in the way in which financial information is expressed from one country to another.

The question is whether accounting harmonization is useful in all cases when comparing financial information. If two companies with similar economic circumstances are located in similar economic environments, is it logical to expect that the financial statements and the ratios are comparable? We cannot guarantee that the answer is yes; it will depend, to a great extent, upon whether the accounting treatments applied in both environments are similar (in which case, the information will be comparable) or different (in which case, it will not).

By contrast, if two similar companies are located in different economic environments, will it be possible to compare the financial statements and ratios? In this case, comparability will not depend solely on the similarity between the accounting treatments that have been applied, given that when the environmental differences are insurmountable, different accounting treatment may be necessary.

In other words, accounting harmonization is desirable in those circumstances where the environmental differences are not excessively important and where the application of one single criterion in companies whose economic realities are similar gives rise to similar financial ratios, while the application of the same criterion in companies whose economic situation is different for the visualization of such a difference.

The increasing awareness of the existence of accounting diversity has led to studies on their quantitative impact upon accounting numbers, mainly upon corporate earnings and related indicators. That research has focused primarily on the impact of the principles in one or more countries in comparison with the US. Noteworthy contributions are those of Choi et al. (1983), Weetman and Gray (1990, 1991), Cooke (1993), Hellman (1993) and Norton (1995). With regard to comparisons between European countries, we note the work of Gray (1980), Simmonds and Azieres (1989) and Joos and Lang (1994), among others.

This paper is a continuation of that previous line of research. It seeks to ascertain whether the existence of diversity in accounting principles has significant consequences for the interpretation of accounting information at an international level and, therefore, for the decisions which may be taken on the basis of the conclusions drawn from an analysis of such information.

To this end, the paper considers from an empirical basis, whether the differences arising in the value of the main ratios employed in company analysis from the use of different accounting principles are statistically significant or, on the contrary, whether accounting diversity is not relevant from the standpoint of the international analysis of financial statements.

As we have stated earlier, previous research has mainly focused on the effects of accounting diversity upon corporate earnings and profitability ratios. An analysis of the repercussions on indicators of liquidity, solvency, indebtedness, and profitability is conducted in this research, on the grounds that they are all relevant for analysts and, therefore, they have an impact on the conclusions of an overall analysis of a company.

To this end, a sample of large listed Spanish companies was chosen and a selection of the ratios calculated from their financial statements was compared with those that would

Table 1. Definition of Ratios

Liquidity	Current assets/current liabilities (r_1)	CA/CL
Solvency	Total net assets/total liabilities (r_2)	TA/TL
Indebtedness	Total liabilities/net worth (r_3)	TL/NW
Return on assets (ROA)	Operating income/total net assets (r_4)	OpI/TA
	Ordinary income/total net assets (r_5)	OrdI/TA
Return on equity (ROE)	Ordinary income/net worth (r_6)	OrdI/NW
	Income before taxes/net worth (r_7)	IBT/NW
	Net income/net worth (r_8)	NI/NW

have been obtained using alternative accounting principles. Important differences in the picture of companies (liquidity, solvency, indebtedness and profitability) under different accounting principles were found. Consequently, accounting diversity can be considered as an significant barrier for the international comparability of financial reporting.

The specific goals, methodology and results of the research are set out in the sections which follow. The paper ends with a brief summary of the conclusions and implications of the results.

OBJECTIVES OF THE STUDY

The survey is based upon 10 reporting items (A_j , $j = 1, 2, \dots, 10$) where international diversity impacts the largest number of ratios and where the information available allows the pertinent adjustments to be made. These are shown in Appendix A together with the alternative accounting methods available for each of them at an international level.

To examine these alternatives, we analyzed the situation in a set of six countries (France, Germany, Japan, Spain, the United Kingdom and United States) regarding these reporting items, using a survey by Coopers and Lybrand (1993): "*International Accounting Summaries*." Appendix A lists the treatments adopted in each country regarding each of the reporting items examined in this paper.

This paper analyzes the effect of accounting diversity on financial ratios from two standpoints: considering the impact of accounting differences in each reporting item considered in isolation (individual effects) and considering the effect of diversity in connection with all the reporting items viewed as a whole (combined effect).

Having defined the reporting items and the countries to be considered, the research proceeded:

1. to test statistically the significance of the impact of the existing accounting alternatives for each of the above 10 reporting items on the liquidity, solvency, indebtedness and profitability displayed by companies (individual effects). Table 1 shows the ratios selected as the most representative indicators of the aforementioned situations; they are the dependent variables in our analysis, denoted as r_t , where $t = 1, 2, \dots, 8$.
2. to consider the accounting methods applied in the countries included in this survey for the 10 reporting items examined and to test whether the combined effect of the differences in the accounting treatment of these aspects, considered

as a whole, leads to significant differences in the liquidity, solvency, indebtedness and profitability of the companies between pairs of countries using pairwise comparisons.

3. to use empirical evidence, to ascertain which of these aspects requires an effort in harmonization to eliminate their negative impact on the international comparability of companies and which, while remaining different, do not require further attention on the grounds that their impact on comparability is not significant.

METHODOLOGY

Selection of the Sample

Some of the published research involving a comparative analysis of the impact of alternative accounting principles on relevant economic or financial magnitudes is based on the information which the companies in one country file with the stock market authorities of another country where they are listed (see, for example, Weetman and Gray, 1990, 1991; Cooke, 1993; Norton, 1995). This is mainly applicable if one of the countries being compared is the USA and the other is a country where many companies are listed in the USA. The US *Securities and Exchange Commission (SEC)* requires more information than any other market authority and foreign companies listed in the USA must file financial information prepared using US accounting principles or, if they file information using their local principles, they must present a reconciliation of income and net worth to US principles.

While this is undoubtedly a valuable source of information on which to base a comparative analysis, not all regulators require a reconciliation of differences to be filed. Consequently, since we are not interested in using a single focus of comparison, such as the USA, it was not considered appropriate to use this type of information in this research. We would also find that, for many countries, the number of companies listed in the USA is very small.

Other researchers have opted to work with samples of companies from different countries and to conduct comparative analyses of their ratios (see, for example, Choi et al., 1983; Aoki, 1992; Frost, 1994). However, this approach is open to the risk that the differences reflected by the accounting magnitudes and the ratios calculated from the latter are due not only to the application of different accounting treatments but also to economic differences between the countries in question.

The objective in this paper is not to ascertain the difference in the situation presented by companies in different countries on the basis of their financial statements but, rather, to examine whether the mere application of the different accounting principles existing internationally to the economic and financial data of a given company can have a significant influence on the calculated liquidity, solvency, indebtedness and profitability of the company.

Consequently, because of the authors' greater familiarity with Spanish accounting principles, the analysis of the information presented by companies in Spain was used. Appropriate adjustments were then made to obtain the accounting magnitudes which these

companies would have presented had the alternative accounting principles observed at international level been applied.

This paper is based on the consolidated financial statements of the 30 largest listed companies in 1993 (see Appendix B). The sample was configured on the basis of two variables: company size using sales volume (Actualidad Económica, 1994) and continued listing on the Madrid Stock Exchange. The main reason for using these variables in choosing the sample was that they were felt to have a positive influence on the amount and quality of the information. Regarding the link between size and/or listing on stock markets and the volume and quality of published information, see Cooke (1989), García Benau and Monterrey (1992) and Meek et al. (1995). Moreover, as shown in Lainez et al. (1996), the information presented by companies is affected not only by the fact that they are listed but also by the market on which they are listed, since not all markets are equally demanding with regards to reporting requirements.

DESIGN OF THE SURVEY

In order to meet the pre-set objectives, the survey was developed according to the following process.

(1) The financial statements of the companies in the sample were studied and the eight indicators being studied were calculated for each of the 30 companies, thus, obtaining the ratio values based on Spanish accounting principles.

(2) Taking account of the alternative accounting treatments available for each reporting item considered, an adjustment was performed to obtain the value of the ratios using those alternative treatments.

For example, in Spain, intangibles are recognized as assets — alternative 1. However, the alternative at international level is to register a current expense — alternative 2. The ratios calculated from the financial statements of the Spanish companies correspond to alternative 1. The balance sheet and income statement were adjusted to ascertain what they would look like under alternative 2 (see Appendix C). After obtaining the financial statements under the second alternative, the eight ratios were recalculated; consequently, the difference between the latter and those obtained using the first alternative is the effect on them due to the application of one or other alternative, i.e., due to the international diversity regarding the recognition of intangibles.

Applying this procedure to the 10 reporting items, the value of the ratios under the various accounting alternatives existing for each aspect was obtained.

(3) After the process of adjustment and calculation of ratios under the various alternatives, the statistical significance of the individual effect of international diversity in each of the 10 reporting items on the eight ratios selected as representing a company's situation was obtained.

As the effect on eight different ratios was being attempted, eight identical null hypotheses ($t = 1, 2, 3, \dots, 8$) for each of the j reporting items, with $j = 1, 2, 3, \dots, 10$ were defined:

H₀: There are no significant differences in the ratio r_t under the alternatives available for reporting item A_j .

These hypotheses were tested using the Wilcoxon signed-rank test (regarding the Wilcoxon test, see Siegel and Castellan, 1988).

(4) A second goal was to check the combined effect of accounting diversity in the 10 reporting items considered as a whole on each of the eight chosen ratios. For this purpose, based on the accounting treatment observed in each country, the financial statements presented by the Spanish companies were adjusted to derive the financial statements which they would have filed under the other countries' accounting treatments.

Where any of the countries allows both the criterion used in Spain and an alternative, the alternative was assigned to that country and the corresponding adjustment was made. In that case, the Spanish approach is compared with only one of the approaches available in the another country.

Conversely, when the accounting treatments applied by a country to a specific accounting aspect was unknown or materially different from the identified alternatives, no adjustment was made. Appendix D presents the items which were adjusted for each country.

(5) After obtaining the various ratios constituting the data base, the Wilcoxon signed-rank test was applied to ascertain the pairs of countries between which the differences in the ratios were significant. The following null hypothesis was tested:

H₀: There are no significant differences in the ratio r_i under the accounting treatments of the pair of countries examined for the 10 reporting items considered as a whole.

Since the effect on eight different ratios was examined, the Wilcoxon test was performed eight times.

RESULTS OF THE STATISTICAL ANALYSIS

Effect of Accounting Diversity with Regard to Each Reporting Items. Individual Effect

Intangible Assets

At an international level, there are two alternatives for recognizing intangible assets: recognition as an asset or as a current expense. The adoption of one or other criterion impacts the various balance sheet and income statement magnitudes and, consequently, affects the analysis ratios based on those magnitudes. For the purpose of making the appropriate adjustments, we excluded from the items reported under the heading of intangible assets both R&D expenses (which we discuss separately) and assets under leasing (whose treatment varies considerably from country to country).

As shown in Table 2-Panel A, the average liquidity and indebtedness ratios of the sample of companies are slightly lower if these items are recognized as assets, whereas the other indicators are higher using this criterion.

At a 5% level of significance, the Wilcoxon signed-rank test reveals that the relative diversity existing with regard to the recognition of intangible assets significantly affects the liquidity, solvency and indebtedness ratios.

Table 2. Results of the Wilcoxon Signed-Rank Test. Recognition of Intangible Assets, Positive and Negative Goodwill

<i>Panel A: Recognition of Intangible Assets</i>			
	<i>Average (Capitalize)</i>	<i>Average (Expense)</i>	<i>p-Values</i>
CA/CL	1.0850	1.0943	0.0001*
TA/TL	1.6950	1.6850	0.0000*
TL/NW	2.2057	2.2360	0.0000*
Opl/TA	0.0583	0.0567	0.5625
OrdI/TA	0.0287	0.0277	1.0000
OrdI/NW	0.0463	0.0423	0.2455
IBT/NW	0.0417	0.0370	0.0962
NI/NW	0.0107	0.0080	0.2344
<i>Panel B: Recognition of Positive Goodwill</i>			
	<i>Average (Capitalize)</i>	<i>Average (Charge Against Reserves)</i>	<i>p-Values</i>
TA/TL	1.6654	1.6438	0.0000*
TL/NW	2.3388	2.4919	0.0000*
Opl/TA	0.0546	0.0565	0.0625
OrdI/TA	0.0227	0.0269	0.0156*
OrdI/NW	0.0308	0.0431	0.0159*
IBT/NW	0.0269	0.0392	0.0303*
NI/NW	-0.0027	0.0085	0.0219*
<i>Panel C: Recognition of Negative Goodwill</i>			
	<i>Average (Specific Liability)</i>	<i>Average (Reserves or Deferred Revenue)</i>	<i>p-Values</i>
TA/TL	1.7800	1.8062	0.2500
TL/NW	2.3113	2.2213	0.1250
OrdI/NW	0.0575	0.0600	1.0000
IBT/NW	0.0663	0.0700	1.0000
NI/NW	0.0413	0.0450	1.0000

Note: *Significant at the 5% level.

Positive Goodwill

In some countries, positive goodwill must be recognized as an amortizable asset, whereas others require it to be charged off against reserves.

Capitalizing goodwill, rather than charging it against reserves produces indebtedness, ROA, and ROE ratios which are lower, on average. The opposite occurs with the solvency ratio.

The results obtained by applying the Wilcoxon test (Table 2-Panel B) show that the differences in the solvency and indebtedness ratios under the two alternatives are significant at the level 1%. The effect on ROE is also significant using any of the three ratios analyzed. ROA is also affected by the criterion which is adopted and the differences are significant if this ratio is measured in terms of ordinary income.

Table 3. Results of the Wilcoxon Signed-Rank Test. Recognition of Capital Subsidies

	<i>Average (Deferred Revenue)</i>	<i>Average (Lower Value of Asset)</i>	<i>p-Values</i>
TA/TL	1.7295	1.7182	0.0005*
TL/NW	1.8000	1.8500	0.0000*
OpI/TA	0.0550	0.0582	0.0156*
OrdI/TA	0.0255	0.0268	0.2500
OrdI/NW	0.0495	0.0532	0.1097
IBT/NW	0.0550	0.0545	1.0000
NI/NW	0.0277	0.0268	1.0000

Note: *Significant at the 5% level.

Negative Goodwill

There are three alternative approaches in this case: recognition as a reserve, as a deferred revenue to be taken systematically to income or as a specific liability item which may only be recognized in income under very special circumstances established by regulation.

In order to make the pertinent adjustments, it was assumed that companies' negative goodwill relates (as is normally the case) to a provision and the the alternatives of recognizing it as a deferred revenue or a reserve were combined. These differ with regards to whether or not the goodwill is imputed to earnings periodically, but since it is impossible to know how much would have been imputed, it was necessary to assume that nothing is imputed to results and merely adjust the effect on the balance sheet.

Accordingly, the impact on the analysis indicators of treating negative goodwill as a reserve or deferred revenue, on the one hand, and as a specific liability, on the other, was tested. Changing the criterion affects the solvency and indebtedness ratios and the three ROE ratios. All except the indebtedness ratio are higher, on average, if the goodwill is recognized as a reserve or deferred revenue (Table 2-Panel C).

However, the statistical analysis reveals that these effects are not significant in connection with any of those ratios.

Capital Subsidies

In the sample of companies that receive capital subsidies, the average ratios of indebtedness and profitability (using ordinary income) are higher when the subsidy is recognized as a reduction in the value of the asset (Table 3). Conversely, the solvency ratio is higher if the subsidy is recognized as a deferred revenue.

Applying the Wilcoxon signed-rank test reveals that the differences between the ratios under the two options are statistically significant in the case of the solvency and indebtedness ratios and in the case of the ROA measured using operating income. The effect on the other indicators is not significant.

Research Expenses

Except where companies provided a break-down, it was assumed that 50% of R&D expenses related to research and the other 50% to development. The reason for making this

Table 4. Results of the Wilcoxon Signed-Rank Test. Recognition of Research and Development Expenses

<i>Panel A: Recognition of Research Expenses</i>			
	<i>Average (Capitalize)</i>	<i>Average (Expense)</i>	<i>p-Values</i>
CA/CL	1.0930	1.0960	0.0312*
TA/TL	1.6745	1.6705	0.0078*
TL/NW	2.3490	2.3620	0.0078*
OpI/TA	0.0665	0.0660	1.0000
OrdI/TA	0.0335	0.0330	1.0000
OrdI/NW	0.0360	0.0340	0.5000
IBT/NW	0.0215	0.0195	0.5312
NI/NW	-0.0135	-0.0140	1.0000
<i>Panel B: Recognition of Development Expenses</i>			
	<i>Average (Capitalize)</i>	<i>Average (Expense)</i>	<i>p-Values</i>
CA/CL	1.0640	1.0687	0.0312*
TA/TL	1.7313	1.7253	0.0078*
TL/NW	1.9773	1.9940	0.0312*
OpI/TA	0.0820	0.0807	0.5000
OrdI/TA	0.0473	0.0467	1.0000
OrdI/NW	0.1060	0.1020	0.3750
IBT/NW	0.0860	0.0827	0.4375
NI/NW	0.0473	0.0460	0.7500

Note: *Significant at the 5% level.

distinction was that the adjustment is affected by the fact that certain countries distinguish between research and development expenses when determining whether or not they should be capitalized.

The recognition of research expenses as an asset or as a period expense impacts the financial statements to such an extent that all the indicators analyzed here are modified. The average liquidity and indebtedness ratios were lower if research expenses were capitalized, whereas the other indicators were higher on average under this option (Table 4-Panel A).

However, from a statistical standpoint, only the differences in the liquidity, solvency and indebtedness ratios are significant at the 1% level. The impact on the liquidity ratio is significant at the 5% level. Conversely, varying the accounting criterion for recognition of research expenses does not significantly affect the profitability ratios.

Development Expenses

The problem is exactly the same as in the case of research expenses and the same ratios are affected by changing the accounting criterion.

The statistical analysis (Table 4-Panel B) reveals the same conclusions as in the case of research expenses.

Table 5. Results of the Wilcoxon Signed-Rank Test. Recognition of Exchange Gains and Losses

<i>Panel A: Recognition of Exchange Gains</i>			
	<i>Average (Defer)</i>	<i>Average (Revenue)</i>	<i>p-Values</i>
CA / CL	1.2888	1.2875	1.0000
TA / TL	1.6413	1.6375	0.2500
TL / NW	2.7862	2.8075	0.2500
OpI / TA	0.0388	0.0388	1.0000
OrdI / TA	0.0100	0.0112	1.0000
OrdI / NW	-0.0550	-0.0525	0.6250
IBT / NW	-0.0675	-0.0663	1.0000
NI / NW	-0.0850	-0.0850	1.0000
<i>Panel B: Recognition of Exchange Losses</i>			
	<i>Average (Defer)</i>	<i>Average (Expense)</i>	<i>p-Values</i>
CA / CL	1.2175	1.2220	0.0078*
TA / TL	1.8120	1.8180	0.0078*
TL / NW	2.0500	2.0240	0.0001*
OrdI / TA	0.0330	0.0275	0.0156*
OrdI / NW	0.0380	0.0210	0.0002*
IBT / NW	0.0405	0.0245	0.0002*
NI / NW	-0.0055	-0.0150	0.0005*

Note: *Significant at the 5% level.

Exchange Gains

The alternatives for recognizing exchange gains considered in the analysis consist of taking them to income or recording them as a deferred revenue over a period of years. In some countries, when these differences arise from financing linked to fixed asset items, they may be capitalized in the value of the assets. However, this alternative was not included in the empirical analysis because of the shortage of information on this practice by the companies in the sample.

The aforementioned diversity influences the ratios analyzed here as follows: the average liquidity and solvency ratios are higher when the exchange differences were deferred, whereas the average indebtedness ratio and the ROA and ROE ratios are higher when exchange gains were recognized as a revenue.

Nevertheless, the Wilcoxon test (Table 5-Panel A) reveals that the differences between the ratios under the two alternatives are not statistically significant in any case.

Exchange Losses

The alternatives for recognizing exchange losses are the same as for exchange gains: deferment or recognition as an expense. As in the case of exchange gains, it is also possible to capitalize exchange losses. However, only the two options of currently expensing or deferring exchange losses were applied for the same reason as in the case of exchange gains.

Table 6. Results of the Wilcoxon Signed-Rank Test. Calculation of Accrued Taxes

	<i>Average (Tax Effect)</i>	<i>Average (Tax Payable)</i>	<i>p-Values</i>
CA / CL	1.1130	1.1119	0.9359
TA / TL	1.7348	1.7474	0.1183
TL / NW	1.9337	1.8759	0.1752
Opl / TA	0.0622	0.0633	0.2500
OrdI / TA	0.0344	0.0352	0.5000
OrdI / NW	0.0822	0.0804	0.1875
IBT / NW	0.0741	0.0707	0.0409*
NI / NW	0.0430	0.0381	0.2012

Note: *Significant at the 5% level.

In this case, deferring the losses reduces the average liquidity and solvency ratios while increasing the average indebtedness and profitability ratios (Table 5-Panel B).

The Wilcoxon test reveals that the impact of the diversity in accounting principles is significant at the 5% level for all the ratios.

Calculation of Accrued Taxes

Changing the method in this case (tax payable or tax effect method) affects all eight ratios: the average liquidity, indebtedness and ROE ratios were higher using the tax effect method. Conversely, the average solvency and ROA ratios were higher using the tax payable method.

However, the statistical analysis reveals that the only significant difference (5%) is in the ROE ratio (using income before taxes). Although changing the method affects the other ratios, the differences are not statistically significant (Table 6).

Valuation of Tangible Fixed Assets

Two treatments are observed internationally for valuing tangible fixed assets: historical cost and restated cost. Our analysis revealed that using the restated cost gives higher average liquidity and solvency ratios and lower averages for the other indicators.

The Wilcoxon signed-rank test revealed that, at the 5% level of significance, the impact of the difference in treatments is significant for all ratios (Table 7).

In short, based on the foregoing results, there are ratios which are of interest in analyzing a company which are affected in a statistically significant way by the application of different accounting principles.

The *liquidity* is affected significantly by changes in:

- the recognition of intangible assets,
- the recognition of research expenses,
- the recognition of development expenses,
- the recognition of exchange losses, and
- the method for valuing tangible fixed assets.

Table 7. Results of the Wilcoxon Signed-Rank Test. Valuation of Tangible Fixed Assets

	Average (Restated Cost)	Average (Historical Cost)	p-Values
CA/CL	1.0019	0.9250	0.0002*
TA/TL	1.7256	1.5906	0.0000*
TL/NW	1.9313	10.2781	0.0000*
OpI/TA	0.0688	0.0831	0.0010*
OrdI/TA	0.0263	0.0337	0.0166*
OrdI/NW	0.0438	0.2925	0.0342*
IBT/NW	0.0325	0.3187	0.0330*
NI/NW	0.0119	0.2369	0.0303*

Notes: *Significant at the 5% level.

The *solvency* ratio is also significantly affected by changes in the methods relating to:

- the recognition of intangible assets,
- the recognition of positive goodwill,
- the recognition of capital subsidies,
- the recognition of research expenses,
- the recognition of development expenses,
- the recognition of exchange losses, and
- the method for valuing tangible fixed assets.

The *indebtedness* ratio is affected by changes in exactly the same principles as in the case of the solvency ratio.

The *ROA*, measured on the basis of operating income, was affected by variations in the following items:

- the recognition of capital subsidies (5%),
- the method for valuing tangible fixed assets (1%).

In contrast, the reporting items whose changes significantly affect the ratio of ordinary income to assets are:

- the recognition of positive goodwill,
- the recognition of exchange losses, and
- the method for valuing tangible fixed assets.

Lastly, the three ratios of ROE present significant differences when there are changes in the following methods:

- the recognition of positive goodwill,
- the recognition of exchange losses,
- the method for valuing tangible fixed assets.

The alternatives for calculating the accrued taxes significantly impact the ROE measured in terms of income before taxes.

Effect of Accounting Diversity with Respect to All Reporting Items. Combined Effect

As indicated earlier in the description of the methodology, six accounting treatment systems were identified, based on the principles adopted in six different countries with reference to the set of reporting items being examined.

The objective was to ascertain whether the differences in the ratios obtained under the accounting treatments of a pair of countries were statistically significant, or whether the differences created by variations in the individual accounting methods offset each other, in such a way that the ratios (and, consequently, the analysis of a company's situation) are unaffected if all these aspects are taken together.

The Wilcoxon signed-rank test was applied, and the results obtained are discussed below on the basis of each of the ratios studied using pairwise comparisons.

Liquidity (CA/CL)

At a 5% level of significance, more than 73% of the pairs of countries (11 of the 15 possible pairs) presented a significant difference in liquidity.

France presents significant differences in the liquidity ratio with respect to four other countries: Germany, Japan, the United Kingdom and the United States. Germany differs from Spain, France and the United Kingdom. The liquidity ratio under the Japanese GAAPs is different from that obtained under the GAAPs of Spain, France and the United Kingdom. Spain was found to present significant differences with respect to Germany, Japan, the United Kingdom and the United States. The United Kingdom differs from all the other countries and the United States from Spain, France and the United Kingdom.

Solvency (TA/TL)

If the foregoing indicates that the accounting principles in different countries have a major impact on the comparability of company liquidity, this effect is also pronounced in the case of solvency.

Again, taking a 5% level of significance, eleven pairs of countries have statistically significant differences with respect to the solvency ratios which a given company would have under the principles of one or another country.

In this case, solvency under the accounting principles of Germany differs significantly from that obtained under the principles of all the other countries. France differs from all the other countries except Spain. Japan, the United Kingdom and the United States present significant differences in the solvency ratio with respect to Germany, Spain and France. Finally, Spain differs from all the other countries except France.

Indebtedness (L/NW)

In this case, 60% of the pairs of countries show a significant difference. Germany presents significant differences with respect to all the other countries. France presents differences in this ratio when compared with Germany and the United Kingdom. Spain differs from four other countries: Germany, Japan, the United Kingdom and the United States. Japan only differs from Germany and Spain. the United Kingdom presents differences with respect to the three other European countries, and the United States only with respect to Germany and Spain.

ROA (OpI/TA)

More than 66% of the pairs of countries (10 of the possible 15 pairs) present differences which are significant at a 5% level.

France presents differences in this ratio when compared with Germany and Japan. Germany differs from all the other countries except Japan, which presents significant differences with respect to the United States and to all European countries except Germany. Spain differs from Germany, Japan and the United States. The United Kingdom differs from Germany and Japan and the United States, while the United States differs from Germany, Japan and the United Kingdom.

ROA (OrdI/TA)

In this case, only five of the pairs present differences which are significant at the 5% level. Using this ROA ratio, Germany presents significant differences with respect to all the other countries except Japan, which also differs from the United States.

The ROA ratio is different under US GAAPs and that obtained under the GAAPs of Japan and Germany, while the rest of countries (France, Spain and United Kingdom) only differ from Germany.

ROE (OrdI/NW)

Here, the results indicate that the comparability of ROE is less affected by accounting diversity than are the earlier mentioned indicators. Measured in terms of ordinary income, ROE does not present significant differences between the 15 possible pairs of countries.

ROE (IBT/NW)

Assuming a 5% probability of error, there are significant differences in two pairs of countries: Germany–Spain and Germany–Japan.

ROE (NI/NW)

Only the pair Spain–Germany show differences in this ratio which are significant at a 5% level.

CONCLUSIONS

The goal of this paper was to examine whether the effects of diversity in accounting principles on the economic and financial situation presented by companies are important in practice. To achieve this, tests were conducted on the statistical significance of the differences in a number of ratios based on the accounting principles applied internationally for a number of specific reporting items.

The results obtained lead to the following conclusions.

Of the ratios studied, the *solvency* and *indebtedness* ratios are significantly affected by the largest number of reporting items from among the 10 considered here, all of them with the exception of the recognition of negative goodwill, exchange differences and the method of calculating accrued taxes.

The *liquidity* ratio is also affected, albeit to a lesser extent. In this case, five of the reporting items generate significant differences due to the diversity of accounting treatment. The *profitability* ratios are also affected, but only a few of the reporting items considered in this survey generate statistically significant differences.

Of the reporting items examined here, the use of a different *method of valuing tangible fixed assets* (historical cost or restated cost) has the greatest impact on the view presented by a company's financial statements.

The impact of diversity in the *recognition of positive goodwill* and of *exchange losses* is also important, since it triggers significant differences in practically all of the ratios analyzed.

Moreover, having ascertained the position of six countries with regard to the alternative accounting methods existing for the reporting items considered here, the ratios obtained were studied according to the accounting treatments applied in each country for the set of reporting items taken as a whole. The goal was to check whether these differ significantly when we compare the countries or whether the international accounting diversity is not a major impediment for the analysis of financial information.

This paper has shown that the differences in the financial ratios remain significant in many cases when the comparison is confined to specific country pairs, particularly in the case of liquidity, solvency, indebtedness and ROA based on operating income. Germany is the country that presents significant differences with respect to the largest number of countries.

Accordingly, the overall picture of a company is affected by the diversity of rules which exist for the items considered here and, although it would be desirable to conduct an analysis considering all the reporting items in which differences arise, the results obtained in this partial analysis can be considered as a more than sufficient indicator that diversity in accounting treatments is a major barrier to the international analysis of financial statements, confirming the conclusions reached in other papers published in this field (see Weetman & Gray, 1990, 1991; Norton, 1995).

The importance of this barrier is its repercussion on the comparability of corporate information in an international context, a factor which is vital if such information is to be useful as a basis for decision-making. Consequently, the user of international financial information must be alert to the existence of diverse accounting principles and to the impact of such principles on the situation presented by companies through their financial reporting.

Appendix A. Accounting Treatments Adopted in the Various Countries

	A_1^a	A_2^b	A_3^c	A_4^d	A_5	A_6	A_7^e	A_8^f	A_9^g	A_{10}^h
Francia (FRA)	a ₁₁	a ₂₂	a ₃₁	a ₄₁	a ₅₁	a ₆₁	a ₇₂	a ₈₁	a ₉₂	a _{10 2}
Germany (GER)	a ₁₁	a ₂₂	a ₃₃	a ₄₂	a ₅₂	a ₆₂		a ₈₁	a ₉₂	a _{10 1}
Japan (JAP)	a ₁₁	a ₂₁	a ₃₃	a ₄₂	a ₅₁	a ₆₁	a ₇₁	a ₈₁	a ₉₁	a _{10 1}
Spain (SPA)	a ₁₁	a ₂₁	a ₃₃	a ₄₁	a ₅₁	a ₆₁	a ₇₂	a ₈₁	a ₉₂	a _{10 1}
United Kingdom (UK)	a ₁₂	a ₂₂	a ₃₁	a ₄₂	a ₅₂	a ₆₁	a ₇₁	a ₈₁	a ₉₂	a _{10 2}
United States (USA)	a ₁₁	a ₂₁	a ₃₂	a ₄₁	a ₅₂	a ₆₂	a ₇₁	a ₈₁	a ₉₂	a _{10 1}

Notes: ^aIn the United Kingdom, alternative a₁₂ is allowed as a permitted alternative together with a₁₁.

^bThe countries which establish criterion a₂₂ also allow a₂₁.

^cFrance allows a₃₂ in addition to a₃₁.

^dWith the exception of Germany, the countries which adopt criterion a₄₂ also allow a₄₁.

^eIn Germany, assets are carried at the lower of the closing and historic exchange rates, and liabilities at the higher of the two. Accordingly, no exchange gains are recognized. Spain allows exchange gains to be capitalized if they are linked to fixed assets.

^fExchange losses may also be capitalized in Spain.

^gFrance adopts criterion a₉₁ for individual financial statements.

^hThe countries which establish alternative a_{10 2} allow it as a permitted alternative together with a_{10 1}.

A₁: Recognition of intangible assets.

a₁₁: Recognize as fixed asset.

a₁₂: Recognize as current expense.

A₂: Recognition of positive goodwill.

a₂₁: Capitalize and amortize.

a₂₂: Charge off against reserves.

A₃: Recognition of negative goodwill.

a₃₁: Add to reserves.

a₃₂: Recognize as deferred revenue.

a₃₃: Recognize as a specific liability.

A₄: Recognition of capital subsidies.

a₄₁: As deferred revenue.

a₄₂: As a reduction in the value of the asset they finance.

A₅: Recognition of research expenses.

a₅₁: Capitalize.

a₅₂: Recognize as current expense.

A₆: Recognition of development expenses.

a₆₁: Capitalize.

a₆₂: Recognize as current expense.

A₇: Recognition of exchange gains.

a₇₁: Credit to income.

a₇₂: Defer.

A₈: Recognition of exchange losses.

a₈₁: Charge to income.

a₈₂: Defer.

A₉: Calculation of accrued taxes.

a₉₁: Tax payable method.

a₉₂: Tax effect method.

A₁₀: Valuation of tangible fixed assets.

a_{10 1}: Historical cost.

a_{10 2}: Restated cost.

Appendix B. List of the Companies Examined

ACERINOX	GAS NATURAL
AGUAS DE BARCELONA	HIDROCANTABRICO
AGROMAN	HUARTE
ASTURIANA DEL ZINC	IBERDROLA
BP OIL ESPAÑA	OCP CONSTRUCCIONES
CAMPOFRIO	PRYCA
CEPSA	REPSOL
CITROËN	SEVILLANA DE ELECTRICIDAD
CRISTALERIA ESPAÑOLA	TABACALERA
CUBIERTAS Y MZOV	TELEFONICA
DRAGADOS Y CONSTRUCCIONES	TUDOR
EBRO AGRICOLA	UNION FENOSA
ENDESA	URALITA
FOMENTO CONSTR. Y CONTRATAS	VALENCIANA DE CEMENTOS
FECSA	ZARDOYA OTIS

APPENDIX C

Adjustment Relating to the Recognition of Intangible Assets

A company records the acquisition of intangible assets by recognizing an asset (alternative 1) and the data presented in its balance sheet and income statement respond to this criterion. We wish to ascertain what figures it would present if it had applied the criterion allowed in other countries for recognizing the acquisition of this type of asset, i.e., if it had expensed the acquisition (alternative 2).

We will illustrate the adjustment using an example of a company which has a beginning balance of intangible assets amounting to 198,500 and an ending balance of 200,000. The adjustments required are as follows:

<i>Balance Sheet</i>		<i>Income Statement</i>	
Fixed assets	reduce by 200,000	Operating income	reduce by 1500
Net worth	reduce by 130,000	Ordinary income	reduce by 1500
Current liabilities	reduce by 525	Income before taxes	reduce by 1500
Cash	increase by 69,475	Taxes	reduce by 525
		Net income	reduce by 130,000

Since the balance of fixed assets in the balance sheet contains the amount of those intangible assets which have been capitalized, that balance must be reduced by 200,000 to adjust to the alternative criterion.

Regarding the income statement, if alternative 2 had been applied, the operating profit and subsequent figures (considering also the effect of amortization) would have been reduced by the net increase of 1500, and the tax burden would have been reduced by 525 (assuming tax at 35%).

With regard to the year just passed, the lower tax resulting from alternative 2 will have, as contra-item, a lower tax payable balance (current liabilities reduced by 525).

Since the taxes for prior years will have already been paid, we will reflect the corresponding adjustment in the cash balance, which will be increased by 69,475 due to the higher taxes paid because of application of alternative 1 by the company.

Moreover, the effects of the use of two different treatments on profits also impacts the net worth; the net worth resulting from capitalizing intangible assets must be corrected by reducing it to take account of the lower profits which would have been obtained (i.e., less 130,000) had alternative 2 been applied in this and prior years.

Appendix D. Items to Be Adjusted for Each Country

	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆	A ₇ ^a	A ₈	A ₉	A ₁₀ ^b
FRA		X	X							
GER		X		X	X	X				X
JAP				X			X		X	X
UK	X	X	X	X	X		X			
USA			X		X	X	X			X

Notes: ^aBecause of the treatment applied in Germany (Appendix A), exchange gains do not arise. However, we made no adjustment because of the impossibility of adjusting the information to the principles applied in that country.

^bThe general valuation method in Spain is historical cost. However, certain asset revaluations have been allowed by law in the past and their effects are still visible in current financial statements. Consequently, we made the corresponding adjustment for countries where no revaluations are allowed.

A₁: Recognition of intangible assets.

A₂: Recognition of positive goodwill.

A₃: Recognition of negative goodwill.

A₄: Recognition of capital subsidies.

A₅: Recognition of research expenses.

A₆: Recognition of development expenses.

A₇: Recognition of exchange gains.

A₈: Recognition of exchange losses.

A₉: Calculation of accrued taxes.

A₁₀: Valuation of tangible fixed assets.

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Cross-Corporate Ownership, Information Asymmetry and the Usefulness of Accounting Performance Measures in Japan

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Key Words: Cross-corporate ownership; Information asymmetry; Information sharing; Informational efficiency; Intertemporal return-earnings associations; Japan

Abstract: Using a large sample of Japanese firms, this paper examines the informational role of cross-corporate, interlocking ownership in Japan. We hypothesize that as the level of cross-corporate ownership increases, there will be less information asymmetry between the firm and market participants, and thus, stock prices of firms with high cross-corporate shareholdings incorporate information about future profitability earlier than do stock prices of firms with low cross-corporate shareholdings. Results of various tests strongly support the hypothesis, suggesting that cross-corporate shareholdings are an important institutional factor that alleviates the information asymmetry in the Japanese equity market.

A key characteristic that distinguishes the Japanese style of corporate governance from its US counterpart is cross-corporate, interlocking ownership through investment in the equity of other firms. In the US, cross-corporate ownership of equity shares is uncommon, and corporate shareholders own less than 30% of the equity shares of US listed firms (Prowse, 1990, 1992). In contrast, about 70% of the equity shares of Japanese listed firms are cross-owned by non-individual corporate shareholders such as financial institutions and other business corporations.¹ Throughout the 1980s, financial institutions such as banks and insurance companies owned, on average, about 40% of outstanding shares of Japanese firms, while they own less than 5% in the US. In a related vein, Bae and Kim (1998) report that Japanese firms, on average, invest 30% of their net assets into the equity shares of other affiliated firms. This cross-corporate shareholding through the inter-corporate investment results in a highly concentrated ownership structure in Japan, while corporate shareholdings in the US are widely dispersed among different classes of investors (Prowse, 1992). Indeed, cross-corporate ownership has been a driving force that made it possible for

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keiretsus (large industrial groups or conglomerates) to evolve as a dominant player in the Japanese economy.²

The prevalence of cross-corporate ownership has an important implication for the level of information asymmetry between managers and outside investors in the Japanese equity market. The information asymmetry arises when outside investors do not have access to private information that managers have. As noted by Jacobson and Aaker (1993), the information asymmetry is likely to be lower in the Japanese equity market than in the US market. For example, in the US, exclusionary information sharing between managers and a selected group of outside investors is prohibited, and thus, outside investors rely more heavily on publicly available information (e.g., published financial statements) to monitor managerial performance and to assess a firm's business prospects. In contrast, the Japanese style of corporate governance allows value-relevant (inside) information about a firm's prospects and/or business strategies to be shared exclusively within the cross-owned network through direct communications between managers and cross-corporate shareholders. This information sharing is often facilitated through such channels as interlocking directorates, presidential clubs (*shacho-kai*), and the general trading company (*sogo shosha*).³ For example, the majority of outside directors of a large Japanese company typically come from main banks or other affiliated companies within the cross-owned network (Kaplan and Minton, 1994).

The prevalence of cross shareholdings in Japan reflects salient characteristics of Japanese social culture such as cooperation, interdependence, and mutual trust in the interpersonal and inter-group relationships.⁴ Some argue that this cross-holding relationship is anti-competitive and exclusionary in that there is little room for competition among cross-held firms and information is shared exclusively within the cross-held network (e.g., Sheard, 1991; Cooke, 1997). Indeed, the cross-shareholding feature of corporate control in Japan has been a subject of bilateral trade talks between the US and Japan, as the US government introduced the subject into the so-called Strategic Impediments Initiative (Berglof and Perotti, 1994; Cooke, 1997).

The literature on comparative corporate governance, in general, finds that the Japanese-style corporate governance gives rise to efficiency gains in the economy by facilitating the monitoring activities (Gilson and Roe, 1993), lowering incentive conflicts and agency costs between borrowers and lenders (Diamond, 1984; Admati and Pfleiderer, 1994), and allowing credible exchange of information (Goto, 1982; Kester, 1991). Further, Kaplan (1994), Kaplan and Minton (1994), and Kang and Shivdasani (1997) provide evidence suggesting that the Japanese-style corporate governance is effective in monitoring a firm's operating and investment decisions. Kang and Shivdasani (1995, 1997) provide evidence suggesting that a positive relation exists between the intensity of monitoring activities and the concentrated ownership with financial institutions in Japan. In addition, Hoshi et al. (1991) find that the Japanese-style corporate governance leads to investments being much less sensitive to a firm's liquidity. However, the aforementioned studies have paid little attention to the impact of the Japanese style of corporate governance on *informational efficiency* in capital markets, while they have focused on its impact on *production efficiency* in product markets.

In an attempt to better understand the Japanese style of corporate governance with cross-corporate ownership, this paper aims to investigate the informational role of

cross-corporate, interlocking ownership in the Japanese equity market that has been unexplored in the extant literature. In particular, we examine a question of whether, and how, the level of cross-corporate ownership in Japan differentially affects the level of information asymmetry, which, in turn, affects the timing and magnitude of intertemporal associations between market returns and a typical accounting measure of firm performance in current and future periods. As the level of cross-corporate ownership increases, the information asymmetry between the firm and outside investors decreases, because more investors are likely to have access to inside information about future business prospects or strategies. In other words, the higher the level of cross-corporate ownership for a firm is, the greater is the business tie or information sharing between the firm and investors; thus, the lower is the information asymmetry between the two parties with respect to future business performance. In this study, we thus hypothesize that stock prices of firms with high cross-corporate shareholdings incorporate information about future business performance earlier than do stock prices of firms with low cross-corporate shareholdings.

We address the above issue by focusing on whether the level of cross-corporate shareholdings, which could serve as a proxy for the level of information asymmetry, differentially affects the timing and magnitude of intertemporal relations between market returns and accounting earnings (deflated by total assets). The findings of various tests are consistent with our hypothesis, and suggest that cross-corporate ownership in Japan is an important institutional factor that alleviates the information asymmetry, thereby facilitating *informational efficiency* in the Japanese capital market.⁵

This paper is related to Jacobson and Aaker (1993), who compare information asymmetry between the US and Japanese capital markets. Their results show that the Japanese capital market incorporates information about future profitability into stock prices earlier than the US capital market, because Japanese investors are, in general, better informed about a firm's business prospects than their US counterparts. While both studies are concerned with the effect of information asymmetry between investors and managers on the timing and magnitude of return–earnings relations, our study differs significantly from Jacobson and Aaker in the following way. Their study focuses on cross-country differences in information asymmetry, and assumes that the level of asymmetric information is homogeneous across firms within each country. In contrast, a crucial assumption of our study is that information asymmetry differs across Japanese firms, depending on the level of cross-corporate shareholdings.

The rest of the paper is organized as follows: *Model Specification and Hypothesis* specifies a model for intertemporal relations between current returns and accounting performance measures in current and future periods, and derives a hypothesis based on the model. *Test Procedures and Results* explains test procedures and presents empirical results. The final section provides a summary and concluding remarks.

MODEL SPECIFICATION AND HYPOTHESIS

To assess differences in the timing and magnitude of return–earnings relations between firms with high and low cross-holdings of equity shares (CRH), we posit the following

Table 1. Descriptive Statistics^a

<i>Panel A: Overall Sample (N = 16,561)</i>				
	<i>Annual Returns</i>	<i>CRH</i>	<i>ROA</i>	<i>SIZE</i>
Mean	0.1978	0.6502	0.0211	17.5975
Standard deviation	0.6393	0.1374	0.0483	1.5222
Maximum	12.5667	0.9624	2.0410	24.3461
Q 3	0.3268	0.7493	0.0328	18.5916
Median	0.0391	0.6688	0.0168	17.5644
Q 1	-0.1391	0.5718	0.0067	16.5435
Minimum	-0.9288	0.0465	-0.8423	12.9042
<i>Panel B: High Crossing-Holding (N = 4142)</i>				
Mean	0.1840	0.8031	0.0194	17.7016
Standard deviation	0.6063	0.0437	0.0557	1.4242
Maximum	8.9543	0.9624	1.9058	22.7837
Q 3	0.3067	0.8322	0.0312	18.6584
Median	0.0310	0.8006	0.0159	17.7712
Q 1	-0.1441	0.7733	0.0049	16.7676
Minimum	-0.8321	0.6988	-0.4923	12.9042
<i>Panel C: Low Crossing-Holding (N = 4018)</i>				
Mean	0.2240	0.4693	0.0234	17.2217
Standard deviation	0.7145	0.1040	0.0610	1.5520
Maximum	10.3880	0.6362	2.0411	24.3460
Q 3	0.3586	0.5504	0.0361	18.1434
Median	0.0466	0.4884	0.0180	17.1298
Q 1	-0.1404	0.4095	0.0075	16.1441
Minimum	-0.8447	0.0465	-0.8423	13.5278

^aVariable definitions: Annual returns = compounded monthly returns for the 12-month period (and -1); CRH = the number of common shares held by financial institutions and other business corporations divided by the total number of common shares outstanding; ROA_{it} = return on total assets measured by net income_{it}/total asset_{t-1}; SIZE = the natural log of market capitalization at the beginning of the fiscal year.

relation between current market returns and accounting performance measures in current and future periods:

$$R_{jt} = \alpha + \beta_1 ROA_{jt} + \beta_2 ROA_{jt+1} + \varepsilon_{jt} \quad (1)$$

where R_{jt} is return on common stock j in year t ; ROA_{jt} is an accounting performance measure for firm j in year t , defined as net income for year t deflated by total assets at the end of year $t-1$; ROA_{jt+1} is an accounting performance measure for firm j in year $t+1$; and ε_{jt} represents unspecified factors.⁶

Eq. (1) is similar to the equations used by Fama (1981), Jacobson (1987), and Jacobson and Aaker (1993) in that current-period returns are linked to not only current earnings (scaled by total assets) but also future earnings. Current returns should be related to current earnings to the extent that the market has not fully anticipated the valuation implication of current earnings in previous periods, and thus, it was not fully incorporated into past returns. Similarly, current returns should be linked to future

Table 2. Correlation Matrix for Research Variables^a

<i>Panel A: Overall Sample (N = 16,462)</i>				
	<i>CRH</i>	<i>ROA</i>	<i>SIZE</i>	<i>Annual Return</i>
<i>CRH</i>	1 (0)			
<i>ROA</i>	-0.039 (0.0001)	1 (0)		
<i>SIZE</i>	-0.016 (0.0392)	0.048 (0.0001)	1 (0)	
<i>Annual Return</i>	-0.082 (0.0001)	0.075 (0.0001)	-0.014 (0.0768)	1 (0)
<i>Panel B: High Cross-Holding Sub-Sample (N = 4142)</i>				
<i>CRH</i>	1 (0)			
<i>ROA</i>	-0.032 (0.0380)	1 (0)		
<i>SIZE</i>	0.099 (0.0001)	0.154 (0.0001)	1 (0)	
<i>Annual Return</i>	-0.055 (0.0004)	0.036 (0.0187)	-0.008 (0.5976)	1 (0)
<i>Panel C: Low Cross-Holding Sub-Sample (N = 4018)</i>				
<i>CRH</i>	1 (0)			
<i>ROA</i>	-0.033 (0.0379)	1 (0)		
<i>SIZE</i>	-0.075 (0.0001)	0.011 (0.4728)	1 (0)	
<i>Annual Return</i>	-0.137 (0.0001)	0.078 (0.0001)	-0.030 (0.0546)	1 (0)

^aVariable definitions: Annual returns = compounded monthly returns for the 12-month period (and -1); CRH = the number of common shares held by financial institutions and other business corporations divided by the total number of common shares outstanding; ROA_{*it*} = return on total assets measured by net income_{*it*}/total asset_{*it-1*}; SIZE = the natural log of market capitalization at the beginning of the fiscal year.

The table shows Pearson correlation coefficients between pairs of variables and their *p*-values in parentheses.

earnings to the extent that the market anticipates future earnings, and then incorporates them into determining current prices.

As discussed earlier, corporate (cross-owned) shareholders are likely to have greater knowledge about future profitability (i.e., future earnings scaled by current total assets: ROA) due to their close links to the firms in which they invest. In this paper, we therefore hypothesize that investors in high-CRH firms are better informed about the future profitability of the firm than those in low-CRH firms; thus, that *stock prices of high-CRH firms incorporate information about future profitability earlier than do stock prices of low-CRH firms*. Under this hypothesis, the effect of future ROA on current returns, captured by β_2 in Eq. (1), should be stronger for high-CRH firms than for low-CRH firms, because more information about future ROA is available, or less information asymmetry about future profitability exists, for high-CRH firms than for low-CRH firms. Conversely, the effect of *current* ROA on current returns, captured by β_1 , should be weaker for high-CRH firms than for low-CRH firms, because ROA for high-CRH firms is better anticipated in previous periods than ROA for low-CRH firms. The above hypothesis can thus be operationalized in the context of Eq. (1) as below:

H_A: β_2 for firms with high cross-holdings is greater than β_2 for firms with low cross-holdings, other things being equal, while the opposite is true for β_1 .

Hypothesis H_A further indicates that the ratio of the effect of future to current ROA on current stock returns (i.e., β_2/β_1) should be greater for high-CRH firms than for low-CRH

firms. Following Jacobson and Aaker (1993), we also obtain this ratio by directly estimating Eq. (2) given below:

$$R_{jt} = \alpha + \beta_1(\text{ROA}_{jt} + \delta \text{ROA}_{jt+1}) + \varepsilon_{jt} \quad (2)$$

where $\delta = \beta_2/\beta_1$. Thus, hypothesis H₁ would be further supported if δ for high-CRH firms is greater than δ for low-CRH firms.

TEST PROCEDURES AND RESULTS

Sample and Data Descriptions

The initial sample for this study consists of all non-financial and non-utility firms that are included in the 1996 PACAP Industrial file for Japan compiled by the Pacific-Basin Capital Market (PACAP) Research Center at the University of Rhode Island. This database contains stock market data, including daily and monthly returns, and financial statement data for the period from July 1975 to September 1995. We excluded firms in the financial service industry because the economic meanings of accounting numbers used in this study may differ between financial and non-financial firms.

Our sample includes only firms with the March 31 fiscal-year end (FYE).⁷ Our sample period covers the 18-year period from 1976 to 1994. For this sample period, we identified 16,561 firm-year observations which have all the data required to compute annual stock returns⁸ and the following variables:

1. *The level of cross-corporate shareholdings (CRH)*: The number of common shares held by financial institutions and other business corporations in year t divided by the total number of common shares outstanding at the beginning of year t .
2. *Return on total assets (ROA)*: Net income in year t divided by total assets at the beginning of year t .
3. *Firm size (SIZE)*: The natural log of market price of common shares at the beginning of year t times the total number of shares outstanding.

To effectively capture differences, if any, in the timing and magnitude of return-earnings relations between high-CRH and low-CRH firms, we first ranked all firms in our sample based on the CRH variable in each sample year. We then constructed two reduced samples: (1) the high-CRH sample which consists of firms in the upper CRH quartile; and (2) the low-CRH sample which consists of firms in the lower CRH quartile. Panel A of Table 1 reports descriptive statistics for the above three variables as well as 12-month compounded annual returns for the overall sample, while Panels B and C of the same table report the same information for the high-CRH and low-CRH samples, respectively. For the overall sample (Panel A), the level of cross shareholding ranges from 4.65% to 96.24% with a mean and median of 65.02% and 66.88%, respectively. On average, over 80% of equity shares of high-CRH sample firms are cross-owned (Panel B), while less than 50% of low-CRH sample firms are cross-owned (Panel C). It is interesting to observe that low-CRH firms are more profitable than high-CRH firms as indicated by ROA and

Table 3. Results of the First-Order Autoregressive Model for ROA^a

<i>Equations</i>	<i>Adjusted R²</i>	<i>No. of Observations</i>
High cross-holding: 1976–1994 $ROA_{jt} = 0.2484 ROA_{jt-1} + \varepsilon_{jt}$ (0.0177**)	4.5%	4141
Low cross-holding: 1976–1994 $ROA_{jt} = 0.1711 ROA_{jt-1} + \varepsilon_{jt}$ (0.0159**)	2.76%	4017

^aVariable definitions: Annual returns = compounded monthly returns for the 12-month period (and -1); CRH = the number of common shares held by financial institutions and other business corporations divided by the total number of common shares outstanding; ROA_{jt} = return on total assets measured by net income_{*jt*}/total asset_{*jt-1*}; SIZE = the natural log of market capitalization at the beginning of the fiscal year. Standard errors are given in parentheses. ** denotes significance at the 1% and 5% level, respectively.

(annual) return measures. This result is consistent with the result reported by Hoshi et al. (1990). High-CRH firms are only slightly larger in size than low-CRH firms.

Panels A, B, and C of Table 2 report Pearson (pair-wise) correlation coefficients for the overall, high-CRH, and low-CRH samples, respectively. Consistent with the result in Table 1 ROA is negatively correlated with the level of cross shareholdings (CRH) and annual returns across all three samples, indicating that high-CRH firms are less profitable than low-CRH firms. Note also that the correlation between ROA and firm size is highly significant for the high-CRH sample, but is not significant for the low-CRH sample. Across all three samples, market return on common stock is positively correlated with ROA, while it is negatively correlated with firm size.

Empirical Procedures and Results

We estimated Eqs. (1) and (2), using a measure of unanticipated changes in ROA rather than ROA itself for the following two reasons: first, in theory, only the unanticipated changes in ROA should correlate with stock returns (Jacobson 1987; Jacobson and Aaker 1993). Second, as will be further discussed later, ROA in period t is likely to be highly correlated with ROA in period $t + 1$. This means that the inclusion of ROA in both periods as explanatory variables would create problems of multicollinearity.

To obtain a measure of unanticipated ROA, we followed similar procedures used by Jacobson and Aaker (1993). In particular, we first estimated an anticipated portion of ROA using the first-order auto-regressive model given below:

$$ROA_{jt} = \phi ROA_{jt-1} + e_{jt} \quad (3)$$

We then obtained unanticipated ROA by taking differences between actual ROA and ROA forecasts, namely the forecast residuals.

Table 3 reports the estimated results of Eq. (3). As expected, the autoregressive parameter, ϕ , is significant with its magnitude being in the range of $0 < \phi < 1$, indicating that ROA is mean reverting. It is also interesting to observe that the mean reversion is stronger for high-CRH firms than for low-CRH firms. In other words, the ROA series is more persistent for high-CRH firms than for low-CRH firms. In estimating Eqs. (1) and (2), current ROA and future ROA were replaced, respectively, by the forecast residuals

Table 4. Results of Regression of Current Annual Returns on Measures of Unanticipated ROA in Current and Future Periods (Eq. 4)^a

	Overall Sample		High Cross-Holding Sample		Low Cross-Holding Sample	
Intercept	0.188** (0.007)	0.464** (0.060)	0.165** (0.012)	0.652** (0.121)	0.217** (0.015)	0.379** (0.131)
ro _{j t-1}	0.802** (0.101)	0.864** (0.107)	0.191 (0.167)	0.282 (0.169)	0.571** (0.180)	0.601** (0.184)
ro _{j t+1 t-1}	0.016* (0.007)	0.017** (0.006)	1.614** (0.224)	1.685** (0.224)	0.011 (0.007)	0.011 (0.007)
SIZE _{jt}		-0.015** (0.003)		-0.027** (0.007)		-0.009 (0.008)
δ	0.019	0.019	8.476	5.969	0.018	0.019
Adjusted R ²	7.33%	7.45%	7.12%	7.45%	6.63%	6.71%
No. of observations	16,649	16,649	4107	4102	3996	3989
DW	2.0937	2.086	2.067	2.054	2.088	2.084

^aVariable definitions: R_{jt} = compounded monthly return over the 12-month period (and -1); $ro_{j|t-1}$ = one-period-ahead forecast errors of ROA from the first-order autoregressive model; and $ro_{j|t+1|t-1}$ = two-period-ahead forecast errors of ROA from the first-order autoregressive model. δ is the ratio of β_2 to β_1 . Standard errors are given in parentheses. ** and * denote significance at the 1% and 5% level, respectively.

from Eq. (3), i.e., the one-period-ahead forecast errors (hereafter $ro_{j|t-1}$), and the differences between the actual two-period-ahead values and the two-period-ahead forecasts (obtained through the chain rule of forecasting), i.e., the two-period-ahead forecast errors (hereafter $ro_{j|t+1|t-1}$).

Table 4 reports the results for the following regression for the pooled, high-CRH and low-CRH samples, separately:

$$R_{jt} = \alpha + \beta_1 ro_{j|t-1} + \beta_2 ro_{j|t+1|t-1} + \gamma SIZE_{jt} + \epsilon_{jt} \tag{4}$$

Note that Eq. (4) was estimated with and without the SIZE variable to examine the sensitivity of our results to the size effect. As shown in Table 4, current returns are significantly, positively related to both current and future profitability for the pooled sample. More importantly, however, the effect of current profitability on current return, captured by β_1 , is insignificant (significant) at the conventional level for the high-CRH (low-CRH) sample firms, while the effect of future profitability on current returns, captured by β_2 , is significant (insignificant) at the conventional level for the high-CRH (low-CRH) sample firms. Note also that the significance and magnitude of β_1 and β_2 are insensitive to the inclusion of the SIZE variable. As expected, current market return is negatively related to firm size, a finding consistent with Freeman (1987), Collins et al. (1987), and Atiase et al. (1988).

To further test for differences between high- and low-CRH firms in the timing of information about future profitability being impounded into current prices or returns, we estimated the following two regressions using nonlinear least squares procedures:

$$R_{jt} = \alpha_t + \beta_1 (ro_{j|t-1} + \delta ro_{j|t+1|t-1}) + \epsilon_{jt} \tag{5}$$

$$R_{jt} = \alpha_t + \beta_1 (ro_{j|t-1} + \delta ro_{j|t+1|t-1} + \delta_{\Delta} Dum_{jt} ro_{j|t+1|t-1}) + \epsilon_{jt} \tag{6}$$

Table 5. Non-Linear Regression Estimates of Jacobson and Aaker Model Stock Market Reaction to Contemporaneous and Future-Term ROA (Eqs. 5 and 6)^a

Coefficient	High-CRH Sample for Eq. 5 (N = 4142)	Low-CRH Sample for Eq. 5 (N = 4018)	Eq. 6 (N = 8260)
β	0.7604** (0.1781)	1.5791** (0.1938)	1.2102** (0.1320)
δ	3.8188** (0.9942)	0.01463** (0.0052)	0.0157** (0.0062)
δ_{Δ}			2.3000** (0.2113)

^aVariable definitions: R_{jt} = compounded monthly return over the 12-month period (and -1); roa_{jt-1} = one-period-ahead forecast errors of ROA from the first-order autoregress model; and $roa_{jt+1t-1}$ = two-period-ahead forecast errors of ROA from the first-order autoregressive model. Dum is a dummy variable which is one for firms in the high-CRH sample and zero for firms in the low-CRH sample. Standard errors are given in parentheses. ** denotes significance at the 1% and 5% level, respectively.

where Dum is a dummy variable which has a value of unity for high-CRH firms and zero otherwise, and other variables are as defined earlier. Note that the significance of δ_{Δ} with a positive sign in Eq. (6) indicates that δ for the high-CRH sample is significantly greater than δ for the low-CRH sample by δ_{Δ} .

Table 5 reports the regression results for Eqs. (5) and (6) for the high-CRH and low CRH samples, separately. The results show that while the δ -coefficient, which captures the ratio of the future-term to the current-term effect on current stock returns, is significant for both samples, it is much greater in magnitude for the high-CRH sample than for the low-CRH sample. The δ -coefficient is 3.8188 with a standard error of 0.9942 for the high-CRH sample, while it is 0.01463 with a standard error of 0.0062 for the low-CRH sample. Consistent with this finding, the coefficient for the slope dummy, namely δ_{Δ} , turns out to be highly significant with a positive sign. Overall, the findings reported in Table 5, coupled with those in Table 4, strongly support our hypothesis that *stock prices of high-CRH firms incorporate information about future profitability earlier than do stock prices of low-CRH firms.*

Results Using an Alternative Methodology

As a robustness check, we also tested hypothesis H_A , using an alternative methodology developed by Kothari and Sloan (1992). They argue that since the forward-looking market anticipates future earnings, price changes always lead earnings changes. As a result of prices leading earnings, the earnings response coefficient (ERC) from a regression of current returns on contemporaneous earnings would be biased toward zero. They suggest that this bias can be reduced by extending the return-measurement interval into the backward direction. To assess the extent to which information about current profitability has been reflected in an earlier period, we posit the following regressions:

$$R_{j[t,t-\tau]} = \varphi_0 + \varphi_1 ROA_{jt} + \varepsilon_{jt} \tag{7}$$

$$R_{j[t,t-\tau]} = \varphi_0 + \varphi_1 ROA_{jt} + \varphi_2 SIZE + \varepsilon_{jt} \tag{8}$$

where $R_{j[t,t-\tau]}$ is the return on common stock j over the period $t - \tau$ to t , and other variables are as defined earlier.

Table 6. Kothari and Sloan Model Stock Market Response, Varying the Time Interval, to ROA (Eqs. 7 and 8)^a

<i>Panel A: Overall Sample (N = 16,462)</i>						
	$\varphi_1 [\tau = 1]$	$\varphi_1 [\tau = 2]$	$\varphi_1[\tau = 2]/$ $\varphi_1[\tau = 1]$	$\varphi_1 [\tau = 1]$	$\varphi_1 [\tau = 2]$	$\varphi_1[\tau = 2]/$ $\varphi_1[\tau = 1]$
Intercept	0.181** (0.007)	0.475** (0.017)		0.470** (0.060)	1.561** (0.165)	
ROA _{<i>jt</i>}	0.797** (0.098)	2.839** (0.275)	3.562	0.872** (0.099)	3.125** (0.278)	3.584
SIZE _{<i>jt</i>}				-0.016** (0.003)	-0.062** (0.009)	
<i>Panel B: High-CRH Sample (N = 4142)</i>						
Intercept	0.178** (0.013)	0.489** (0.031)		0.606** (0.122)	1.639** (0.327)	
ROA _{<i>jt</i>}	0.263 (0.162)	1.713** (0.437)	6.514	0.372* (0.164)	2.008** (0.444)	5.397
SIZE _{<i>jt</i>}				-0.024** (0.007)	-0.065** (0.018)	
<i>Panel C: Low-CRH Sample (N = 4018)</i>						
Intercept	0.206** (0.015)	0.543** (0.042)		0.392** (0.130)	1.472** (0.391)	
ROA _{<i>jt</i>}	0.725** (0.176)	2.228** (0.540)	3.072	0.755** (0.177)	2.396** (0.544)	3.172
SIZE _{<i>jt</i>}				-0.011 (0.007)	-0.054* (0.023)	

^a τ is the time interval. $R_{jt-t-\tau, t}$ = annual returns are measured over the period $t - \tau$ to t ; ROA_{*jt*} = return on total assets measured by net income_{*jt*}/total asset_{*jt-1*}; SIZE_{*jt*} = the natural log of market capitalization for firm j at the beginning of fiscal year t . Standard errors are given in parentheses. ** and * denote significance at the 1% and 5% level, respectively.

According to Kothari and Sloan (1992), as the return-measurement interval is extended into the backward direction (i.e., τ increases), the leading-period returns over year $t - \tau$ to year t are more likely to reflect information about current earnings or current profitability (i.e., ROA_{*jt*}). To the extent that this information has already been reflected in an earlier period, the ERC, namely φ_1 , will become larger as the time interval, τ , increases. If investors in high-CRH firms possess superior information about future profitability relative to those in small-CRH firms, and thus, incorporate the information earlier, one would observe that the ratio of the ERC for $\tau = 2$ to the ERC for $\tau = 1$ would be greater for high-CRH firms than for low-CRH firms.

Panels A, B and C of Table 6 report regression results of Eqs. (7) and (8) for $\tau = 1$ and for $\tau = 2$, along with the ratio of the ERC for $\tau = 2$ to the ERC for $\tau = 1$, for the overall, high-CRH, and low-CRH samples, respectively. The first part of each panel presents results of the regression without the size variable while the second part presents the results with it. The results show that for all three samples, the magnitude of ERC is consistently greater for $\tau = 2$ than for $\tau = 1$, which is consistent with the US results of Kothari and Sloan (1992). These results remain unchanged when the size variable is included in the regressions.

As reported in Panels B and C, for the results of regressions without firm size, the ERC ratio for the high-CRH sample (6.514) is twice as great as that for the low-CRH sample (3.072). Similar results are obtained when firm size is included in the regression. This indicates that stock prices of high-CRH firms have already impounded a greater fraction of current ROA information in an earlier period than stock prices of low-CRH firms. In short, the above findings, which are consistent with those reported in Tables 4 and 5, lend further support to the hypothesis that stock prices of high-CRH firms incorporate information about future profitability earlier than do investors in low-CRH firms. Put differently, the prevalence of cross-corporate ownership in Japan appears to enhance informational efficiency in the Japanese equity market by alleviating information asymmetry between investors and managers.

SUMMARY AND CONCLUDING REMARKS

In the US style of corporate governance, outside investors monitor managerial performance primarily through the control mechanisms of managerial incentive contracts, independent outside directors, and corporate takeovers. In so doing, outside investors rely much on publicly available information. In contrast, in the Japanese style of corporate governance in which cross-corporate shareholdings are common, managerial performance is monitored by cross-corporate shareholders such as main banks and affiliated companies with whom managers share their private and strategic information exclusively. As such, an important difference between the two different styles of corporate governance centers around the issue of how value-relevant information is transmitted between managers and outside stakeholders who monitor managerial performance.

While the extant literature on comparative corporate governance has explored the impact of the Japanese style of corporate governance on efficiency gains or losses in the production economy, it has paid little attention to its impact on informational efficiency in capital markets. In this paper, we have examined the informational role of cross-corporate ownership, that is a key feature of the Japanese style of corporate governance. We argue that as the level of cross-corporate shareholdings increases, there will be less information asymmetry, or more information sharing, between the firm and market participants; thus the market will become more informationally efficient. In particular, we hypothesize that stock prices of firms with high cross-corporate ownership incorporate information about future profitability earlier than do stock prices of firms with low cross-corporate ownership. Our analysis focuses on the impact of cross-corporate shareholding on the timing and magnitude of intertemporal relations between market returns in the current period and accounting performance measures in current and future periods. Results of various tests strongly support our hypothesis, and suggest that cross-corporate ownership in Japan is an important institutional factor which alleviates information asymmetry, thereby facilitating informational efficiency in the Japanese capital market.

In a nutshell, our results suggest that the quality of financial disclosures would be differentially affected by corporate ownership structures and related information environments. The corporate ownership structure could be an important variable, in particular, when one is concerned with differences in the usefulness or timeliness of accounting and

non-accounting information across countries with different corporate ownership structures. Further research in this direction is called for, given that previous research has paid relatively little attention to informational aspects of corporate ownership structures.

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NOTES

1. In contrast, management ownership (or inside holding) is not significant in Japan (Kester, 1991; Prowse, 1992), while it is in the US (Demsetz and Lehn, 1985; Morek et al., 1988; Prowse, 1992). In Japan, for example, stock option plans are very rare.
2. In Japan, there are at least 17 major industrial groups or keiretsus. The six largest keiretsus, Mitsui, Mitsubishi, Sumimoto, Fuji, Sanwa, and Dai-ichi Kangyo, have main banks that play a central role in the financial activities of firms within each keiretsu, and control about a half of the top 200 firms in Japan through cross-corporate shareholdings, which amounts to more than 25% of all the assets in Japan.
3. For example, the Mitsui group, which is one of the Big Six conglomerates in Japan, has an executive council called Nimoku (Second-Thursday Club) consisting of 26 core companies. It meets on the second Thursday of each month to exchange strategic information. The Mitsubishi Group has a similar information-sharing club called Kin-Yokai (Friday club). See Sheard (1989) for the role of the General Trading Company in the Japanese market.
4. Fukuyama (1995) argues that these cultural aspects of Japanese society may lead to lower transaction costs than those in a low-trust society such as Hong Kong.
5. Previous US research has focused on various issues related to *managerial inside ownership* in the contexts of accounting choice or income smoothing (e.g., Smith 1976), agency costs and incentive problems associated therewith (e.g., Jensen and Meckling, 1976; Dhaliwal et al., 1982; Watts and Zimmerman 1986; Klassen, 1997). The present study differs from this line of previous research in that our focus is on *informational aspects* of cross-corporate ownership that has been unexplored by previous research.
6. Though not reported here, we have also estimated Eq. (1), using as explanatory variables current and future earnings yields (i.e., net income in year t divided by market capitalization at the end of year $t - 1$). The results are qualitatively identical with those reported in the paper.
7. The fiscal-year end (FYE) for most Japanese firms is March 31, while it is December 31 for most US firms. We restricted our sample to firms with the March 31 FYE which account for about 80% of all listed Japanese firms. This restriction allows us to ensure that all firms in the sample have the same interval for compounding monthly returns to obtain annual returns. In addition, the choice of the same FYE allows our sample firms to be exposed to the same market-wide factor for a certain period, thus allowing us to control for possible effects of market-wide factors on inter-temporal relations between stock returns and accounting performance measures.
8. Annual return on common stock is computed by compounding monthly returns for the 12-month period starting in April (and -1).

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The Entry of International CPA Firms into Emerging Markets: Motivational Factors and Growth Strategies

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Abstract: This article examines the entry of professional service firms, specifically the Big Six international accounting firms, into emerging foreign markets and explores how they develop and expand their business once established in those markets. The study is based on survey data (supplied by the Big Six) regarding their penetration of the People's Republic of China, the Commonwealth of Independent States, and Central Europe. A conceptual model is employed to illustrate the interrelationship between a firm's specific characteristics, the foreign environment, and foreign subsidiary intrafirm structure. Growth potential, client needs, favorable political/legal climate, and cultural considerations emerged as important factors in determining market entry and growth strategies for professional services firms. The research findings broaden our understanding of factors that influence professional services firms' development of pricing and marketing mix strategies. While all firms surveyed offered a full range of services, their marketing mix strategy differed from domestic approaches because of various local constraints on pricing and promotion.

For decades, as domestic markets have become saturated, industrial corporations have expanded their operations worldwide. U.S. corporations have extended their operations throughout Europe, Asia, Africa; and the Americas. European companies have spread to the Americas, Asia, and Africa; and Asian firms have moved into the Americas, Europe, and Africa. Thus, multinational corporate (MNC) economic activity has become increasingly global in scope. The rapid international spread of MNCs has presented both opportunities and challenges to those firms that serve them, including the Big Six international public accounting firms.

The expansion of the international CPA firms¹ (hereafter, "Big Six") into international markets is a continuation of their long-term growth trend, as shown in Table 1. From 1990

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Table 1. Big Six Growth, 1990–1996

CPA firms	1990		1996	
	Staff*	Revenue (\$)**	Staff*	Revenue (\$)**
AA	56.8	4.2	91.5	9.4
CL	53.0	4.1	74.0	6.8
DT	59.7	4.2	59.0	6.5
EY	72.8	5.0	72.0	7.8
KG	77.2	5.4	78.0	8.1
PW	46.4	2.8	56.0	5.0

Sources: Issues of *Public Accounting Report*, recruiting brochures, and information from <http://www.rutgers.edu/Accounting/raw-internet/big6.htm>.

*Staff in thousands.

**Worldwide revenue in billions.

to 1996, all the firms have expanded greatly in terms of worldwide revenue. The announced 1998 mergers of (1) Coopers and Lybrand with Price Waterhouse, and (2) Ernst and Young (E&Y) with Peat Marwick (KPMG) emphasized the international aspect of professional accounting. One of the proposed advantages of these mergers is that the new firms will have the global reach, strength, and scope to meet the needs of their clients. Emerging markets were clearly on the minds of E&Y and KPMG chairmen and chief executive officers (CEO) when pursuing merger talks (which subsequently were discontinued in early 1998).² Stephen G. Butler, chairman and CEO at KPMG, stated "By combining resources, we intend to gain ground in China, Russia, and other developing markets" (MacDonald, 1997, A3).

Today, one of the fastest growing areas of international trade is business services. In general, world trade growth has been faster in services than in goods. In fact, recently, the growth rate in the world trade of services was about three times higher than the related growth in world trade in goods. In 1996, U.S. services exports amounted to \$224 billion.

The service segment of world trade involves all countries at every level of development; even the least-developed countries are seeking computer technology and sophisticated data banks to aid them in advancing their economies. These export figures may be underestimated by as much as 20 percent to 30 percent since data in the current account do not reflect all categories of services. Unlike merchandise trade that requires a declaration of value when exported, most services do not have to have an export declaration nor do they always pass through a tariff or customs barrier when entering a country. Services infrequently counted include advertising, accounting, management consulting, legal, and most insurance (Cateora, 1996).

The world market for services has grown at a faster rate (16%) than that for merchandise trade (7%) (Czinkota and Ronkainen, 1993). This growth has been apparent in professional services such as accounting and management consulting, legal, advertising, and public relations. Zeithaml and Bitner (1996) estimate that of the 10 leading U.S. global consulting firms, revenues from outside the U.S. represent more than half their total revenue. (Among the 10 are the consulting wings of four of the Big Six accounting firms: Andersen Consulting; Coopers and Lybrand; E&Y; and Price Waterhouse.)

While international expansion has become an important strategic imperative on the part of large professional services firms, empirical data are lacking for organizations dealing in accounting services. Of considerable interest is why and how accounting professional services firms enter foreign markets and what they do to develop the business once established in such markets. Questions like these raise important issues about the firms and their approaches to international expansion.

This article presents the findings of a recent study dealing with the Big Six accounting firms' penetration of the People's Republic of China (PRC), the Commonwealth of Independent States, and Central Europe. The study explores their motives for expansion into these nations, their methods of expansion, and the means they used to evaluate their expansion. The results are of interest to the following groups: (1) the Big Six firms, who participated in the study and can now compare their individual responses to the overall responses; (2) non-Big Six national and regional public accounting firms, who are now expanding or considering expanding into these and other emerging markets; (3) other, non-accounting professional services firms, who are considering expanding into these markets; (4) all financial services firms as they consider expansion into newly emerging developing markets, such as Latin America under NAFTA, or Africa; and (5) international accounting educators. The article first describes the nature of specified markets. Next, follows a review of the relevant literature and then a description of the conceptual framework and the methodology of the study. The results of the survey are presented next, followed by the conclusions of the study.

EMERGING POST-COMMUNIST AND MAINLAND CHINA MARKETS

Post-Communist

Eastern Europe's newly won freedom from its former occupier, the Soviet Union (USSR), in the decade of the 1980s, and the break-up of the Soviet Union itself by the end of 1991, have presented unexpected investment opportunities for industrial corporations and service firms. Likewise, the PRC offers unique investment opportunities as that nation seeks to pursue the aggressive growth of its dual economic system.

Eastern European and Baltic States, the Commonwealth of Independent States (CIS), and the PRC are moving rapidly to establish free-market systems. New business opportunities are emerging almost daily in this vast region, extending from Poland in the West to the South China Sea in the East. "Chaotic with big risks" and "exciting with untold opportunities" are typical descriptions of the region's promise. Well into the next century, this region will rank among the important emerging markets.

Prior to the break-up of the Soviet Union, the former Soviet satellite states and Soviet Republics had centrally planned command economies. In them, accounting served the needs of the government. The Soviet accounting system was tailored to provide statistical information to different levels of government, such as the ministries (Radebaugh et al., 1994). The transformation of the Soviet economy, and those of its satellites, from central command to market, caused a transformation of the accounting systems. The initiation of joint ventures and the encouragement of foreign investment necessitated a movement to compatibility between communist and international

accounting practices. The attainment of political independence by the Eastern European countries and the fragmentation of the Soviet Union into independent republics have drastically altered the course of change in those countries. Now, each independent state is moving in its own direction; each government is taking the lead in the development of market-oriented accounting principles, and it is often difficult for them to cooperate with each other (Radebaugh and Gray, 1996). Each Eastern European and CIS country has its own economic problems and is at a different point in its evolution from a socialist to a market-driven economy. Most are privatizing state-owned enterprises, establishing free-market pricing systems, relaxing import controls, and trying to control inflation.

The Baltic States, comprised of Estonia, Latvia, and Lithuania, were among the first republics to declare their sovereignty and independence as the Soviet Union began to crumble. With their past experience while under Soviet domination as exporters to the USSR of manufactured goods made from Russian raw materials, they are positioned to be a bridge for trade and investment between the West and the former USSR.

China

Economic reforms have moved the economy of the PRC from a planned, socialist model to a "socialist market economic system," i.e., a planned economy with market adaptations. Under the economic reforms, private enterprises, co-operatives, and joint ventures co-exist and compete with state-run entities. The movement toward private ownership has required a revision of the PRC's accounting and disclosure standards. Responsible for the promulgation and revision of accounting standards, the Ministry of Finance is being assisted by Deloitte Touche Tohmatsu, one of the international Big Six accounting firms, in their revision (Winkle et al., 1994).

The PRC, while attempting to maintain its communist, centrally planned economic system, is permitting the rapid growth and development of capitalist free enterprises. The economic and social changes occurring in China since it began to actively seek economic ties with the industrialized world have been dramatic. China's dual economic system, embracing socialism along with many tenets of capitalism, produced an economic boom with expanded opportunity for foreign investment, despite internal political upheaval in 1989 that temporarily cast doubt on its future. The International Monetary Fund lists China as the world's third-largest economy and the World Bank predicts that China will have the world's largest economy by 2010.

While there are marked differences between these regions, until recently, the nations within them had similar political systems characterized by centrally planned economies largely closed to foreign investment. With *détente*, and the opening of these nations to foreign joint ventures and other corporate forms, economic possibilities began to emerge for foreign direct investment. Over the past decade and a half, the Big Six accounting firms have seen the economic opportunities available in these nations and have responded by establishing offices in many of them. Thus, a multidisciplinary study that systematically investigates their entry into these areas is in order. The present study fills the knowledge void that currently exists regarding the Big Six's penetration of these markets.

LITERATURE REVIEW

Shapiro (1989) provided a taxonomy of the multinational corporation and its evolution. He characterized MNCs by their motivation to expand internationally. Raw materials seekers, the earliest multinationals, were the firms hoping to exploit the raw materials available overseas. Market seekers are the archetype of the modern multinational firm that goes overseas to produce and sell in foreign markets. Cost minimizers, a fairly recent category of firms doing business internationally, seek out and invest in lower-cost production sites in order to remain cost competitive both at home and abroad.

The management literature pays considerable attention to the structuring of the multinational firm (Prahalad and Doz, 1987; Bartlett and Ghoshal, 1989; Humes, 1993). Cateora (1996) summarizes the elements that contribute to effective global organization. Determining the firm's worldwide strategy and shaping the organization to achieve goals and objectives are the two central tasks of global marketing management that define the level of international integration of the company.

Erriamilli and Rao (1993), in a study of professional services firms and how they choose to enter foreign markets, found the international marketing literature limited in providing empirical data to answer important marketing strategy questions. The literature dealing with entry-mode choice has focused almost exclusively on manufacturing firms and has not directly addressed the question of entry-mode choice for service firms. Those studies that have addressed the issue provide little insight. After a firm decides to enter a particular foreign market, it must choose a mode of entry or organizational structure for conducting international business transactions. The choice of the correct entry mode for a particular foreign market is a critical marketing decision (Terpstra and Sarathy, 1991).

Accounting and advertising firms were among the earlier companies to establish branches or acquire local affiliations abroad to serve their U.S. multinational clients. The primary purpose for marketing their services internationally was to serve home-country clients. Once established, many of these client followers expanded their client base to include local companies. As global markets grew, creating greater demand for business services, service companies became market seekers in that they actively sought customers for their services worldwide. Erramilli and Rao's study of service firms' international entry mode choice found that the entry motive of advertising and accounting firms was primarily market-seeking (53.65%) versus client-following (46.15%).

Post (1996), in a case study of two Dutch accounting firms, BDO Binder and BDO CampsObers, evaluated the impact of internationalization on professionalism. Professionalism was defined as a control mechanism (quality assurance) of the accounting firm's production or service-delivery processes, including its management and support processes.

The survey of the literature uncovered no research concerning the entry of the Big Six international accounting firms into the successor states of the former Soviet Union and its Satellite Empire, and/or the PRC. The present study, relying upon the findings, concepts, and theories advanced in the literature, develops a conceptual framework within which to analyze the Big Six firms' entry into these national emerging market economies.

CONCEPTUAL FRAMEWORK AND METHODOLOGY

Fahy (1996) focused on the issue of how service companies can attain a sustainable competitive advantage. He proposed a multinational corporate model for the international services sector designed to help managers evaluate potential sources of such advantage. Drawing heavily on an existing foundation of literature spanning the fields of services marketing, strategic management, international business, and industrial organization economics, Fahy founds his conceptual premise upon a resource-based view. Organizational strategy has long been seen as the challenge of matching internal resources and strengths with the opportunities existing in the external environment. The task of strategic management is viewed in the context of the interaction between the personal values of management and the firm's skills and resources, and the relationship of these to environmental opportunities/threats and broader societal expectations. The resource-based view sees the firm in terms of unique bundles of resources and capabilities that provide the foundation upon which a competitive advantage can be established. To be successful in the international marketplace, the multinational firm must organize itself to realize the benefits of global integration, national responsiveness, and learning: that is, the firm must seek to emphasize both the parent company and the foreign subsidiary and successfully transfer organizational knowledge in both directions (i.e., from the home-country headquarters to the subsidiary and vice versa). This suggests that superior international business performers combine both home- and host-country firm-specific resources and capabilities. The process by which resources and capabilities are transformed into a competitive advantage for the multinational service firm is modeled in Fig. 1. The model provides a framework within which to identify key elements in the process of international market entry and expansion for professional services firms, such as the Big Six. A professional services firm in the home-country is constrained by firm-specific resources and capabilities in its foreign market entry choice. As a firm expands internationally, both the foreign business environment and the foreign intrafirm structure impact market development and growth. The foreign business environment refers to the foreign nation's culture, regulatory regime, and market structure; it encompasses the location of the subsidiary office facilities, and costs of doing business. The foreign intrafirm structure refers to the foreign operation's organizational form, human resource availability, and utilization; these condition the services that can be offered, and the foreign promotion/pricing strategies. The combination of firm-specific resource capabilities, foreign business environment, and foreign intrafirm structure influence the foreign market entry choice, and impact the market development and growth strategies, policies, and procedures of the Big Six firm once it has located in a foreign market.

The model also provides a basis for exploring the appropriateness of the market growth pattern hypothesized in the marketing literature (Etzel et al., 1997). Market growth is presented as following a predictable pattern over the life of a product/service. This life cycle consists of four phases: introduction, growth, maturity, and decline. Is this life cycle concept relevant to professional services, such as accounting and consulting? If there is a predictable pattern of growth, how do the approaches to the marketing of professional services change from one growth phase to another?

In the fall of 1996 and the spring of 1997, we conducted a multidisciplinary questionnaire survey of the Big Six accounting firms. We included a cover letter, and a

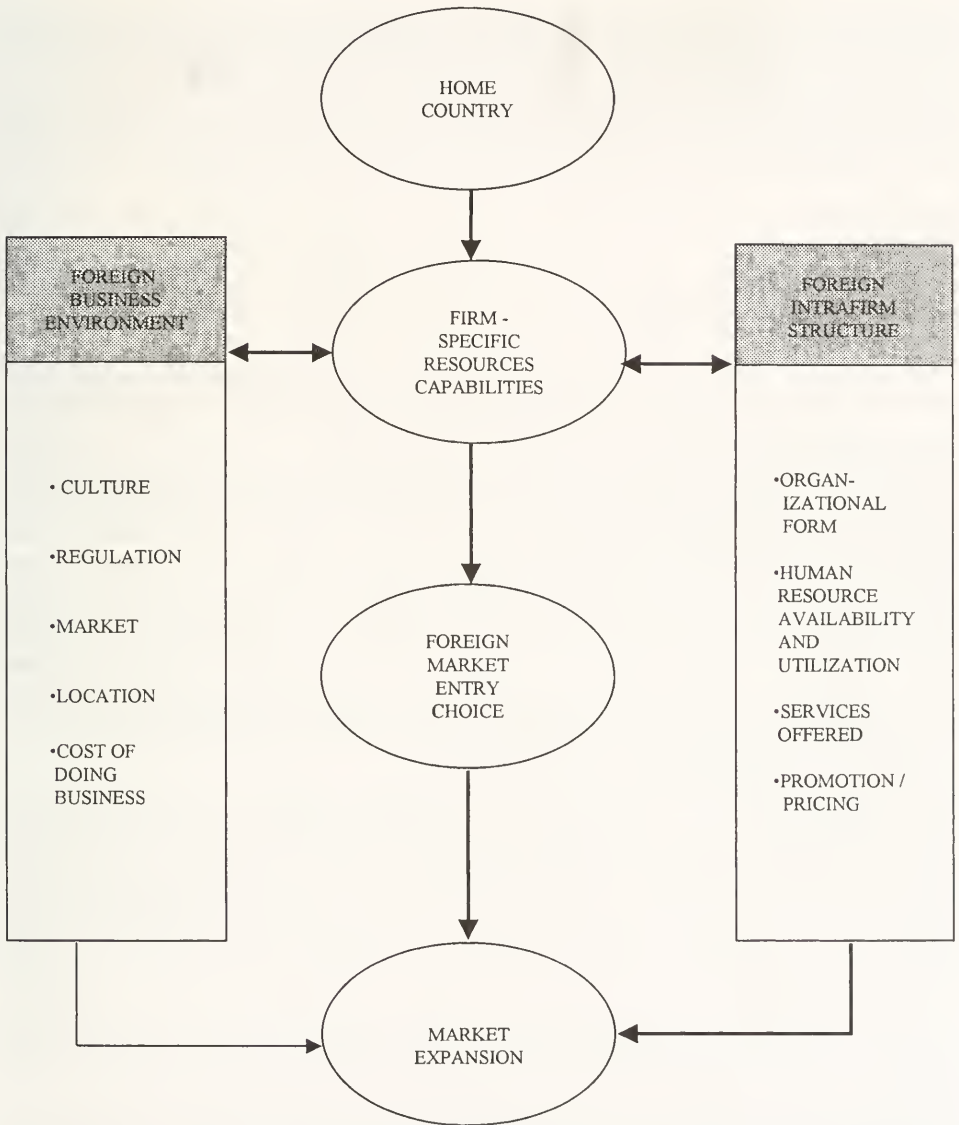


Figure 1. A Resource-Based Model of International Market Entry and Expansion for Professional Services Firms. Adapted from Fahy, 1996.

note to potential respondents that requested that the questionnaire “be completed by someone who is knowledgeable of your firm’s steps to enter the former Soviet Union, and its empire in Central Europe, and the PRC.” All the Big Six provided useable responses to the 44-item questionnaire.

Based on the resource-based model discussed above, the questionnaire was divided into sections to elicit information and opinions on: (a) location—regions, countries, and cities in which operations in the geographic regions of interest are located; (b) motivation for

entry into audit markets of these regions; (c) profitability and return on investment benchmarks; (d) organizational structure of foreign offices; (e) types of services provided, promoted, and marketed; and (f) the role of each firm in the development of the local accounting profession and standard setting processes.³ The results are discussed in the following section and follow the sequence of the questions in the survey.

RESULTS

Location of Foreign Operations

By the end of 1991, the USSR and its empire dissolved into (1) the CIS composed of 11 of the former Republics; (2) four independent states which were former republics; and (3) seven independent states which were former satellite states.

Big Six respondents were asked to indicate in which of the member states of the CIS has their firm opened an office. The results are shown in Table 2. The respondents stated that their firms had established operations in six (54.5%) of the 11 states. Numbers of the six respondents reporting the opening of offices in the capital cities of those six were as follows: Azerbaijan (1), Belarus (1), Kazakhstan (6), Russia (6), Ukraine (6), and Uzbekistan (3). These CIS are historically among the more industrially, agriculturally, and commercially developed regions of the former USSR, or are rich in natural resources, such as petroleum, which have attracted considerable recent foreign investment. Of the Big Six with offices in Russia, five indicated they had offices in St. Petersburg, one in Novosibirsk, in addition to the capital, Moscow.

Respondents indicated that their firms had established operations in three of the four former republics. They located offices in the capital cities of the Baltic States (Estonia, Latvia, and Lithuania) mainly because these countries appear to be well positioned to serve as pathways for trade between the West and the former USSR, and they are developing rapidly in their own right. However, none of the Big Six had opened an office in Georgia, a non-Baltic state, possibly because that country has experienced considerable armed conflict in recent years.

Further, respondents stated that their firms had located offices in the capital cities of all seven of the former Eastern European Satellites: East Germany, Poland, the Czech Republic, Slovakia, Hungary, Romania, and Bulgaria. In addition, four of the Big Six responded that their firms had offices in four to eight East German cities, such as Dresden, Erfurt, and Leipzig. Three of the Big Six indicated that their firms had offices in one to three other Polish cities, such as Krakow, Poznan, and Gdansk. One of the Big Six had established offices in other Rumanian cities, such as Cluj-Napoca and Timisa. Thus, the Big Six had all moved extensively into all the former Satellites to participate in the economic opportunities presented there by the rapid shift from command to market economies.

In response to whether their firms had located any offices in the PRC, all respondents gave an affirmative answer: all indicated that they had offices in the capital city, Beijing. In addition, six indicated that they had established offices in both Shanghai and Shenzhen, two in both Guangzhou and Dalian, and one in Tianjin. These are among the most rapidly expanding free-enterprise provinces within Mainland China. The survey

Table 2. Location

<i>In which of the member states of the CIS has your firm opened (an) office(s)?</i>			
<i>Member state</i>	<i>Big Six offices</i>	<i>Cities located</i>	
		<i>Capital</i>	<i>Other</i>
Azerbaijan	1	1	0
Armenia	0	0	0
Belarus	1	1	0
Kazakhstan	6	6	0
Kyrgyzstan	0	0	0
Moldova	0	0	0
Russia	6	5	2
Tajikistan	0	0	0
Turkmenistan	0	0	0
Ukraine	6	6	0
Uzbekistan	3	3	0

<i>In which of the four former republics (which did not join the CIS) has your firm opened (an) office(s)?</i>			
<i>Former republic</i>	<i>Big Six offices</i>	<i>Cities located</i>	
		<i>Capital*</i>	<i>Other</i>
Georgia	0	0	0
Estonia	6	5	0
Latvia	6	5	0
Lithuania	6	5	0

<i>In which of the former central european satellites has your firm opened (an) office(s)?</i>			
<i>Former satellites</i>	<i>Big Six offices</i>	<i>Cities located</i>	
		<i>Capital*</i>	<i>Other</i>
East Germany	6	5	8
Poland	6	5	3
The Czech Republic	6	5	0
Slovakia	6	5	0
Hungary	6	5	0
Romania	6	5	2
Bulgaria	6	5	0

Notes: *One Big Six respondent did not indicate the cities in which his/her firm has located an office.

was conducted before Hong Kong reverted to Communist control on July 1, 1997; thus, none of the respondents indicated whether they had established offices in the former Dominion Territory.

All six firms indicated that there are other foreign markets currently attractive to them, including India (5), Vietnam (4), Indonesia (1), and Thailand (1). Also mentioned were Asia/Southeast Asia (1) and Latin America (1). Among the reasons cited for that attraction were market size (India), market growth potential, attractiveness to foreign investors, and the nation's emerging market status (Vietnam). Thus, the character of the foreign business environments, the emerging markets, which are either already growing rapidly or which have significant growth potential, coupled with client needs and favorable political/legal climates, combine with the Big Six firms' specific resource

Table 3. Market Entry

<i>Questions</i>	<i>Number of responses</i>
Which factors does your firm consider when choosing to enter a foreign market?	
Political stability	4
Ability to hire and train local managers	2
Availability and skill of local workforce	3
Level of business taxation	3
Size of market potential represented by the nation	6
Stability of the national currency	1
Telecommunications sophistication in the nation	1
Prevailing wage structure	3
Other—clients' location or need	3
How did your firm become interested in entering the former communist market?	
By invitation of the host government(s)	0
Through contact with foreign professionals	2
Through market analysis of potential	2
Other—clients' need	2
What role does your firm play in the development of accounting standards and/or accounting regulations?	
Advisor	6
Standard setter	2
Consultant	5
Other	0

capabilities to spark foreign investment commitments in these areas. This is consistent with the research model.

The results show a difference in the approach of the firms to these emerging areas in terms of the locations chosen to open offices. By country, fewer offices were opened in the 11 member states of the CIS (six of 11 or 54.5%); whereas more offices were opened in the former republics which did not join the CIS (three of four or 75%); more offices were opened in former Central European Satellites (six of six or 100%); and in the PRC (all firms or 100%). Reasons for these differences were cited above.

Market Entry Considerations

Respondents were asked which factors (political stability, availability of local managers and local workers, level of taxation, market potential, currency stability, telecommunications technology, wage structure, and other) do their firms consider when choosing to enter a foreign market and which factors were most important (Table 3). They reported considering the following factors (listed in order of popularity): size of market potential represented by the nation (6), political stability (4), availability and skill of local workforce (3), level of business taxation (3), ability to hire and train local managers (2), stability of the national currency (1), telecommunications sophistication in the nation (1), prevailing wage structure (1), or other (3). The other factors indicated were clients' location (2), and clients' need (1).⁴

Four respondents indicated which factors are most important to their firms' decisions, in decreasing order of importance. Three of the four indicated clients' location or clients' need as most important; one indicated that size of market potential was most important; two others indicated that it was the second most important factor. Two respondents indicated that the level of business taxation was the third most important factor. Political stability was ranked as the fourth most important factor by one respondent; the ability to hire and train local managers was ranked fourth by another. Clearly, the two most important factors when considering entry into these markets are clients' location or need, and size of market potential. This conclusion is highlighted further by response to another question, which asked how respondents' firms became interested in entering these markets. Two indicated that interest arose through market analysis of potential; two specifically mentioned clients' need; and two became interested through contact with foreign professionals. It is interesting to note that none indicated that interest arose as a result of an invitation by the host government(s).

MNCs that have entered these emerging markets rely upon the competencies and skills of the Big Six to serve their far-flung operations. From our results, it is clear that the Big Six firms have responded to their client's needs by locating abroad to serve them. However, in addition, the Big Six has recognized the tremendous market potential of these areas and is interested in tapping into them, provided there is sufficient political stability.

Factors Influencing Service Offerings

In response to a question about the importance of cultural factors when marketing professional services, five of the six respondents indicated that cultural considerations were very important when marketing professional services in the designated markets; only one rated it as important. Five of the six responded that there are special regulations or licensing requirements for professional service providers in these markets. Four of the five indicated that there are licensing requirements for auditors/public accountants; one indicated that in Russia, there is special licensing for bank audits.

In response to a question about activities to develop accounting standards in these nations, all six respondents answered that their firm plays a role in the development of accounting standards and/or accounting regulations. Their responses indicated activities in the following roles: advisor (6), consultant (5), and standard setter (2).

Thus, as predicted by the research model, the Big Six firms' specific resource capabilities interacted with the foreign business environment to influence the development of accounting standards and/or accounting regulations; and foreign licensing requirements impact the provision of professional accounting services in these markets. Overarching the provision of such services is the importance of local cultural considerations.

Pricing and Profitability

There is a relationship between the cost of doing business in a foreign environment, the pricing of services by the foreign intrafirm structure, and its profitability. As shown in Table 4, four of the Big Six respondents indicated that the pricing of their services in

Table 4. Profitability and Return on Investment

<i>Questions</i>	<i>Number of responses</i>
How are services priced in these foreign operations?	
Same as rest of world	4
Different	2
How does your firm measure profitability in these environments?	
Same as rest of world	5
Different	2
How do you repatriate your returns from the country?	
Commodities	0
Finished products	0
Hard currency	2
Soft currency	1
Other	3
How much of your investment return is reinvested in country?	
81 percent to 100 percent	4
61 percent to 80 percent	0
41 percent to 60 percent	1
21 percent to 40 percent	0
0 percent to 20 percent	0

the designated foreign operations was the same as in the rest of the world and two indicated it was different. Reasons given for pricing services differently included: "lower fee for indigenous clients at entry stage into country"; "hourly billing rates are generally used, but rates are sometimes lower"; and "typically based on the cost structure of specialized services—e.g., Russian Tax Partner rates (are) higher, general services (are) often lower."

Regarding measurement of profitability in these environments, four respondents indicated little difference between the designated nations and the rest of the world (one offered the clarification that the "measurement systems (are) the same"); two indicated differences. Reasons cited for using different profitability measurement methods include: "different standards of living"; and "different costs structures"—high salaries for expatriates versus low salaries for indigenes.

Firms indicated that repatriation of returns from these countries takes place in hard currency (2), and/or soft currency (1). When specifying reasons for responding "other," two of the three respondents indicated it was "not applicable"; one commented that it is "not always a consideration; local partners generally retain profits." Four respondents indicated that between 81 percent and 100 percent of investment returns are reinvested in the local country; one noted a range of 41 percent to 60 percent; one did not respond to the question. Using the midpoint of the ranges of reinvestment to calculate an average reveals that the average amount of the return reinvested in the country is 82 percent, which is high. The high reinvestment rates signify that the Big Six are not merely interested in a fast profit and quick exit, but rather, that the firms are in for the long term.

Organizational Form and Staffing

An area in which the relationships between the Big Six firms' specific capabilities, the foreign business environment, and the foreign intrafirm structure are evident is in the organizational form and staffing of foreign operations. As shown in Table 5, Panel A, generally, foreign offices are either firm-owned (four responses) or joint ventures (three responses). Two respondents used the "other" category to comment: "depends on local law and financing"; and "part of worldwide member firm group; same share in portion of profits."

In response to another question, firms indicated that foreign office staffing is largely local, between 70 percent and 90 percent and foreign; western-trained personnel make up the remaining 10 percent to 30 percent. Thus, the Big Six have not relied extensively on expatriates to staff these offices. All of the Big Six indicated that they have encountered problems in locating suitable office facilities (5), finding trained personnel (6), and/or training untrained personnel (2). And all post U.S. nationals to these foreign offices for 2 to 5 years and follow rotation policies in such postings.

To function effectively in these emerging markets, the Big Six must combine knowledge and experience acquired elsewhere with local knowledge and talent. Firms were asked a group of questions about foreign intrafirm structures. The results are shown in Table 5, Panel B. All the respondents indicated that their firms transfer proprietary knowledge and skills from the parent (or domestic) operation to their foreign operations. Perhaps, because it is extremely difficult to do so when service knowledge is taught to employees who are free to leave and carry that knowledge with them, only a minority (2) responded that their firms attempt to protect proprietary professional knowledge and skills (processes and procedures) in foreign operations. One of the two stated that this is done "through international policies," i.e., through the firm's international data management processes and procedures.

The firms encounter significant variation in accounting methods employed within each country; one respondent observed "too many variations to describe"; another "we encounter language differences, but all partners are required to speak English." Two respondents replied that their firms do not encounter significant variation in accounting methods employed in each country. Their reasons were clear: one commented "(we) use (our) own worldwide standards"; the other, "(we) use (our) firm's international manual." Concerning dealing with language differences, the respondents noted: "(we) learn each others languages"; "(we offer) training in local language and English"; and "(we) use local staff and we provide language training for expats."

Services Offered

According to the research model, a connection exists between the firm's specific resource capabilities, the human resources available, and the services that the foreign office can offer. Table 6 shows the overall response to questions about the type of services offered in the nations under study. All the Big Six respondents indicate that their firms' foreign operations are able to offer a full range of services, including audit and management consulting; one indicated that his/her firm also offered advice on "corporate

Table 5. Organizational Form of Foreign Operations

<i>Panel A: Staffing Questions</i>			
<i>What percentage of your staff is local; foreign, western-trained; foreign, non-western?</i>			
<i>Percentage (%)</i>	<i>Local</i>	<i>Foreign, western-trained</i>	<i>Foreign, non-western</i>
10	0	2	0
20	0	2	0
30	0	1	0
40	0	0	0
50	0	0	0
60	0	0	0
70	1	0	0
80	2	0	0
90	3	0	0
100	0	0	0
<i>Questions</i>	<i>Number of responses</i>		
How do you organize your foreign offices?			
Firm-owned office	4		
Management contracting (exclusive agent)	0		
Licensing/franchising	0		
Joint venture	3		
Other	1		
Problems encountered in			
Locating suitable office facilities	5		
Finding trained personnel	6		
Training untrained personnel	2		
<i>Panel B: Foreign intrafirm structure questions</i>			
<i>Foreign intrafirm structure questions</i>	<i>Responses</i>		
	<i>Yes</i>	<i>No</i>	
Do you post U.S. nationals to foreign offices?	6	0	
In the posting of U.S. nationals to foreign offices, do you follow any rotation policies?	5	0	
Do you transfer your firm's culture?	6	0	
Do you transfer proprietary knowledge and skills from your parent (or domestic) operation to your foreign operations?	6	0	
Do you protect proprietary professional knowledge and skills (processes and procedures) in foreign operations?	2	3	
With respect to local practices, do you encounter significant variation in accounting methods employed within each country?	4	2	
Do you deal with language differences?	4	1	

finance." In the audit area, the types of reports prepared include audit opinions (6), forecasts (4), and compilations (3). A wide range of management consulting services is

Table 6. Types of Services Offered

<i>Questions</i>	<i>Number of responses</i>
What types of services do you offer through your foreign operations?	
Audit	6
Management consulting	6
Tax	6
Other—corporate finance	1
In the audit area, what types of reports do you prepare?	
Audit opinions	6
Compilations	3
Forecasts	4
What sorts of management consulting services do you provide?	
To foreign nationals wishing to enter the host country	6
To host country business people	6
To host country government people	6
What sorts of tax services do you provide?	
Preparation of returns	6
Tax planning	6
Other—tax advice	1
Do you offer management consulting services in	
The choices and uses of computer hardware	5
The choices and uses of computer software commercially available	6
The development of software to special order	3
Are the professional services offered by your firm standardized globally or customized to local market needs?	
Standardized	4
Customized	4

provided to foreign nationals wishing to enter the host-country (6), to host-country business people (6), and to host-country government people (6). The tax services provided are preparation of returns (6), tax planning (6), and other, “tax advice” (1). In addition, management-consulting services are offered in the following: the choices and uses of computer software commercially available (6), the choices and uses of computer hardware (5), and the development of software to special order (3). The professional services offered by the firms may be standardized globally (4) or customized to local market needs (4). One respondent observed that there is “some local customization based on local requirements”; another that “we observe quality standards but tailor our services to meet specific market needs.” The results show a broad scope of consulting services available in these locations.

Promotional Considerations

Promotion and marketing are related to the provision of a wide range of professional services. The firms’ response to questions on promotion and marketing are presented in Table 7. Various media are used to promote the different services the firms offer, including

Table 7. Promotion and Marketing of Services

<i>Questions</i>	<i>Number of responses</i>	
How does your firm promote the different services it offers?		
Magazines	6	
Trade journals	4	
Newspapers	5	
Radio	0	
Television	2	
Other	2	
	<i>Responses</i>	
	<i>Yes</i>	<i>No</i>
Are services promoted differently in foreign operations than in domestic ones?	5	1
Are services promoted differently from one country to another?	5	1

magazines (6), newspapers (5), trade journals (4), television (2), and other (2). One of the two respondents indicating "other" mentioned reliance upon "trade and professional associations, civic activities, etc."; the other, "conferences, direct-mail, Chamber of Commerce." Five respondents stated that their firms promote services differently in foreign operations than in domestic ones; one that his/hers does not. Two indicated that their firms use television domestically but not for foreign operations; one indicated that his/her firm uses magazines, trade journals, newspapers, and television domestically but not for foreign operations. Five respondents indicated that their firms' services are promoted differently from one country to another; one that his/hers are not. Respondents indicated why foreign services are promoted differently, including: "some countries do not allow advertising, solicitation, etc."; "(it) depends on local laws"; and "(it is) dependent on local regulations."

Professional Development

Interaction between the Big Six domestic headquarters, their foreign offices, and their environments is evident in their efforts at professional development. As noted above, as command economies move in the direction of free market economies, they need to develop accounting standards that are closer to internationally acceptable practices. Thus, it is in the interest of their governments and accounting professionals to pay attention to international developments and to pattern their own standards upon international norms. Likewise, it is in the interest of the Big Six to monitor such developments and to participate in them when practical, and in the training of accounting personnel.

Our results, presented in Table 8, show extensive involvement by the Big Six in these activities. Respondents indicated that their firms participate in host-country sponsored colloquia or symposia on the development of acceptable accounting standards (6); acceptable tax laws (rules and regulations) (6); and acceptable regulatory standards (5).

Table 8. Development of the Profession

<i>Questions</i>	<i>Number of responses</i>
Does your firm participate in host-country sponsored colloquia or symposia on the development of	
Acceptable accounting standards	6
Acceptable regulatory standards	5
Acceptable tax laws (rules and regulations)	6
Your firm is actively involved in the training and preparation of local nationals for the accounting profession	
In house	6
Cooperatively with local colleges and/or universities	3
Cooperatively with host governments	3
Cooperatively with local professional bodies	3
In the training process, do you encourage foreign nationals to intern in offices in	
The United States	6
Western Europe	6
Other—worldwide (1), Japan, Hong Kong (1)	2

The Big Six firms are actively involved in the training and preparation of local nationals for the accounting profession in house (6); cooperatively with local colleges and/or universities (3); cooperatively with host governments (3); and cooperatively with local professional bodies (3). In the training process, they encourage foreign nationals to intern in offices in the US (6); Western Europe (6); and other—worldwide (1); Japan, Hong Kong (1). Thus, extensive knowledge transfers are taking place in these locations.

International Standards Development

We asked the respondents how closely, in their experience, host governments monitor international accounting developments. With regard to the standard setting activities of the International Accounting Standards Committee (IASC), one replied either very closely or closely, it varies by country; a second indicated that it varies by country; a third replied that host governments were neutral; a fourth that host governments do not closely follow international accounting developments. Concerning the regulatory pronouncements of the International Organization of Securities Commissions (IOSCO), one replied “closely”; a second, “neutral”; a third, “not closely”; and a fourth, “varies by country.” The United Nations Center for Transnational Corporations was not watched closely. It would appear that the host governments are most concerned with the standard setting work of the IASC.

As noted above, we asked respondents as to which factors did their firms consider when deciding to enter the emerging markets under study. At this point in the questionnaire, we sought to develop a better understanding of the Big Six firms’ market entry criteria. We asked the respondents if their firms’ criteria differ based upon the type of country in which they are attempting to establish an office, such as a mature country like the UK, France, or Germany, or an emerging country like Mainland China, Poland, or Russia. Three replied in

Growth Phases*

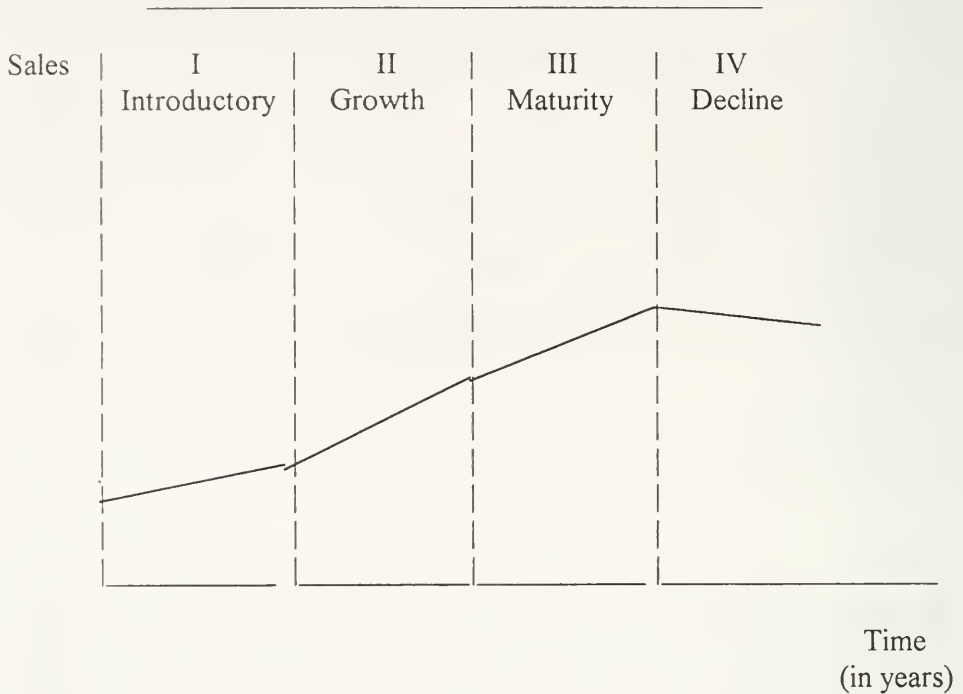


Figure 2. Market Entry and Growth. Market Growth Matrix. (*The Length of the Growth Phases is Influenced by Market Characteristics).

the affirmative; two in the negative. Those who responded in the affirmative gave the following reasons for their firm's policy: "(we are) willing to make greater investment"; "we are already in the mature countries"; and "future potential/longer term view required for emerging markets." These comments suggest that the firms differentiate between mature and emerging markets; the responses received above suggest that they differentiate within emerging market regions as well.

Services Growth Life Cycle

The next set of questions dealt with the market growth matrix (Fig. 2). It shows that products/services follow a predictable pattern of growth involving four phases: I—introductory; II—growth; III—maturity; and IV—decline. Respondents generally indicated that the market growth matrix was not relevant to professional services such as accounting and consulting. By way of explanation, one respondent indicated: "Our services are not trendy and are required, not optional. Decline in later years, or any other time, is quality driven or caused by decreasing market." Another commented: "One might be able to find data to support this theory, but it does not adequately capture the

complexities of our market, including the role of government regulations, privatization, outsourcing, etc.”

Regarding the length of the introductory phase (Phase I), one respondent replied “5 years”; a second, “(it) depends on (the) country; those in question, 5–10 years.” One indicated that the growth phase lasts “5–10 years.” However, four of the respondents indicated that the length of the various phases varies by country; one stated it “depends on country characteristics.” Asked whether their firms’ marketing approach changes from Phase I to Phase II, one respondent replied: “awareness building, advertising, and public relations to field collateral (features and benefits).” Another remarked: “I cannot really comment on this because again it varies.” Polled as to whether their firms’ marketing approach changes from Phase II to Phase III, one respondent remarked: “greater competitive awareness, positioning, and pricing.” Another indicated that it “varies by country.” Thus, the model does not seem to describe the experience of our respondents in the designated markets.

CONCLUSION

The research model helps to illustrate the interrelationship between the domestic parent’s firm specific characteristics, the foreign environment, the foreign subsidiary’s intrafirm structure, and the marketing mix deployment for market growth and development. Market entry decisions were driven by the characteristics of the foreign business environment, the perceived growth potential of the local market, and client needs. Culture, which communicates through language, requires language facility that the Big Six obtain both by hiring foreign nationals and by training expatriates. Business culture is expressed in accounting, its language. Cultural considerations were very important in determining the professional services to be offered. The governmental regulatory environment influences accounting standards. As these emerging markets move from command economies to market and/or mixed economies, accounting standards must evolve and keep pace with the socio-economic changes. Foreign governments and professionals, and the Big Six that invested in these nations, indicate an interest in international standard setting trends. These governments are intimately involved in the formulation of national accounting standards, and they monitor international standard setting activities. Also, the Big Six participate in standard setting and practice development through training of personnel.

The Big Six have encountered organizational and human resource problems. Where necessary, the firms have formed joint ventures with local nationals. And they are seeking to overcome their human resource problems through hiring local employees and training them, and by capitalizing upon the knowledge, expertise, and skills of Western-trained personnel through rotation practices and policies.

The symbiotic relationship between the foreign market, the cost of doing business there, and the promotion/pricing of services is evident in the practice of some of the firms to accept smaller profit margins by charging less for services, particularly for new clients. This serves to attract new clients while, at the same time, recognizing their lesser ability to pay higher fees until better established. Despite the hardships encountered, and the difficulties confronted, the Big Six offer a wide range of services to their clients. Approaches to promoting professional services varied by market. However, trade

journals and professional networking, through membership in trade and professional associations, were most prevalent. It is also clear that they intend to stay in these markets for the long haul: their reinvestment rates suggest that this is so. The study found that unlike manufactured products, professional services do not follow a traditional product growth life-cycle. This is probably due to the fact that "intangible knowledge assets" are unique to each of the Big Six firms and such capability is difficult to duplicate by competition. Successful efforts will likely be crowned with market expansion, as the model predicts.

This study is subject to the following limitations. The authors did not inquire into whether and how the Big Six differentiate among the regions and countries under study. Further, the study relies upon a survey of opinions. Responses to opinion surveys may not represent the actual actions of the firms, but what the respondents expect those actions should have been. The Big Six accounting firms are not the only foreign auditing firms operating in the three regions. There are several non-Big Six British, Dutch, French, and German auditing firms operating in these regions. The stimuli that motivate their entry and growth in these markets may be different from those that motivate the survey participants (i.e., the Big Six firms).

NOTES

1. The Big Six international accounting firms were: Arthur Andersen; Coopers and Lybrand; Deloitte and Touche; Ernst and Young; KPMG Peat Marwick; and Price Waterhouse.
2. The proposed merger between E&Y and KPMG did not materialize.
3. The authors are willing to supply the full survey instrument to interested readers upon request. Contact Professor Robert J. Kirsch.
4. Clearly, one important factor that caused the Big Six to enter particular countries is the level of foreign direct investment (FDI) in that nation. The authors attempted to obtain data on the level of FDI for the countries in the study. Unfortunately, as newly emerging nations, only about 40 percent of the European nations searched on the Internet provided any data on FDI. So, we consider the entrance of the Big Six into a country following clients as a proxy for FDI.

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Audit Quality in ASEAN

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Key Words: ASEAN; Audit quality; International auditing standards; Statutory auditors

Abstract: This study explores audit quality in ASEAN from an analysis of the legal environment faced by statutory auditors. First, it provides an overview of the national laws, regulations, professional codes and standards defining the legal environment. Second, it provides an economic analysis of the main differences among countries and relates those differences to the functioning of the audit markets, with a potential for uneven audit quality in the region.

Data were collected with questionnaires from national representatives of four "Big Five" firms, and accuracy of the information was reviewed by 15 governmental and professional bodies responsible for regulating the auditing profession in ASEAN.

Analysis of the data revealed a diverse legal environment among the ASEAN countries possibly creating a climate of differential audit quality. Many differences were observed in the competence requirements of auditors, the requirements regarding the conduct of statutory audits, and the reporting obligations. Further, audit quality in some countries is seriously compromised due to a lack of rules ensuring auditors' independence. Finally, some of the liability regimes in ASEAN do not provide an incentive for statutory auditors to provide quality audit services. Several recommendations are made to improve the legal environment by bringing the national laws and regulations in line with international standards of auditing which would result in a more uniform audit quality throughout ASEAN.

This article reports the result of a study on audit quality in the member states of the Association of Southeast Asian Nations (ASEAN). Laws, regulations, professional codes and standards¹ regarding statutory audits define the role and position of auditors, and affect the functioning of audit markets in the region. Currently, the legal environment in which auditors operate differs between the ASEAN countries. Thus, the role and position of statutory auditors are not uniform in the region and this heterogeneity could result in dissimilar audit quality within the ASEAN community.

The objective of this study is to provide an overview of the legal environment affecting the role and position of statutory auditors in the ASEAN region. More

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specifically, it examines the national laws and regulations affecting (1) the appointment and termination of statutory auditors, (2) the independence and incompatibilities issues faced by auditors, (3) audit reporting, and (4) the liability of statutory auditors. This overview thus provides a basis to analyze the main differences between the national laws and regulations and their impact on the functioning of the audit market in ASEAN.

This study offers several benefits. First, it gives a better understanding of the nature of the audit function within the ASEAN community and of the reliability that can be placed on audited financial information. As the ASEAN securities markets play an increasing role in global investment strategy, this assessment should help to evaluate the risk factors of investing in the region. Further, as ASEAN becomes more involved in global trading, companies wishing to invest or conduct business in the region should benefit from understanding the present state of audit services. Second, by providing a comparative analysis among the member states, this study should help the ASEAN community in assessing the adequacy of the current laws and regulations governing the auditing profession. The study makes several public policy recommendations, using international audit standards as a benchmark, for the adoption of measures expected to improve audit quality in ASEAN. In view of the present crisis faced by some of the ASEAN countries, increasing the quality of audit services should heighten investors' confidence in the fair play of ASEAN markets.

FRAMEWORK AND SCOPE

There are two parts to this study. The first part concerns an overview of the relevant legal environment in ASEAN. This overview is based on data provided by the local offices of "Big Five" firms. The national representatives of the audit firms were asked to respond to questionnaires covering the relevant laws and regulations. Table 1 indicates the firms that participated in the collection of the data in each ASEAN country.

The second part is the analysis of the main differences among ASEAN laws and regulations, and their impact on the functioning of the audit markets. The analysis uses insights from economics-based research in auditing to make public policy recommendations using international audit standards as a benchmark. The political feasibility of those recommendations is beyond the scope of this study. While the overview is concerned with nearly all regulatory aspects of audit markets, the analysis focuses on the specific issue of

Table 1. Participating "Big Five" Firms

<i>Country</i>	<i>Firm</i>
Brunei	Ernst & Young
Indonesia	HTM, member firm of Deloitte Touche Tohmatsu International
Malaysia	Price Waterhouse
Philippines	SGV & Co., member firm of Arthur Andersen & Co.
Singapore	Deloitte & Touche
Thailand	SGV-Na Thalang, member firm of Arthur Andersen & Co.
Vietnam	Arthur Andersen & Co.

audit quality in ASEAN. Not all laws and regulations are equally relevant to this topic. Hence, the recommendations emphasize a subset of the national laws and regulations included in the study.

While the overview deals with laws and regulations concerning audit markets, the analysis concentrates on the functioning of the audit markets. In this context, the questionnaires used in the study provide in principle only data on the relevant laws and regulations. They provided no information on the actual functioning of the markets. While the respondents provided background information on their national audit market as much as possible, no direct evidence was collected.

This study did not explicitly examine the role of markets in the supply of audit services for lack of available empirical data. However, it is obvious that the seven countries included in the study are at different stages of economic development. For example, while Singapore has a rather sophisticated financial market and engages in significant global trading, Vietnam by comparison is still in the transition stage from a government-directed economy to a freer market environment. Hence, the demand for audit quality will invariably be different among the ASEAN countries.

Nevertheless, the recent economic crisis in Southeast Asia has proven that lax accounting practices may result in devastating financial consequences for foreign investors. Since the reliability of financial information is an essential condition to sound foreign investments, one step in the economic recovery of the ASEAN countries should be to promote auditing standards that will lend credibility to the audit process and improve the quality of financial information.

This study also did not measure the audit concentration of the “Big Five” firms in the seven ASEAN countries and there are no empirical data to that effect. If international firms dominate the audit markets in the region, one could argue that the mechanisms by which these firms maintain and enhance their reputation for audit quality might be more relevant than “minimum” standards via regulation. However, some anecdotal evidence seems to counter this claim. Because most international public accounting firms are mixtures of different national auditing firms, the quality of work performed may vary. For example, SGV in the Philippines (a member firm of Arthur Andersen Worldwide) is subject to the internal peer review program prescribed by Arthur Andersen for all its member firms but not to an external peer review. In fact, the World Bank recently encouraged the “Big Five” accounting firms to ensure that “their developing-world affiliates meet international auditing and accounting standards” (Wall Street Journal, 1998).

Four dimensions define the scope of this study. First, the countries covered in this study correspond to the member states of the ASEAN as of December 31, 1996.² At that date, the member states were Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Laos and Myanmar were admitted into ASEAN on July 23, 1997 and thus were not included in this study. Second, this study defines “entities subject to a statutory audit” as private enterprises that are audited as a requirement of national law. Audits of public sector organizations are not included, though they may be performed under national laws and regulations similar to those applying to audits of private entities. Third, auditors included in this study are those who have the right to conduct statutory audits for the entities defined above. Finally, the questionnaires asked the respondents to describe the status of laws and regulations as of June 1997, and any recent or upcoming major changes in the legal environment.

METHODOLOGY

This section presents the development of the questionnaires and the procedures to ensure the quality of the data collected. The major activity for the first part of the study was to obtain data on all the institutional details relevant to the role and position of statutory auditors. Data on the laws and regulations were collected with questionnaires completed by national representatives of the four participating audit firms. The first questionnaire was developed by adapting to the region a research instrument previously used in a European study (Buijink et al., 1996). The questionnaire used an open question format to allow respondents more flexibility and give them the opportunity to add background information to their answers. Additionally, many questions explicitly asked for background data on the function of the statutory audit and the nature of the financial information in the country of the respondents. The questionnaire asked information about the following topics: appointment and termination of statutory auditors, independence and incompatible activities, relationships of statutory auditors with the company, liability of statutory auditors towards the company and third parties, and contents of the audit reports.

Upon examining the answers, some of the completed questionnaires did not address a number of specific issues and some of the responses required further clarification. Thus, a second questionnaire was mailed to the national representatives with a list of questions specific to each country. The information provided by both questionnaires was then summarized and the overview sent to the national representatives to ensure that the data compilation was correct. Finally, to enhance the accuracy of the information, the final overview was mailed to the relevant professional and governmental bodies regulating the auditing profession in each ASEAN country for their review. In total, 15 professional and governmental bodies, including the ASEAN Federation of Accountants (AFA), were involved in this review. This process was considered likely to result in the best quality of

Table 2. ASEAN Professional and Governmental Bodies

<i>Country</i>	<i>Organizations</i>
ASEAN	ASEAN Federation of Accountants
Brunei ^a	Ministry of Finance, Brunei Darussalam Institute of Certified Public Accountants
Indonesia	Ministry of Finance, Indonesian Institute of Accountants
Malaysia	Ministry of Finance, Malaysian Institute of Accountants, Malaysian Association of Certified Public Accountants
Philippines	Professional Regulation Commission, Philippines Institute of Certified Public Accountants
Singapore	Public Accountants Board, Institute of Certified Public Accountants in Singapore
Thailand	Board of Supervision of Auditing Practice, Institute of Certified Accountants, and Auditors of Thailand
Vietnam	Ministry of Finance, Vietnamese Accounting Association

Note: ^aThe Brunei Darussalam Institute of Certified Public Accountants was the only ASEAN professional body that could not perform the quality review of the data within the 60-day period. However, the Brunei Ministry of Finance reviewed the data within the same period and concluded that the information properly reflected the current rules and procedures affecting statutory auditors in Brunei.

information possible, given the time constraints. Table 2 shows the names of the ASEAN professional and governmental bodies involved in the quality review of the data.

DESCRIPTIVE RESULTS

This section provides an overview of the laws, regulations, professional codes, and auditing standards affecting statutory auditors. The first part of this section summarizes the audit environment in each of the ASEAN countries. The second and third parts detail the appointment and termination procedures, respectively. The fourth part discusses the independence requirements imposed on statutory auditors as well as incompatible activities. The fifth part focuses on audit reporting. Finally, the last part reviews statutory auditors' liability towards the company and third parties. The seven member countries of ASEAN as of December 31, 1996 are included in this study. In the remainder of the article, the names of the countries are abbreviated, using the first four letters of the full name (Table 3).

The Audit Environment in ASEAN

Brunei

Currently, no rules, guidelines or policies have been issued by either a professional body or the government to regulate the auditing profession. The Brunei Institute of Certified Public Accountants (BICPA) is not officially recognized by the government as a regulating body for the auditing profession. Hence, the BICPA does not issue any rules, guidelines or policies regulating the auditing profession. The Ministry of Finance can be considered as the de facto regulatory body by virtue of its authority to grant audit licenses. The Companies' Act gives the Ministry of Finance the responsibility and authority to process applications for audit license, and thus empowers it to reject a new application, refuse the renewal of an existing license, and cancel an existing license. In the absence of established local auditing standards, the International Standards on Auditing (ISA) are generally applied in practice.

Indonesia

The Indonesian Institute of Accountants or Ikatan Akuntan Indonesia (IAI) is the government-sanctioned organization which has the responsibility to establish and review

Table 3. ASEAN Countries Abbreviations

<i>Country</i>	<i>Abbreviation</i>
Brunei	BRUN
Indonesia	INDO
Malaysia	MALA
Philippines	PHIL
Singapore	SING
Thailand	THAI
Vietnam	VIET

accounting and auditing standards, and the Accountants' Code of Ethics. The auditing profession is regulated and monitored by the Ministry of Finance under Decree No. 43 dated January 1997 regarding Public Accountants' Services. The Ministry grants licenses to practice as a public accountant and only registered public accountants can be appointed as statutory auditors. To be registered as a statutory auditor, one must reside in Indonesia, pass the examination administered by IAI, be a member of IAI, have 3 years of work experience as an auditor, and, for the audit of listed companies, be accredited by the Capital Market Supervisory Board.

Malaysia

The 1967 Accountants' Act regulates the auditing profession. The Malaysian Institute of Accountants (MIA) is the statutory national accountancy body, whereas the Malaysian Association of Certified Public Accountants (MACPA) is a professional body. In addition, various sections of the Companies' Act relate to approved company auditors and most of the laws relating to government agencies contain several provisions covering the qualifications, roles, and duties of auditors.

Both bodies issue local auditing standards and adopt the auditing guidelines, modified to suit the local business environment, issued by the International Auditing Practices Committee of the International Federation of Accountants (IFAC). These two bodies have their own Code of Professional Ethics and Conduct, and are empowered to conduct investigations and take disciplinary actions on any complaint filed by the public against its members.

To qualify for appointment as a statutory auditor, one must be a public accountant registered with the MIA and licensed by the Ministry of Finance. Membership to the MIA requires either a degree in accountancy from a local university or membership in the MACPA, and 3 to 5 years of practical experience in the field of auditing. To become a member of MACPA, one must either pass the examinations conducted by MACPA or hold an accountancy qualification recognized by MACPA, and have no less than 3 years of relevant practical experience.

Philippines

The 1975 Revised Accountancy Law regulates the auditing profession. Only certified public accountants are allowed to conduct statutory audits. The Professional Regulation Commission (PRC) was created in 1973 by Presidential Decree to supervise and regulate the various professions in the Philippines, including the accounting profession. The PRC is under the administrative supervision of the Civil Service Commission, an independent agency reporting to the Office of the President. A Board of Accountancy, operating under the supervision of the PRC controls the licensing of certified public accountants. Its members are appointed by the President of the Philippines. Specifically, the Board determines and prescribes the minimum requirements for the admission of candidates to the CPA examination. It administers the CPA examination and issues certificates to those who have satisfactorily passed the examination. The Board also investigates violations of the Revised Accountancy Law and, after due process, may suspend, revoke, or reissue certificates of registration.

Subject to the PRC's approval, the Board promulgates rules and regulations, and sets professional and ethical standards.

In 1975, the PRC issued a certificate of accreditation to the Philippine Institute of Certified Public Accountants (PICPA) as the national profession-wide organization of CPAs. There are four other organizations composed exclusively of CPAs engaged in the major areas of accountancy. They are the Association of CPAs in Public Practice (ACPAPP), the Association of CPAs in Commerce and Industry (ACPACI), the Association of CPAs in Education (ACPAE), and the Government Association of CPAs (GACPA). Under the integration concept defined by the PRC, these organizations co-exist with PICPA and pursue activities and objectives compatible with those of PICPA. The Auditing Standards and Practices Council (ASPC), established by PICPA in coordination with ACPAPP, promulgates auditing standards, practices and procedures. The pronouncements issued by ASPC and approved by the PRC (through the Board of Accountancy) become generally accepted by the auditing profession. US auditing standards and the pronouncements of the International Auditing Practices Committee significantly influence the development of auditing standards in the Philippines.

Singapore

The 1987 Accountants' Act regulates the auditing profession. The Public Accountants' Board (PAB) is the regulatory body and the Institute of Certified Public Accountants of Singapore (ICPAS) is the professional body. In addition, various sections of the 1967 Companies' Act (revised in 1994) relate to approved company auditors. The functions of the PAB are to (1) register public accountants, (2) maintain a register of public accountants, and (3) determine the qualifications of persons seeking registration as public accountants under the Accountants' Act. In addition, it controls and regulates the practice of the accountancy profession by public accountants. Finally, it regulates the conduct and ethics of public accountants, and hold inquiries when rules of conduct or ethical behavior have allegedly been violated.

In addition to registering with the PAB, public accountants also need to be members of the ICPAS in order to call themselves "Certified Public Accountants." The ICPAS was established in 1963 as the Singapore Society of Accountants and renamed the ICPAS in 1989 (pursuant to the 1987 Accountants' Act). The ICPAS is responsible for the technical development and advancement of the profession. The Singapore Standards on Auditing issued by ICPAS are practically the same standards issued by the International Auditing Practices Committee. In practice, all statutory auditors in Singapore are members of both the PAB and the ICPAS.

Thailand

The 1962 (Buddhist Era Year 2505) Auditing Act established the Board of Supervision of Auditing Practice (BSAP) which has the power to regulate the auditing profession. The BSAP is a government agency under the Ministry of Commerce. The Act prescribes that only certified public accountants are eligible to conduct statutory audits in Thailand. The BSAP determines the qualifications of persons seeking registration as public accountants by holding the necessary examinations that enable persons to qualify for registration.

Additionally, it sanctions the accounting and auditing standards promulgated by the Institute of Certified Accountants and Auditors of Thailand (ICAAAT). Statutory auditors are appointed by the shareholders at their annual general meeting and must be approved by the Securities and Exchange Commission (SEC) for publicly listed companies and by the Bank of Thailand for banks and finance companies. The ICAAT promulgates auditing standards, practices, and procedures. The pronouncements must be approved by the BSAP to become generally accepted by the auditing profession. Most auditing standards follow the ISA.

Vietnam

The Ministry of Finance of the Socialist Republic of Vietnam regulates the auditing profession. The auditing rules and regulations in Vietnam are contained in two documents: Decree 07 of the Vietnamese Government dated January 29, 1994, and Circular 22/TCDK dated March 19, 1994, which details the provisions of Decree 07. Though Circular 22 provides detailed guidance on the auditing profession, various auditing matters are not included therein, including Vietnamese auditing standards. The Ministry of Finance is currently developing such standards. The Ministry of Finance is responsible for issuing and guiding the implementation of the principles, criteria, and professional methods of audit applied in the national economy. Additionally, the Ministry coordinates the implementation of programs to train and educate professionals who wish to perform audits. It also regulates the professional examinations and the granting of the auditing certificates. A Selection Council at the State level set up by the Ministry administers the professional examinations.

Furthermore, the Ministry of Finance processes applications for the establishment of auditing firms, and manages the registration of individual auditors. Currently, statutory audits are conducted by local firms (100% Vietnamese owned) and by the "Big Five," organized either as joint venture auditing firms (partially foreign-owned) or 100 percent foreign-owned auditing firms. While local auditing firms apply the Vietnamese auditing methods, the "Big Five" firms follow the International Auditing Standards. The Ministry of Finance also regulates the operations of auditing firms, and settles differences and disputes arising from the result of the audit.

The Vietnamese Accounting Association (VAA), recognized by the Ministry of Finance, is a professional body with a limited consultative role. Its aim is to unite those engaged in the accounting and auditing profession in order to maintain and develop the profession, improve expertise and professionalism, and preserve professional morality. The Ministry of Finance issues legal documents about accounting and auditing operations with the assistance and advice of the VAA.

Appointment of Statutory Auditors

Eligibility

Except in Thailand and Vietnam, both natural persons and auditing firms may be appointed as statutory auditors. In Thailand, only natural persons and, in Vietnam, only auditing firms may be appointed as statutory auditors.

In most countries, no specific restrictions exist on the delegation of audit work and the qualifications of the individuals to whom audit work is delegated. Except for Indonesia and the Philippines, no restrictions exist on the delegation of audit work and no specific guidelines are given on the extent of work carried out by assistants. Further, except for Indonesia and Vietnam, no educational or professional requirements are specified for the assistants to whom the audit work is delegated. Generally, the only restriction is that a licensed auditor sign the audit report.

In Indonesia, assistants need to have completed an accounting degree, be informed of their responsibilities, and know the objectives of the procedures they are to perform. In the Philippines, most audit work may be delegated as long as assistants are properly supervised. Aspects of the audit work that cannot be delegated include the final assessment and evaluation of the audit results, the conclusion on the overall financial statement presentation, and the signing of the audit report. Vietnam has no guidelines on the delegation of audit work but assistants must possess an accounting or finance degree from a recognized university or vocational school.

Qualifications

Several requirements typically exist to qualify a statutory auditor. For example, there may be proficiency (e.g., CPA examination) and/or educational (e.g., accounting degree) requirements. Practical experience in the field of auditing may also be necessary to register or be licensed as a statutory auditor. Significant differences exist among ASEAN countries in the requirements to qualify as statutory auditor. Some countries have no educational and/or proficiency requirements (Malaysia, Singapore) while others have either no practical experience requirement (Philippines) or an unusually low requirement (Thailand). Table 4 summarizes the requirements to qualify as a statutory auditor.

In order to retain their qualification, statutory auditors are often required to maintain sufficient up-to-date knowledge through programs of continuing professional education (CPE). Again, significant differences among countries can be observed. Brunei and Vietnam have no CPE requirements, and Thailand has an unusually low requirement

Table 4. Qualification Requirements for Statutory Auditors

<i>Country</i>	<i>Educational requirement</i>	<i>Proficiency requirement</i>	<i>Minimum period of practical experience required</i>
BRUN	Yes	Yes	5 years
INDO	Yes	Yes	3 years
MALA	Yes	No ^a	3 years
PHIL	Yes	Yes	None
SING	No ^a	No ^a	3 years
THAI	Yes	Yes	1,000 hours within 1 year
VIET	Yes	Yes	5–10 years ^b

Notes: ^aRequired of public accountants who wish to become members of the MACPA (Malaysia) or ICPAS (Singapore) and be recognized as "Certified Public Accountants."

^bUniversity graduates in finance are required to have at least 5 years of experience in accounting and finance; graduates from a vocational school of finance and accountancy are required to have at least 10 years of similar experience.

Table 5. Continuing Professional Education Requirements

<i>Country</i>	<i>Continuing professional education required and minimum CPE credit hours</i>	
BRUN	No	—
INDO	Yes	120 hours over 3 years with a minimum of 30 hours per year
MALA	Yes	50–60 points from unstructured learning activities and 20–40 points from structured learning activities per year ^a
PHIL	Yes	60 hours over 3 years
SING	Yes ^b	40 hours per year
THAI	Yes ^c	24 hours over 5 years
VIET	No	—

Notes: ^aSome activities such as CPE courses and conferences organized by the MIA are awarded three points per hour while those conducted by accredited institutions are awarded one point per hour.

^bMandatory for all members of the ICPAS, but not required by the PAB to be registered as a public accountant and licensed to conduct statutory audits.

^cCan be substituted by continuing professional experience.

substitutable by professional experience if the auditor has signed at least one set of statutory audited financial statements within five years (Table 5).

Nominations and Appointments

The parties responsible for the nomination and appointment of statutory auditors vary among countries. In some countries (e.g., Philippines), management retains a lot of control over the selection of auditors, while in others (e.g., Brunei), shareholders are empowered with this prerogative. Table 6 specifies the parties responsible for nominating and appointing statutory auditors, and whether approval of the appointment is required.

Restrictions

The Philippines and Vietnam have no procedures for or restrictions on communication between the incoming and outgoing auditors. In Brunei, such communication is the practice, though not required by law. In all other countries, the incoming auditor must communicate with the outgoing auditor before accepting the engagement.

Advertising and unsolicited offering of services are prohibited in all countries, except Vietnam. Companies may use tenders (i.e., offers to bid for an audit engagement) in the appointment process. In Thailand, tenders are frequent and the Board of Directors will nominate one firm from among those who have submitted bids. Brunei, Indonesia, the Philippines, and Vietnam have no statutory requirements for tenders. However, in Brunei, Indonesia, and the Philippines, some companies use tenders in the appointment process. In Vietnam, government-owned projects or projects sponsored by the World Bank use tenders in the appointment of statutory auditors. Malaysia and Singapore do not allow auditors to respond to tenders.

Termination Procedures

Audit appointments terminate when the statutory auditor voluntarily withdraws from the appointment (resignation) or is asked to withdraw from the appointment (dismissal).

Table 6. Nomination, Appointment, and Approval of Auditors

<i>Country</i>	<i>Nominating party</i>	<i>Appointing party</i>	<i>Party approving the appointment</i>
BRUN	Shareholders	Shareholders	None
INDO	Directors and/or shareholders	Shareholders	None
MALA	Shareholders	Shareholders	Shareholders and the Central Bank of Malaysia for financial institutions
PHIL	Management	Management	Board of Directors, shareholders, or both depending on company's by laws
SING	Shareholders ^a	Shareholders ^a	Shareholders and the Monetary Authority of Singapore for financial institutions
THAI	Directors	Shareholders	SEC for publicly listed companies and the Bank of Thailand for financial institutions
VIET	General Director	Directors	State Bank of Vietnam for financial institutions

Note: ^aOften delegated to the Board of Directors.

Auditors usually resign because of loss of independence, material fraud, or conflict of interest. Table 7 summarizes the resignation particulars for each ASEAN country.

Companies often dismiss auditors because of disagreements on fees, matters of accounting principles or practices, financial statement disclosures, or auditing scope or procedures. Table 8 summarizes the dismissal particulars for each ASEAN country.

The notification procedures relating to the termination of statutory auditors also vary among countries. Brunei, Indonesia, and Vietnam have no public filing or required notification procedures. In Thailand, only the shareholders are notified of the termination of statutory auditors. In the Philippines, public companies are required to notify the SEC of a change in auditors but there are no requirements of public notification for private companies. In Malaysia, the company must send a copy of the resolution to remove an auditor to the shareholders, the auditor concerned and the Registrar of Companies. In addition, for publicly listed companies, the Kuala Lumpur Stock Exchange must be

Table 7. Auditor's Resignation

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Resignation possible	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serious motives required	No	Yes	No	No	No	Yes	No
Approval by third party required	No	No	No	No	No	No	No

Table 8. Auditor's Dismissal

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Dismissal by appointing body	No	Yes	Yes	Yes	Yes	Yes	Yes
Dismissal by body other than appointing body	Yes	Yes ^a	No	No	No	Yes ^b	No
Serious motives required	No	No	No	No	No	Yes	No
Approval by third party required	No	No	No	No	No	No	No

Notes: ^aStatutory auditors appointed by the Board of Directors could be dismissed by the shareholders.

^bBank of Thailand for financial institutions and SEC for public companies.

notified of the change in auditors. In Singapore, the change of auditors must be filed with the Registrar of Companies.

The defensive rights of auditors vary between countries. Brunei and Thailand do not grant auditors the right to defend their position. Further, in Brunei, the Philippines, Thailand, and Vietnam, auditors are not legally entitled to compensation fees upon termination. Table 9 summarizes the defensive rights of statutory auditors.

Table 9. Auditor's Rights

<i>Country</i>	<i>Rights to defend position</i>		<i>Entitled to compensation fees</i>	
BRUN	No	–	No	In practice, auditors are compensated for a portion of the work performed
INDO	No	–	Yes	Any outstanding fees for professional services before termination
MALA	Yes	Representation to the shareholders in writing or personally	Yes	Fees owed to outgoing auditor must be paid before incoming auditor can accept the engagement
PHIL	Yes ^a	Letter filed with SEC stating nature of disagreements	No	–
SING	Yes	Representation to the shareholders in writing or personally, and filed with the Registrar of Companies	Yes	Fees owed to outgoing auditor must be paid before incoming auditor can accept the engagement
THAI	No	–	No	In practice, auditors are compensated for a portion of the work performed
VIET	Yes	Complaint filed with the Court of Economy	No	–

Note. ^aFor public companies only.

Table 10. Auditor's Restrictions

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Personal relationship	Yes ^a	No	No	No	No	No	No
Commercial relationship	Yes ^a	No	No	No	No	No	No
Financial interest or relationship	Yes ^a	No	No ^b	No	No ^c	No	No
Influential position	No	No	No	No	No	No	No

Notes: ^aNot prohibited by local laws and regulations.

^bAllowed if the amount of the auditor's indebtedness to the company or related party is less than RM 2,500.

^cAllowed if holding less than 5 percent of a public company's or less than 20 percent of a private company's equity share capital, and/or loan to/from auditee or related parties is S\$2,500 or less.

Independence and Incompatible Activities

Restrictions

Table 10 summarizes the restrictions aimed at preserving the independence of statutory auditors. The relationships allowed (Yes) or prohibited (No) are between the statutory auditors (or related persons) and the entity being audited (or related parties).

To preserve their objectivity, auditors may not be allowed to provide other services to a statutory audit client within the same legal entity. However, these restrictions may be ineffective if the same accounting firm has the ability to provide services through multiple legal entities. Table 11 details the services that auditors can provide to an audit client within the same legal entity.

Several other mechanisms are aimed at reducing threats to auditor's objectivity. Some examples are rules concerning audit fees, regulations mandating the rotation of audit partners or firms, restrictions on personnel movement, and sanctions attached to breach of independence. Table 12 summarizes those provisions.

Safeguards

Safeguards such as internal or external quality reviews, or the involvement of an audit committee are often used to minimize the potential of threats to objectivity faced by auditors. Table 13 summarizes the available safeguards.

Table 11. Services Provided by Auditor

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i> ^a	<i>SING</i>	<i>THAI</i> ¹	<i>VIET</i>
Bookkeeping/Accounting	Yes	Yes	No	Yes	Yes	Yes ^b	No ^c
Tax	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Legal services	Yes	No	No	Yes	No	Yes	No
Consulting	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Investment/Financial advising	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Corporate recovery	Yes	Yes	No	Yes	Yes	Yes	Yes

Notes: ^aAllowed as long as the auditor does not have a relationship with the client in any capacity equivalent to that of a member of management or employee.

^bIf the owners of the bookkeeping firm are not the same as the owners of the audit firm.

^cBookkeeping and compilation work may be provided with specific approval of the Ministry of Finance.

Table 12. Provisions to Reduce Threats in Auditor's Objectivity

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Audit fees fixed in advance	Yes	Yes	Yes	Yes	No	Yes	Yes
Rules to calculate audit fees	No	No	Yes ^a	No	No	No	No
Rules to avoid low balling	No	No	Yes	No	Yes	No	No
Overdependence on single client with respect to audit fees	No	No	Yes	No	Yes	No	Yes
Rotation of auditing firms required	No	No	No	No	No	No	No
Rotation of audit partners required	No	No	No	No	Yes ^b	No	No
Restrictions on auditors moving to clients	No	No	No	No	No	No	No
Restrictions on clients' personnel moving to auditing firms	No	No	No ^c	No ^c	No ^c	No	No
Sanctions for breach of independence	No	Yes	Yes	Yes	Yes	Yes	Yes

Notes: ^aMIA's recommended basis for determining audit fees serves as a guide only. In practice, audit fees are negotiated between the company and the auditors.

^bAudit partners are rotated every 5 years for publicly listed companies.

^cRestrictions are limited to situations in which the independence rule may be violated.

Audit Reporting

Statutory auditors can be required to report on matters other than the "truth and fairness" of the annual financial statements. Such a reporting obligation implies that the statutory auditors need to report on specified matters in the auditor's report or to other parties. Three tables present the role of the statutory auditors. Table 14 shows the reporting obligations of statutory auditors in the auditor's report. Table 15 lists the reporting requirements to external bodies. Table 16 reports the disclosure and audit requirements of interim financial information and environmental matters.

Except in Vietnam, the auditor's opinion is published in full with the annual financial statements. In Vietnam, the opinion is published in condensed form, which does not

Table 13. Safeguards to Minimize Threats to Auditor's Objectivity

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Challenges to objectivity disclosed	No	No	Yes	No	Yes	Yes ^a	No
Quality reviews by regulators	No	Yes	No	No	No	No	No
Quality reviews by peer audit firms	No	No	No	No	Yes	No	No
Internal quality reviews	No	Yes	Yes	No	No	No	No
Potential threats to objectivity monitored by independent party	No	No	Yes ^a	No	Yes ^b	No	No
Audit committees required	No	No	Yes ^a	No	Yes ^b	No	No

Notes: ^aFor financial institutions and publicly listed companies.

^bFor publicly listed companies only.

Table 14. Reporting Obligations in Auditor's Report

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET^a</i>
Fraud or irregularities	No	No	No	No	Yes	No	No
Illegal acts	No	No	No	No	Yes	No	No
Internal controls and systems	No	No	No	No	Yes	No	No
Maintenance of proper accounting records	No	No	Yes	No	Yes	No	No
Going concern	Yes	Yes	Yes	Yes	Yes	Yes	No
Corporate governance	No	No	No	No	No	No	No

Note: ^aCircular 22 only recommends but does not require disclosure of these items in the auditor's report.

Table 15. Reporting Obligations to Other Parties

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Fraud or irregularities	No	Yes ^a	Yes ^a	Yes ^b	Yes	Yes ^a	No
Illegal acts	No	Yes ^a	Yes ^c	No	Yes	No	No
Internal controls and systems	No	Yes ^a	Yes ^a	Yes ^b	No ^d	Yes ^a	No
Maintenance of proper accounting records	No	Yes ^a	No	No	Yes	Yes ^a	No
Going concern	No	Yes ^a	No	No	No ^d	Yes ^a	No
Corporate governance	No	No	No	No	No	No	No

Notes: ^aReport to the Board of Directors.

^bReport to management under local auditing standards.

^cReport in writing to the Registrar of Companies under the 1965 Companies' Act.

^dExcept to the Monetary Authority of Singapore for financial institutions.

Table 16. Interim Financial Information and Environmental Matters

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Disclosure of interim financial information	No	Yes ^a	Yes ^b	Yes ^c	Yes ^b	Yes ^a	No
Audit of interim financial information	No	No	No	No	No	No	No
Disclosure of environmental matters	No	No	No	No	No	No	No
Audit of environmental matters	No	No	No	No	No	No	No

Notes: ^aQuarterly financial results required for listed companies.

^bMid-year financial results required for listed companies.

^cQuarterly condensed financial statements (unaudited) required for public companies.

include a description of the audit work performed and its results. The nature of the audit opinion is different among countries (Table 17).

The scope of the work performed is not mentioned in Malaysia and Vietnam, and reference to auditing standards is not required in Brunei and Vietnam. As shown in Table 18, the requirements to use standard forms of published audit reports vary among the countries.

Table 17. Audit Opinions

<i>Country</i>	<i>Nature of auditor's opinion</i>	<i>Report on compliance with accounting laws and regulations</i>
BRUN	"true and correct" ^a	Yes
INDO	"present fairly"	Yes
MALA	"true and fair"	Yes
PHIL	"present fairly"	Yes
SING	"true and fair"	Yes
THAI	"present fairly"	Yes
VIET	"faithful and reasonable"	Yes

Note: ^aLimited to an opinion on the balance sheet.

In the countries where standard forms of audit reports are established by professional bodies, the following reports are available: unqualified opinion, unqualified opinion with explanatory paragraph, qualified opinion, adverse opinion, and disclaimer of opinion. More variation is observed in the statement of responsibilities as evidenced in Table 19.

The situations under which the auditors will issue a qualified report also differ among countries. Table 20 indicates whether the auditor's opinion can be qualified in case of limitations placed on the scope of work performed, existence of uncertainties, or other matters.

The use of a "subject to" qualified opinion is still used in some countries. In Malaysia, a "subject to" qualification is used for uncertainties either inherent or arising from a scope limitation and the issue is regarded as material but not fundamental. In Brunei and Singapore, an audit report could be qualified on the basis of a "subject to." Auditors are not required to take a definite position on issues where they cannot form an opinion. In Thailand and Vietnam, a "subject to" opinion is used when the financial statements are affected by uncertainties concerning future events.

Finally, in some countries, auditors are allowed to emphasize in the audit report matters which they regard as relevant to a proper understanding of their opinion. For example, auditors may wish to emphasize that the audited entity is a unit of a larger business enterprise or that it had significant transactions with related parties.

Table 18. Standard Audit Reports

<i>Country</i>	<i>Standard forms of published audit reports required by law</i>	<i>Matters to be included in reports specified by law</i>	<i>Standard forms of published audit reports established by professional bodies</i>
BRUN	No	Yes	No
INDO	No	No	Yes
MALA	No	Yes	Yes
PHIL	No	No	Yes
SING	Yes	Yes	Yes
THAI	Yes	Yes	Yes
VIET	No	Yes	No

Table 19. Statement of Responsibilities

<i>Country</i>	<i>Audit report indicates party responsible for the preparation of audited information and describes statutory auditors' responsibilities</i>	
BRUN	No	–
INDO	Yes	Management is responsible for the preparation of financial statements and the auditor is responsible for the opinion on those statements.
MALA	No	–
PHIL	Yes	Management is responsible for the preparation of financial statements and the auditor is responsible for the opinion on those statements.
SING	Yes	Management is responsible for the preparation of financial statements and the auditor is responsible for the opinion on those statements.
THAI	No	–
VIET	No	–

Furthermore, auditors may draw attention to unusually important subsequent events or to accounting matters affecting the comparability of financial statements. Such supplementary information is presented in a separate paragraph of the auditors' report (before the opinion paragraph). Certain circumstances, while not affecting the auditors' unqualified opinion, may require the auditors to add an explanatory paragraph or other explanatory language to the standard report. Table 21 presents examples of such matters.

Liability of Statutory Auditors

Liability in General

In general, a liability regime consists of civil liability, criminal liability, and professional sanctions. Whether auditors are exposed to civil or criminal liability usually depends on the nature of the offense committed by the statutory auditor. Generally, auditors are subject to civil liability when they breach contractual and/or civil obligations. Usually, criminal liability is not defined with respect to audit matters, but arises from general definitions of criminal acts (e.g., intentionally providing misleading information). Statutory auditors can also be sanctioned (e.g., warning, exclusion) by professional or regulatory bodies. Table 22 lists the range of professional sanctions against statutory auditors.

Civil Liability

The engagement contract between the auditor and the auditee is a civil law contract. The main issue in civil liability relates to privity, which refers to whether a party not

Table 20. Qualification of Audit Opinion

<i>Auditor's opinion qualified in the event of scope limitations, uncertainties, or other matters</i>			
<i>Country</i>	<i>Scope limitations</i>	<i>Uncertainties</i>	<i>Other matters</i>
BRUN	Yes	Yes	Departure from generally accepted accounting principles, financial statements not in accordance with laws and regulations, inadequate disclosures, disagreement with facts, or amounts disclosed in the financial statements.
INDO	Yes	No	Departure from generally accepted accounting principles, inadequate disclosures, disagreement with facts, or amounts disclosed in the financial statements.
MALA	Yes ^a	Yes ^a	Departure from generally accepted accounting principles, financial statements not in accordance with laws and regulations, inadequate disclosures, disagreement with facts, or amounts disclosed in the financial statements.
PHIL	Yes	No	Departure from generally accepted accounting principles, inadequate disclosures, or lack of sufficient competent evidential matter.
SING	Yes	Yes	Departure from generally accepted accounting principles, or inadequate disclosures.
THAI	Yes ^a	Yes ^a	Departure from generally accepted accounting principles or financial statements not in accordance with laws and regulations, substantial doubt about going concern, material changes in accounting principles, or inadequate disclosures.
VIET	Yes	Yes	Departure from generally accepted accounting principles, financial statements not in accordance with laws and regulations, inadequate disclosures, disagreement with facts or amounts disclosed in the financial statements.

Note: ^aQualified "subject to" opinion if material.

involved in the original contract (i.e., third party) can initiate litigation in the context of the contract. Thus, the liability position of auditors is two-fold. Auditors may be exposed to litigation initiated by the other contract party (i.e., the auditee). They can also be subject (together with the auditee) to litigation initiated by a third party (e.g., shareholders). Table 23 summarizes the parties to whom auditors are exposed in civil liability.

Limitations of Liability

Some procedures aim at limiting the risk of civil liability faced by auditors. First, liability may be capped. A legal liability cap is applicable when auditors are exposed to civil liability initiated by the other contract party (i.e., the auditee) or by a third party (e.g., shareholders). A contractual liability cap is applicable when auditors are exposed to civil liability by the other contract party. It is not available when auditors together with the

Table 21. Modification of Unqualified Audit Opinion

<i>Country</i>	<i>Opinion based partly on other auditor's report</i>	<i>Uncertainties about future events</i>	<i>Substantial doubt about going concern</i>	<i>Material changes in accounting principles</i>
BRUN	Yes	Yes	Yes	No ^a
INDO	Yes	Yes	Yes	Yes
MALA	Yes	No ^b	No ^b	No ^a
PHIL	Yes	Yes	Yes	Yes
SING	Yes	Yes	Yes	No ^a
THAI	Yes	No ^b	No ^b	No ^b
VIET	Yes	Yes	No	No

Notes: ^aRequires a qualified "subject to" opinion.

^bIf appropriately disclosed in the notes to the financial statements.

auditee are subject to civil liability initiated by a third party since a third party is not a contract party. Table 24 summarizes the possibilities of liability caps.

Second, statutory auditors may be required to carry professional indemnity insurance. However, none of the ASEAN countries requires auditors to do so.

Third, liability of statutory auditors may be limited by means of organizational structure of the audit firms. Except in Thailand and Vietnam, individual practitioners and audit firms' partners are personally liable for the audits conducted and/or reported on by them. Thus, they personally bear a joint liability with their firm. In Thailand and Vietnam, where auditing firms may be organized as limited liability companies, audit partners do not bear a personal liability.

ANALYSIS OF AUDIT QUALITY

This section focuses on the differences in national laws and regulations affecting audit quality. The analysis shows that the legal environment is not uniform, leading to various

Table 22. Professional Sanctions

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Warning	Yes	Yes	Yes	No	Yes	Yes	No
Reprimand	No	No	Yes	No	Yes	No	No
Fine	No	No	Yes	No	Yes	No	No
Temporary suspension	No	Yes	Yes	Yes	Yes	Yes	No
Permanent exclusion	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 23. Civil Liability Exposure

	<i>BRUN</i>	<i>INDO</i>	<i>MALA</i>	<i>PHIL</i>	<i>SING</i>	<i>THAI</i>	<i>VIET</i>
Auditee	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shareholders	Yes	Yes	Yes	Yes	Yes	Yes	No
Other third parties	Yes	Yes	No ^a	Yes	Yes	Yes	No

Note: ^aUnclear as there is no legal precedence.

Table 24. Liability Caps

<i>Country</i>	<i>Legal liability cap between contract parties</i>	<i>Legal cap between contract parties and third parties</i>	<i>Contractual liability cap between contract parties</i>
BRUN	No	No	No
INDO	No	No	No
MALA	No	No	No
PHIL	No	Yes ^a	No
SING	No	No	No
THAI	No	No	No
VIET	No	No	Yes

Note. ^aThe auditor's liability is limited to twice the amount of the difference between the amount paid (or committed to be paid) for the security (not exceeding the price offered to the public) and (a) the value of the security at the time the suit was brought or (b) the price at which the security was sold before the suit or after the filing of the suit but before the judgment, whichever is lowest.

levels of audit quality within ASEAN. Laws and regulations on the contents of the audit and the independence of statutory auditors play an ex-ante role on audit quality by directly affecting auditors in the conduct of their examinations. Laws and regulations prescribing the liability regime under which auditors operate influence audit quality ex-post.

Audit quality can be defined as the probability that an error or irregularity is detected and reported (DeAngelo, 1981b). This probability measures the extent to which the assurance given by the auditor is indeed justified. The detection probability is affected by the contents of the audit, which refer to the actual work done by auditors to reach their opinion. Issues related to the contents of the audit are competence of the auditors (eligibility and qualifications), requirements regarding the conduct of the audit (quality review and monitoring), and reporting requirements. The reporting probability is affected by the auditor's independence. High independence implies a high probability of publicly reporting a detected material error or irregularity. Issues related to independence are appointment and termination procedures, restricted or prohibited activities (e.g., relationships with companies), and mandated activities (e.g., communication between auditors).

A strong liability regime will have a positive effect on the contents of the audit and the auditor's independence. Knowing that they are liable for mistakes or negligence in the rendering of their professional duties, auditors have incentives to be independent and provide high quality audits. The exposure to liability as a mechanism affecting audit quality has gained prominence in policy debates about auditing in recent years. The next three parts will provide a comparative analysis among ASEAN countries of the laws and regulations affecting audit quality along those three dimensions.

Contents of the Audit

Competence

The competence of an auditor is evidenced by the actual audit work. The higher the auditor's competence, the higher the probability that errors and irregularities in the

financial statements will be uncovered. The requirements that determine eligibility and qualifications to be appointed as a statutory auditor influence the degree of competence.

Proficiency, Educational and Experience Requirements

The requirements imposed by the national laws and regulations in ASEAN and used to evaluate the skills and competence of statutory auditors are substantially different. Singapore has no educational requirements,³ and Malaysia and Singapore have no proficiency requirements to qualify as a statutory auditor. Hence, in those countries, the CPA examination is used as a differentiating marketing tool by the professional bodies rather than as a qualifying standard by the regulatory bodies. Most ASEAN countries have reasonable experience requirements to qualify as statutory auditor. However, the Philippines has no such requirement and Thailand has an unusually low requirement.⁴

Continuing Professional Education

Auditors operate in an environment of change. The knowledge needed to function effectively as a statutory auditor has expanded rapidly. As mentioned in Guideline 2 (International Federation of Accountants, 1982), auditors need to maintain an adequate level of technical knowledge in order to respond to the growth in public expectations about their role. Brunei and Vietnam have no requirements of continuing professional education. Further, Thailand's requirement⁵ does not seem to meet adequately the objectives of continuing professional education (CPE).

Delegation of Audit Work

The lack of guidelines in most ASEAN countries on the extent of delegated audit work and the qualifications of the staff to whom work is delegated is troublesome. Crucial parts of the audit may be assigned to assistants who do not have the required competence to fulfill their responsibilities with due care. For example, the task of evaluating a going concern assumption demands professional judgement at the highest level, attained after years of experience. The lack of standards in this area may result in engagements with staff who do not have the technical proficiency required to adequately perform the audit.

Conduct of the Audit

Two mechanisms can be used to enhance the quality of the audit conducted by statutory auditors. One relates to a quality review of the audit work performed either internally or externally (by peer audit firms or regulatory bodies). The other deals with the monitoring of the auditors' activities.

Quality Reviews

The "Big Five" firms in ASEAN as a matter of firm policy usually perform internal quality reviews. However, only Indonesia and Malaysia require internal quality reviews,

only Indonesia has quality reviews performed by the regulatory body, and only Singapore mandates peer quality reviews.

Monitoring

Audit committees are considered a valuable tool to enhance the audit quality (Public Oversight Board, 1994). Those committees, by considering the retention or replacement of the independent external auditors, exercise an influence on the performance of the audit. Only Malaysia and Singapore require audit committees for publicly listed companies.

Audit Reporting

The activities of the auditors are affected by the aspects on which they need to provide assurance. Some aspects of the entity subject to audit include compliance with laws and regulations, internal controls, fraud, and corporate governance. There are significant differences in the legal environment within ASEAN concerning the types of reporting as well as the form and contents of the auditor's report.

Reporting Obligations

Reporting obligations mean that the statutory auditors need to report on matters other than the "truth and fairness" of the financial statements in their report or to other parties. Brunei and Vietnam have no reporting obligations with respect to fraud and irregularities. Furthermore, in Brunei, the Philippines, Thailand, and Vietnam, illegal acts do not have to be reported. Few countries mandate reporting related to the evaluation of internal control systems and the proper maintenance of accounting records. Reporting obligations related to corporate governance and environmental matters do not exist in any ASEAN country. Although most countries mandate the disclosure of interim financial information, none requires statutory auditors to review or audit this information.

Form and Contents

In Malaysia and Vietnam, the auditor's report makes no mention of the scope of work performed and reference to auditing standards is not required in Brunei and Vietnam. Furthermore, in Brunei, Malaysia, Thailand, and Vietnam, the audit report does not indicate the party responsible for the preparation of financial statements or describe the statutory auditors' responsibilities. No standard forms of published auditor's reports are required by law or established by professional bodies in Brunei and Vietnam. Further, in Indonesia, Malaysia, and the Philippines, standard reports established by professional bodies are not required by law.

In ASEAN, many of the conditions under which modified reports are issued are not in conformity with international standards of reporting. ISA 700 states that material uncertainties about future events and issues of going concern should give rise to a modification of the standard unqualified report by the addition of an "emphasis of matter" paragraph rather than a qualified opinion. However, in Malaysia and Thailand,

substantial doubt about going concern requires a qualified “subject to” opinion, and, Vietnam has no reporting obligations related to issues of going concern. Further, in Brunei, Malaysia, Singapore, Thailand, and Vietnam, uncertainties about future events also give rise to such opinion.

Independence

Appointment of Statutory Auditors

In the Philippines and Vietnam, management retains much control over the selection of statutory auditors. Shareholders may approve the appointment of auditors in the Philippines depending on company’s bylaws. In Vietnam, where the Board of Directors appoints the auditors, no approval or ratification of the appointment is required. Having shareholders involved in the appointment process strengthens the independence of auditors from management and is bound to improve audit quality.

Termination of Statutory Auditors

In most countries, auditors may resign without any restrictions. However, in Indonesia and Thailand, serious motives are required for auditors to be allowed to resign. These restrictions imposed on statutory auditors diminish the degree of independence towards the companies they audit and impair the quality of the audit. The resignation of auditors should not be contingent on the approval of their clients.

Except for Thailand, no serious motives are required for the dismissal of auditors. This prerogative gives management more incentive for “opinion shopping” in case of disagreements over fundamental issues (e.g., choice of accounting principles or practices, adequacy of financial disclosures, auditing scope or procedures). Further, Brunei, Indonesia, and Vietnam have no notification procedures relating to the termination of auditors. In Brunei, Indonesia, and Thailand, statutory auditors have no defensive rights following their termination, and in Brunei, the Philippines, Thailand, and Vietnam, auditors are not legally entitled to compensation fees for the work performed before their termination.

Restricted or Prohibited Activities

The Code of Ethics for Professional Accountants issued by IFAC (1996) states that accountants in public practice “should be and appear to be free of any interest which might be regarded as being incompatible with integrity, objectivity, and independence.” The following situations would give a reasonable observer grounds for doubting the independence of an auditor: (1) financial involvement with or in the affairs of clients (directly or through a related party), (2) appointments in companies, (3) personal and family relationship, (4) provision of other services to audit clients, and (5) overdependence of a single client with respect to audit fees.

Brunei is the only ASEAN country that does not legally prohibit statutory auditors from having a financial interest in or relationship with their clients. Further, no restrictions on

personal or family relationships, and commercial relationships exist between the auditors and the companies.

With few restrictions, auditors may provide other services to audit clients beyond their attest function. For example, in all countries, statutory auditors provide tax, consulting, and investment advisory services. They may also provide legal services (Brunei, Philippines, and Thailand), corporate recovery services (except in Malaysia), and book-keeping and accounting services (except in Malaysia and Vietnam).

If the proportion of fees from one client or a group of related clients represents the only or a substantial part of the auditor's income, such reliance may impair independence. Only Malaysia and Singapore have a restriction on the overdependence on a single client with respect to total audit fees.

Except for Vietnam, advertising or unsolicited offering of services by auditors is prohibited. Except in Malaysia and Singapore, statutory auditors are allowed to respond to tenders of companies seeking to appoint auditors. The restriction imposed on tenders is a rule aimed at avoiding the practice of "low balling." Auditors have less incentive to resign when they disagree with management for fear of not being able to recover the early losses they incurred in securing the engagement (DeAngelo, 1981a).

Mandated Activities

Some activities are mandated by regulatory and/or professional bodies in order to preserve the independence of statutory auditors. The following areas were examined in the study: (1) communication between predecessor and successor auditors and (2) rotation of audit firms or partners.

Except in Brunei, the Philippines, and Vietnam, an incoming auditor is required to communicate (with permission from the client) with the outgoing auditor before accepting an engagement. In the Philippines and Vietnam, no procedures are established for the communication between auditors. In Brunei, such communication is the practice, though not required by law. Those procedures are used to ascertain that there are no professional reasons why the appointment should not be accepted.

Rotation of audit firms and/or partners is another mechanism used to enhance auditors' independence. None of the ASEAN countries mandates the rotation of audit firms and only Singapore requires the rotation of audit partners for publicly listed companies. Finally, the existence of sanctions by regulatory and/or professional bodies for breach of independence is an effective deterrent. Except for Brunei, all countries have such sanctions (discussed in the next section).

Liability of Statutory Auditors

A strong liability regime will have a positive effect on audit quality since auditors will be responsible for the quality of the professional services rendered. Liability in a broad sense encompasses the consequences of professional sanctions and those of civil and criminal liability. While civil liability is related to the engagement contract between the audit firms and their clients, criminal liability (not covered in this study) is a wider concept that puts the audit engagement contract explicitly in a public context.

Professional Sanctions

In Vietnam, no professional sanctions exist but a de facto permanent exclusion from the profession arises if the Ministry of Finance revokes the license to practice as a statutory auditor. Brunei has only two sanctions: a warning from the Ministry of Finance and a permanent exclusion from the BICPA if the auditor's license is revoked by the Ministry of Finance. In the Philippines, two sanctions are available: temporary suspension and permanent exclusion. Indonesia and Thailand have no sanctions of reprimand or fine; a temporary suspension or a permanent exclusion usually follows a warning. Only Malaysia and Singapore have a full array of sanctions ranging from warning to permanent exclusion.

Civil Liability

In Vietnam, statutory auditors are not liable to the shareholders or other third parties. In Malaysia, statutory auditors may not be liable to other third parties. In all other countries, the liability of statutory auditors extends to the companies, shareholders, and other third parties.

Limitations of Liability

Some countries provide mechanisms that limit the liability of statutory auditors, thereby decreasing the value of the liability regime as a motivator for high quality audits. For example, Vietnam allows a contractual liability cap between contract parties and the Philippines allows a legal liability cap between the contract parties and third parties. Liability caps limit the risk of civil liability faced by the auditors. None of the ASEAN countries requires statutory auditors to maintain professional indemnity insurance. Finally, in Thailand and Vietnam, where auditing firms may be organized as limited liability companies, partners do not bear a personal liability for the audits conducted and/or reported on by them.

CONCLUSIONS, RECOMMENDATIONS, AND CONSIDERATIONS

The first part of this study presented an overview of the laws and regulations of ASEAN regarding statutory auditors. Data on the legal environment were collected using a questionnaire completed by national representatives of four "Big Five" firms participating in the study. The scope of the overview was defined on four dimensions. First, the countries included in the study were the member states of ASEAN as of December 31, 1996. Second, entities subject to statutory audits were limited to private enterprises audited as a requirement of national law. Third, auditors covered by the study were those who have the right to conduct statutory audits. Finally, all relevant laws, regulations, standards and codes as of June 1997 were included in the overview. The questionnaires solicited information concerning five topics: appointment and termination of statutory auditors, independence and incompatible activities, relationships of statutory auditors with the companies, liability of statutory auditors, and contents of audit reports. Accuracy of the

information was reviewed by 15 governmental and professional bodies responsible for regulating the auditing profession in ASEAN.

The second part of the study consisted of an analysis of the differences in the legal environment affecting audit quality in ASEAN. The national laws and regulations which aim at safeguarding audit quality can be classified into three categories: (1) those relating to the contents of the audit (competence, conduct of the audit, audit reporting), (2) those with the objective of enhancing audit independence (appointment and termination of statutory auditors, restricted or prohibited activities, mandated activities), and (3) those regarding the liability of statutory auditors.

Contents of the Audit

Concerning the competence of statutory auditors, some deficiencies were observed. The competence of statutory auditors has a direct relationship to audit quality and ASEAN countries should benefit from adopting more stringent requirements. Because the quality of accounting education dispensed by universities, colleges, technical and vocational schools throughout ASEAN is not uniform, the regulatory bodies of Malaysia and Singapore should consider mandating a proficiency examination in order to qualify as a statutory auditor. However, a demonstration of proficiency in accounting through examination is hardly sufficient to ensure that an individual has the necessary skills and competence to fulfill the obligations of a statutory auditor. Hence, the Philippines should consider requiring a minimum of practical experience in order to qualify as a statutory auditor and Thailand should increase their requirement from the current level of 6 months to a more realistic one. These proposed changes would make the requirements of all ASEAN countries consistent with Guideline 9 on accounting education and experience issued by the International Federation of Accountants (1996b).

Brunei, Thailand, and Vietnam should also enhance audit quality by instituting requirements that would mandate rigorous continuing professional education (e.g., Singapore) and encouraging professional bodies to develop CPE programs. With respect to the delegation of audit work, the professional and/or governmental bodies of most ASEAN countries should consider enacting standards and guidelines similar to the ones contained in ISA 220.

Regarding the conduct of the audit, external quality reviews (by peers or regulatory bodies) is a valuable tool to enhance audit quality. The ASEAN regulatory bodies should consider enhancing audit quality by requiring, at a minimum, periodic peer review for all audit firms, as specified by the Statement of Policy of the IFAC Council (1992) and ISA 220. Optimally, firms conducting statutory audits of publicly traded companies should be subject to a process of regulatory quality review. Further, the use of audit committees as a monitoring device, though not an explicit international standard, should be considered. In a recent study, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) reported that, among 200 randomly selected cases of alleged financial fraud investigated by the US Securities and Exchange Commission, "most audit committees met only about once a year or the company had no audit committee" (COSO, 1999).

The reporting obligations of statutory auditors greatly vary among ASEAN countries. Stronger and uniform reporting requirements should foster a climate of accountability to

investors and public responsibility. This move towards transparency in the conduct of business should therefore enhance the perceived quality of the audited financial information. There is also little accord in the form and contents of the audit reports. The ambiguity created by the lack of proper disclosures takes away from the value provided by the audit and reduces the quality of the information provided. Much would be gained by those nations in requiring audit reports that properly disclose the nature of the work performed, the standards applied, and the responsibilities attributed to financial statements, as outlined in ISA 700.

The regulatory bodies should consider mandating the use of standard reports to remove any ambiguity in the reporting output and enhance the quality of the audited information. Investors increasingly demand accountability by management and transparency in the financial affairs of companies. Audit reporting is a valuable means to achieve those objectives. The use of qualified “subject to” opinion has not been adopted by international standards because of the confusion it creates in relation to the other available audit reports. Hence, audit quality could be improved in many ASEAN countries by bringing the audit reporting requirements up to par with international guidelines (ISA 700).

Independence

Independence of the auditor is a *sine qua non* condition for audit quality. ASEAN countries could strengthen the independence of statutory auditors by mandating that companies provide a serious motive for the termination of their auditors and that the appropriate regulatory body be notified of any change in auditors. Brunei, Indonesia, and Thailand should strengthen the position of statutory auditors by allowing them the right to defend their position so that unjustified termination may be revealed. In addition, compensatory damages should be guaranteed to auditors upon termination in order to increase their independence. Otherwise, some auditors, who disagree with management, may choose to ignore the nature of the disagreement if faced with a potential loss of audit fees for the work already performed.

Auditors’ independence is seriously compromised in Brunei by allowing financial relationships, personal or family relationships, and commercial relationships with their clients. Brunei should consider prohibiting any relationships, between the statutory auditors and their clients, which might impair in fact or in appearance their independence. Those measures outlined in Section 8 of the IFAC Code of Ethics (1996a) would certainly improve the quality of the audit by preserving the objectivity of statutory auditors with regards to their clients.

Providing other services to audit clients is not detrimental to the independence of statutory auditors as long as they do not perform management functions and provided there is no involvement in or responsibility assumed for management decisions. The regulatory and professional bodies of the ASEAN countries should ensure that their rules for multi-disciplinary practices include such restrictions. Further, restrictive rules should be put in place to prevent over-reliance on single clients and to prohibit auditors from responding to tenders.

Finally, the Ministry of Finance in Vietnam should implement regulations to ensure that advertising and solicitation are aimed at informing the public in an objective and truthful

manner. Those regulations could be similar to the ones in Section 14 of the IFAC Code of Ethics and should be part of an effort to establish a code of professional conduct for statutory auditors.

Brunei, the Philippines, and Vietnam should benefit from requiring communication between incoming and outgoing auditors, as outlined in Section 13 of the IFAC Code of Ethics, as such requirement reinforces the independence of statutory auditors. ASEAN regulatory bodies should consider mandating rotations of audit firms and partners to reduce the "low balling" practice that may impair the independence of audit firms. ASEAN countries should consider implementing those requirements to enhance audit quality in the region.

Liability of Statutory Auditors

The liability regime faced by auditors is quite diverse in the region. Extreme measures are unlikely in the context of Asian culture and the lack of alternative professional sanctions may result in violations of professional conduct going unpunished, thus creating audit markets of uneven quality. In Vietnam, the Ministry of Finance should consider imposing sanctions similar to those of professional bodies in other ASEAN nations in order to provide incentive for high quality audits. Brunei, Indonesia, the Philippines, and Thailand should consider a wider range of sanctions to make them more effective.

With regards to civil liability, Malaysia and Vietnam should consider expanding the liability of statutory auditors in order to increase the incentive to provide high quality audit. The Philippines and Vietnam should ensure that the amounts of liability caps are high enough not to eliminate the incentive provided by exposure to civil liability. Further, ASEAN should also consider requiring statutory auditors to maintain professional indemnity insurance in order to offer relief to investors in case of audit failures. Finally, Thailand and Vietnam should consider the adverse impact on audit quality of limiting the liability of statutory auditors by means of organizational structure.

A balance is needed between providing sufficient incentive for auditors to deliver high quality audits and avoiding a decline in the supply of audit services due to the costs of excessive litigation (Palmrose, 1988). Given these considerations, ASEAN countries should consider moving towards a regime with the following features: (1) range of professional sanctions corresponding to the severity of the conditions giving rise to such sanctions, (2) possibility of litigation by the auditee, the shareholders and other third parties, (3) reasonable liability caps, and (4) required professional indemnity insurance.

In conclusion, the legal environment faced by statutory auditors is presently too diverse to ensure a uniform audit quality throughout the region. While major international accounting firms have their own quality control mechanisms that may mitigate any regulatory gaps, the ASEAN professional and governmental bodies should strive to implement high standards of quality applicable to all statutory auditors in the region. As the future economic development of those countries will rely on increased foreign investments and global trading, much can be gained from increased audit quality, through an upgrading of the laws and regulations to match current international audit standards (Schwartz, 1997). The main benefit for the ASEAN countries should be to increase investors' confidence in the fair play of their financial markets.

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NOTES

1. Thereafter the term “legal environment” will encompass the laws, regulations, professional codes and standards affecting statutory audits.
2. This date is the grant date of the research fellowship from the ASEAN-EC Management Center.
3. Statutory auditors who wish to take the professional examination leading to the designation of Certified Public Accountant do have an educational requirement.
4. Thailand requires 1,000 hours of practical experience within 1 year, which is equivalent to 6 months.
5. Twenty-four hours within a period of 5 years, substitutable by professional experience if the auditor has signed at least one set of statutory audited financial statements within 5 years.

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The “Anti-Stapler” and the Transfer of Social Sphere Functions from Federal Enterprises to Local Governments: Lack of Accounting Rules Contributes to Russia’s Financial Woes

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Key Words: Russia; Performance budgeting; International accounting standards; Accounting in Russia; Raions and oblasts; Taxes

Abstract: This article focuses on funding issues facing local government in Russia during the current financial crisis. It concludes that efforts to develop a budget for the Lysogorski raion were hampered by (1) lack of generally accepted accounting principles, (2) the transfer of commercially unproductive assets from old Soviet enterprises to local authorities, (3) no funding for capital improvements, (4) unshared private information, (5) lack of economic resources to fund everyday purchases, (6) a return to the barter system, and (7) a chaotic system of raising and allocating tax revenue.

Since the collapse of communism in the former Soviet Union, the Russian Federation has attempted to privatize enterprises which were previously owned and managed by the state. The Russian Federal government¹ mandated that local governments assume financial and managerial responsibility for certain functions of these enterprises, in order to encourage enterprise privatization and improve enterprise efficiency (Struyk et al., 1996). Thus, while many enterprises have been transferred to private parties, most social sphere activities, such as education and health care, have been transferred to local governmental authorities. For example, take the case of an old-style collective organization, which was owned and managed by the state. The collective might have owned a farm operation, a canning factory, a bakery, a slaughter house, apartment houses for their workers, veterinary clinics, schools, medical facilities, etc. In the restructuring of the economy, the productive assets of the collective—such as factories and bakeries—would be sold to private owners, sometimes to the former workers,

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while the social sphere functions—housing, education, health care, etc.—would become the responsibilities of a local government, which is often ill-equipped to operate and maintain them.

Oblast (state) and raion (city) governments are expected to develop and publish performance budget plans. We observed and participated in the development of the 1998 Performance Budget Plan for the Saratov oblast (state) and the Lysogorski raion (city).² The budget included minimum and optimum funding levels for 45 local government functions, as well as performance objectives with over 100 measurable performance outcome indicators.³ Preparation of the budget highlighted the financial necessity for local governments in Russia to reduce the size and scope of the inherited social infrastructure to an affordable level. However, there is an expectation by Russian citizens that social services will be abundantly present in every small village, just like they were in the days of state-run enterprises, when nobody “kept score” of the cost or effectiveness of those services.

Lysogorski officials prepared all records manually, since computers were not available at the raion level, and rarely seen at the oblast or state level. At the completion of one segment of the budget process, the Chief Financial Officer of the Lysogorski raion was presented with a number of “budgetary luxuries” as a token of gratitude for her cooperation and assistance in the project: a stapler, a staple remover, and a supply of staples. The Chief Financial Officer said she had seen an “anti-stapler” (staple remover) once, but had to have its use demonstrated, since she had never been able to afford a stapler before.

Using the term “anti-stapler” for a staple remover may strike the reader (as it strikes us) as quaint and humorous. Yet, this terminology by a raion official provides a metaphor for what is happening in Russia. “Stapling” can be viewed as the process of neatly arranging and organizing materials, such that there is a reduction in chaos and disarray. In another sense, stapling can signify the bonding of resources in a meaningful fashion to provide a unified whole. In the Western Bloc, when organizations are decoupled from each other, or divest themselves of certain functions, the process is fairly orderly and the consequences are generally manageable. This process can be likened to “staple removing.” However, in Russia, the collapse of communism and the dismantling of the Soviet empire, with its concurrent economic disaster, are drastically more severe than anything witnessed in the Western Bloc since World War II. The process used to transfer social responsibilities to raions with pitiful resources is akin to an economic implosion that has ruptured the fabric of the social infrastructure, and created unmanageable chaos. This process can be viewed as “anti-stapling.”

There are numerous impediments contributing to the plight of the raions. These impediments must be removed or corrected to successfully “staple” the process of providing social infrastructure and services to the raions’ constituents. Despite federal and oblast level mandates to complete transfers of social assets from enterprises to raions by arbitrary dates, the local governments’ financial and management shortcomings have, in fact, frequently caused these transfers to be ineffective. The transfer of assets from the old Soviet enterprises to local governmental units is complicated by several impediments including: (1) lack of generally accepted accounting principles, (2) the unproductive nature of the assets, (3) little or no funding for capital improvements, (4) private information that is not always included in budgetary numbers, (5) lack of

economic resources to fund everyday operations, (6) a return to the barter system, and (7) a chaotic system of raising and allocating tax revenues. Each of these impediments is discussed below.

IMPEDIMENTS TO PERFORMANCE BUDGETING

Lack of Generally Accepted Accounting Principles

The lack of a meaningful set of accounting principles and procedures contributes to Russia's financial woes. Western-style accounting methods had no place in the communist system in the former Soviet Union. One of the main purposes of accounts under communism was to show whether an enterprise was complying with norms and standards, or output targets set by the central government (Bush, 1998). Russian Accounting Regulations (RAR) emphasized the safeguarding of assets in their approach to accounting for fixed assets and inventory. Accounts were maintained to help the central planners stop people from stealing, by keeping tabs on inventory (Higgins, 1998). Extensive physical inventories of all assets were required every year, and any shortages had to be investigated and explained (Schneidman, 1997). With few exceptions, an identical chart of accounts was constructed for all enterprises (Sherry and Vinning, 1995). Accordingly, there was no flexibility in the choice of an accounting system to use in the development of a chart of accounts best suited to a raion's budgeting needs. The inflexibility of the recording and reporting systems was a major impediment in efforts to introduce Performance Budgeting Programs and cash flow forecasting in the Lysogorski raion.

Accounting standards inherited from socialism are inadequate to determine the historical cost of an enterprise, much less net present value (Gray, 1996). The RAR accounting approach provided little or no capability to determine profits and losses for individual enterprise functions, or for the overall enterprise. For instance, the collective bakery used collective-produced grain to make bread for sale, but it also provided bread at no charge to feed its workers, school children, and hospital patients. There was no accounting for the distribution of the bread among the various functions of the enterprise. Since there were no allocation of revenues and expenses to segments, there was no way to determine the total cost of an enterprise function.

The transfer of assets from old Soviet enterprises to local authorities is also hampered by numerous problems in valuing the fixed assets. Depreciation rates used by Russian officials still follow state-set formulas, which inhibit accurate evaluation of fixed assets and discourage replacement of obsolete buildings and equipment. For instance, Western accountants depreciate most buildings over 30 years or less; in Russia, buildings are decreed to last up to 100 years (Higgins, 1998). Therefore, the net book value of most fixed assets may be overstated by Russian accounting rules, to the extent that using 100 years for estimated useful lives is unrealistic.⁴ Fixed assets in Russia could not realistically be valued using "market values," since a "market value" for an enterprise, such as an electric utility, was non-existent at the time of the collapse of communism in the Soviet Union. Attempts to use discounted net-present-value methods to value fixed assets are complicated by the common practice of under-reporting revenue. For example, an electric utility might agree to provide free electricity to a raion in exchange for tax credits.

Consequently, both the utility's and the raion's revenues are understated, as such a transaction would be "extra budgetary," or off the books.

Even when a market value was estimated, the condition of an enterprise emerging from communism was not a reliable indication of its earning potential a few years hence. Most enterprises need major restructuring, usually requiring considerable new capital investment (Bush, 1998). Consequently, the assessed value of assets is often arbitrarily made, even though the assets may have been re-assessed several times (Coyle and Platonov, 1998).

Efforts to modernize Russian accounting have been modest. Generally accepted accounting principles (GAAP) are slowly being developed in Russia for financial reporting by publicly held companies (Coyle and Platonov, 1998), but the principles that have been established are not always applied consistently (Schneidman, 1997) and, even fewer guidelines exist for budgeting at the local government level. Russia does not have the equivalent of the Governmental Accounting Standards Board, which governs certain aspects of governmental accounting in the United States and there is no Governmental Finance Officers Association (GFOA) to encourage the development of professional standards. Thus, for local governments, current Russian governmental accounting standards do not even begin to provide a way to track revenue and expenditures for the vastly expanded functions and responsibilities that municipalities have inherited from the enterprises. For example, since most bakeries are now privately owned, school lunchrooms, which have become a responsibility of the raions, have to buy their bread. But raion officials have no idea how to budget for the cost of bread, or any of the many other costs associated with running a school. They have never had to budget for such items in the past, and there is no information available concerning historical costs of providing these things.

The concept of revenue recognition is also a new concept for raion officials. The notion that a profitable auto manufacturer would be taxed, that some of that tax money would be allocated from the Federal government to the raion, and that the local school function would be tax-supported, is a brand-new concept.

Transfer of Unproductive Assets

The transfer of certain enterprises and functions from federal enterprises to local governments has imposed a substantial financial burden on Russian raions. Under the Soviet system, enterprises provided nearly all the social infrastructure (Struyk et al., 1996). Soviet farms, for example, not only paid their employees, but they provided social services, including education, health care, and even housing. Many towns and cities were built around a single enterprise, which was also responsible for providing local amenities. A major task in the restructuring of Russian enterprises is the transfer of these commercially "unproductive assets" to local authorities (Bush, 1998). In fact, enterprises have been most anxious to transfer those assets that were the most expensive to staff and maintain. An essential financial necessity for local governments in Russia is to minimize the size and scope of the social infrastructure so as to reduce maintenance and staffing costs. But Russian citizens expect that such activities will be available to them in every small raion, as they were in the days of state-run enterprises.

While business enterprises are able to concentrate on core activities, Russian raions are left with the task of managing the services that no one else wants to provide, using obsolete assets in deplorable condition. For example, in a rural raion, even the smallest community would have a daycare facility and an elementary school building. These facilities were built many years ago by a collective and were never maintained. The raion could provide a better school system if it simply closed many of these dilapidated neighborhood schools and allocated its scarce resources into fewer, higher quality, facilities. However, this type of consolidation would require a fundamental change in citizen attitudes, and might necessitate implementation of a school bus system. Paradoxically, it is doubtful whether the local roads, which are in disrepair and often unpaved, could handle school bus traffic. Thus, the fiscal and management capacity of local government is often insufficient to provide social services at the same levels as those provided by the enterprises.

It is imperative for raions to develop realistic estimates of their assets, liabilities, costs of activities to be performed, and funding and resource needs. The first step in the process is to record all unproductive assets at zero value, such that an acceptable estimate can be made of the economic resources available to the raions.⁵ The second step should be the development of a schedule showing varying combinations of service levels and the corresponding resource requirements for each combination. Then it is a matter of political choice, based on economic reality, as to what a raion chooses to provide for its constituents.

Lack of Funding for Capital Improvements

The budgets of local governments in Russia do not provide for capital improvements. One of the objectives of the budget restructuring project assisted by USAID was to develop a 5-year capital improvement program. Work on this task was halted early in the project because it proved to be too abstract for raion and oblast officials to accept. These officials focus on immediate problems—whether to pay the teachers or the doctors next week—not on planning to replace the hospital roof 2 years hence.

Fixed assets transferred from the enterprises to raions or oblasts are virtually always in disrepair and ill-suited to long-term service as governmental facilities. When the farm enterprise built an apartment complex, it relied on its unskilled farm workers to do carpentry, masonry, etc. The result was a poorly constructed building. Since the enterprise had no idea of the cash value of the commodities it traded to other enterprises—for instance, natural gas to heat its apartments—the cost of heating was assumed to be free. Thus, insulation and energy efficiency are unknown in Russia.

In essence, the raions have inherited a herd of white elephants. However, since there is virtually no funding for capital improvements in the raion budget, and only a small, insufficient amount in the oblast budget, the transferred assets are used in lieu of adequate capital funding for more appropriate infrastructures. Capital needs have been unfunded for so long that the local focus is on emergency repairs, and no efforts are expended on long-term capital expansion or even maintenance. In addition, deferred maintenance contributes to the cost of future municipal budget outlays (Struyk et al., 1996).

Private Information

Another impediment to performance budgeting in Russia is the lack of reliable budget data. Reliable information is a scarce commodity in Russia. Coyle and Platonov (1998, p. 227) note that:

During the days of the Soviet Union, the state controlled almost everything of value in the country. One of the few valuable things the state could not control was the information individuals had about certain things. As such, private information was highly valued and not easily given up. This attitude continues today, and without a clear incentive to release information or the regulatory pressure to do so, voluntary information release does not occur.

This attitude of holding on to private information extends to financial personnel who prepare budgets at all levels of government in Russia. The budgeting of capital resources by oblasts is not usually determinable. Funds for capital improvements filter down to the raions in an arbitrary manner, if at all. Secrecy is further manifested in the budget process when budget personnel do not record all sources of funds. There is also a tendency by raion officials to project budgeted amounts based upon expectations of the oblast or federal government, as opposed to budgeting amounts based upon economic reality.

The Soviet legacy also prevents a clear understanding of the amount of money that Russian enterprises previously spent on social services. Soviet accountants buried social costs, such as money spent on staff housing and health care, in murky "special purpose" accounts (Higgins, 1998). Therefore, efforts by local Russian government officials to budget for these costs are impeded by the lack of accurate information regarding costs to provide social services.

Budgeting efforts are also hampered by an overall lack of knowledge about the process, since in the past, the state controlled all financial assets and resources. Under the Soviet system, accountants were not supposed to think for themselves, and accounting tasks were relegated to women who possessed little or no training. Today, many of these same women hold positions of responsibility at the raion or oblast level, and are charged with such tasks as preparing Performance-Based Budgets. What was once a rote exercise, consisting of putting numbers on a mandated report, even if no practical purpose was served, has become a key policy function of allocating scarce resources to an increasing variety of social sphere activities. Thus, these dedicated local government officials are faced with preparing a budget for the first time in their lives with no training or background on how to do so.

The necessity of sharing relevant information to achieve any entity's goals is self-evident. However, changing the behavior of individuals involved in raion management requires a cultural change of immense proportions. The former Soviet system of using "norms and standards" to measure government performance was based on unrealistic quantities of inputs and bore little relationship to meaningful outputs. For instance, the system focused on ascertaining that the number of physicians per 1,000 citizens met the standard, and ignored the possibility that the doctors might be gerontologists when the critical problem was to reduce rampant childhood diseases. Further, it was widely believed that reports of norms and

standards were largely ignored at the higher levels of government, so the people who provided the data for such reports had little regard for their accuracy.

However, the foundation of performance budgeting requires accurate information about the results of public expenditures. After reliable output data is shared, budget allocations need to be based on the data. In short, information must be accurate and widely shared; then it must be related to spending decisions.

Effective information systems can help in the implementation of performance budgeting, once the cultural change is accepted. It is even possible that the use of modern information systems may be a critical factor in initiating the change from private hoarding of information to using information for the public good.

Lack of Economic Resources

Although some Russian oblasts have limited computer hardware and software components, most raions are lucky to have paper and pencils. Scarce resources cause raions to focus on providing only the most basic of necessities. However, often, even basic requirements are not met. For instance, drinking water often is not sanitized, because local governments cannot afford to buy chlorine (Gleason, 1998). Consequently, outbreaks of cholera (as well as other diseases) result in over-burdening a health care system that is already woefully inadequate.

Rampant inflation, coupled with the declining exchange value of the ruble against the US dollar and most other currencies, only compounds the economic problems of the raions and oblasts. The federal government provides some financial assistance to oblasts, which in turn assist raions, in paying for the cost of maintaining divested enterprises. Although the raions rely heavily on federal/oblast budget transfers, approved amounts fall far short of the amounts requested. Furthermore, only a portion of the approved amounts actually get disbursed (Struyk et al., 1996). Thus, local authorities view federal assistance as woefully lacking, since funds received are far less than the costs incurred to run social services. Many US local government officials might say that broken promises and inadequate funding from the higher levels of government is endemic in a federal structure. However, in Russia, the rules change daily; a promise of funding on Monday evaporates by Friday.

Return to the Barter System

The lack of liquidity in Russia's economy makes estimating future cash flows a formidable task for raions and oblasts. Russian companies often do not have cash to pay their workers or even their own taxes. Therefore, in Russia's underdeveloped financial system, barter deals are increasing.⁶ There are reports of Russian workers being paid with the products of their factories, such as coffins and bras, and of customers offering two eggs as payment for a movie ticket.⁷ An accounting firm with offices in Russia reports being offered trucks and oil to settle a client's audit fee (Irvine, 1998). It is estimated that barter now accounts for about half the transactions in industry and at least 40 percent of Russia's national tax payments.⁸ Given that a significant portion of the shrinking federal tax revenue is in the form of commodities (exchanges of goods and services) and credits, it

becomes even more difficult for Moscow to transfer funds to the oblast and raions. Further, since revenues do not reflect bad debts, or disclose the portion of receivables that are likely to be satisfied by barter (Bush, 1998), it is exceedingly difficult for a governmental enterprise to estimate future cash flows.

Chaotic Tax System

Another major contributor to Russian local government's economic woes is the instability of the tax system. Transformation from a central government to a federal system continues to be a delicate balancing act. If the federal system is too heavy-handed, more territories may opt for independence. If the federal system is so weak that there are no benefits to membership, states may also decide to become autonomous. A key factor in the balancing act is the perceived fairness of the tax system. For example, many experts view taxation of natural resources as a fertile revenue source. But, after several of the mineral-rich states in Russia threatened to pull out of the federation, their tax rates were cut in half, or even eliminated. This, in turn, cut the amount available for revenue sharing with agricultural and urban areas.

Local governments have to contend with unstable state tax policies, too. For example, the Saratov oblast made the difficult decision to further reduce revenue transfers to the raions in favor of maintaining an economic development and international trade initiative. Enforcement of Russian tax laws is weak, and many tax obligations go unpaid. And even when taxes *are* levied, local governments may allow factories to settle their tax obligations with cans of paint or other manufactured items. The previously described barter arrangements help industry evade taxes, because barter income is not readily detected; a firm's trading activities and inventory must be thoroughly scrutinized to determine income that may be masked by barter agreements (The Economist, March 15, 1997). However, the confidence that services will continue to be provided, even if bills go unpaid, is one of the few comforts for millions of struggling Russians in an otherwise fairly dreadful life.⁹

SUGGESTED SOLUTIONS

Russia can make progress towards a market economy and an effective performance budgeting system by attracting investment, and by creating a single coherent, stable, and understandable tax system (Bush, 1998). However, Russia's lack of a comprehensive, understandable set of accounting rules adversely affects its ability to attract foreign investors. This position is supported by Douppnik and Salter (1993, p. 41), who note that in general, a "lack of uniform standards creates information barriers for the international investment community."

Improvement in Tax Collection System

In Soviet times, central government revenue was derived from productive assets in the form of a "value added" tax (VAT). As those productive assets were transferred to private ownership, and the non-productive assets were transferred to local governments, the old

revenue source disappeared, while governmental spending responsibilities increased, and attempts to legislate a federal tax collection and distribution system lagged.

The local tax system faces the greatest challenges. Like the US system, raions will rely upon property taxes for the majority of their revenue. However, valuation of real property is a nascent art in Russia, and the property sales market is too artificial and volatile to support stable values. In the absence of their own dedicated, predictable revenue source, local governments will be forced to continue to depend on highly variable federal and oblast support.

Accordingly, improving the tax collection system in Russia is one way to increase the resources available to a raion for meeting its obligations. Tax collection in Russia is currently a problematic process. The tax laws are ignored or flouted by an overwhelming number of businesses and individuals. To remedy this situation, some governmental entities in Russia are trying new ideas for improving the tax collection process and increasing the amount of tax collected (Kudrin, 1997). Some possible solutions include:

- Increases in corporate tax rates
- Increases in maintenance tax rates for housing and social/cultural facilities
- Revaluation of real property
- Better tax reporting and collection operations
- Increased efforts to levy and collect *local* taxes, to reduce the vulnerability to unfavorable resource allocations at the federal and oblast levels.

Adoption of International Accounting Standards

Companies are reluctant to invest in Russian enterprises, partly because of the chaotic methods used to maintain records and accounts. Therefore, Russian companies would be more likely to gain access to capital markets if the financial information provided by the companies is credible and understandable. The International Monetary Fund (IMF) is already demanding that Russia's natural-gas, oil-pipeline, electricity, and railway monopolies all start submitting IAS financial accounts. Accordingly, it is important for Russia to adopt the International Accounting Standards (IAS), since there is little or no expertise in Russia for setting their own accounting standards.¹⁰ Several former Soviet Union countries, including Moldova and Kazakhstan, have adopted IAS as their national accounting standards (Pacter, 1998).

Although President Yeltsin signed a decree in 1997 ordering Russian companies to adopt international accounting standards,¹¹ the Russian government recently issued a resolution to introduce new domestic accounting standards, which are to conform with international accounting standards (Hunt, 1998), thus indicating that IAS were not, in fact, implemented by Yeltsin's decree. Despite the fact that the USAID is providing \$1 million to partially fund a new International Center for Accounting Reform in Russia (Higgins, 1998), mandates, decrees, and resolutions do not get the job done. Russian accountants need to be educated regarding the IAS, and embrace their concepts in order for adoption of the standards to occur.

Adopting IAS, while quick and efficient, may have monumental implementation problems for Russian accountants. These problems include lack of trained accounting

personnel and lack of efficient information processing systems. Not only are effective and efficient accounting systems a prerequisite for economic development and optimal resource allocation, they would also help Russian companies gain access to foreign capital markets. The Russian federal government and raions should seek funds from international aid organizations like the World Bank, the IMF, the International Bank for Reconstruction and Development (IBRD), and the European Bank for Reconstruction and Development (EBRD) to acquire information processing systems, and to train personnel. Raion officials can also be trained by creative partnerships with Western universities, accounting organizations, philanthropic organizations, and business entities. These partnerships can enable accounting practitioners and academics to travel to Russia to improve the expertise of raion accounting and management officials, or for the latter to travel abroad to obtain accounting and information processing systems skills. However, perhaps the greatest drawback to adopting IAS may be an incompatibility, or lack of congruence between goals of the raion and those that IAS aim to accomplish.

CONCLUSION

The transfer of certain enterprise assets and functions to Russian raions has imposed a substantial financial burden (Struyk et al., 1996). Lack of accounting principles and procedures, as well as the absence of requisite knowledge, contributes to poor planning for social services by local government officials. The barter system, which is prevalent in Russia, only exacerbates the host of problems facing Russian raions and oblasts. Taxes either go unpaid, or are paid in goods that are of little or no use to local governments. The persistence of these difficulties results in budget deficits at the local level. In addition, inadequate funding for such items as housing maintenance and public transportation presents obstacles to future economic development, further increasing the instability of the tax base (Kudrin, 1997).

The transformation from communism to perestroika has had a significant, negative impact on the financial capabilities of local governmental units. Consequently, saddled with inadequate funding, local governments in Russia face the difficult task of prioritizing the allocation of scarce resources to social services, which are already woefully inadequate. In sum, the existence of a multitude of financial and management problems in Russia makes the development of a meaningful Performance Budget at the raion level a nearly impossible task.

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NOTES

1. The Russian Federation is divided into approximately 71 sub-units, known as kraals or oblasts, which are similar in function to US states. A raion, which is subordinate to an oblast, is

- generally equivalent to a US city. In rural areas, however, raions provide services akin to both municipal and county functions in the US.
2. The second author worked on a United States Agency for International Development (USAID) project to assist the Lysogorski raion (city), a local government unit in the Saratov oblast (state) of the Russian Federation, in developing a Performance Budget Plan for 1998. The opinions expressed in this article are those of the authors, not those of the USAID, the Saratov oblast, or the Lysogorski raion.
 3. Performance budgeting is a budgeting philosophy, which allocates resources based on expected outcomes, instead of simply funding planned inputs. For example, a school system using performance budgeting might allocate funds to achieve the goal of having 90 percent of their students eligible for college, as opposed to budgeting for the cost of 20 teachers.
 4. Determining whether net book values obtained using estimated useful lives of 30 years is more accurate than using estimated useful lives of 100 years depends on the *actual* useful lives of the related assets. Accordingly, whether 30 years or 100 years or some other number is an accurate estimate of the useful lives of Russian fixed assets is an empirical question beyond the scope of this article.
 5. Theoretically, negative valuations should also be used, to provide an accurate estimate of activities and resource needs.
 6. A barter arrangement is an exchange of goods or services, or a settlement of an obligation, without the use of money as either a means of payment or a unit of account.
 7. "The Cashless Society." *The Economist*, 342, (March 15, 1997): 77–78.
 8. "Russia's Cash Woes Turning Many to Barter System." *The Pantagraph* [Daily Newspaper of Bloomington–Normal, IL], (September 7, 1998): A7.
 9. "A Brave Idea: Russia—Raising Housing Maintenance and Utility Costs to Market Levels." *The Economist*, 342, (May 3, 1997): 45.
 10. However, it should be noted that if Russian companies want to sell their securities in US markets, such companies must either use US GAAP or reconcile their financial statements to US GAAP.
 11. "Russia Adopts Western Bookkeeping to Woo Investors." *Management Accounting—London* 76, (January 1998): 3.

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Book Reviews

Readings in International Accounting, edited by Ki Pyung Kim, Chun Eui Lee, Seung Je Jo, Soo Kwan Lee, Chosun University Press, Korea, 1998, iii + 307 pp.

The purpose of this book of readings, according to its preface, is to help students expand their knowledge of international accounting, in particular, the current trend of international accounting standards. Such knowledge is considered important in view of the pressure exerted on Korea by the International Monetary Fund to adopt international accounting standards, especially after the financial crisis in the latter part of 1997. The book contains 14 papers of which nine are from three accounting journals (*The International Journal of Accounting*, two articles; *Accounting Horizons*, four; and *Issues in Accounting Education*, three, all from the Fall 1996 issue). The other five papers were among those presented at the Seventh International Conference on Accounting Education, held in October 1992.

The book covers a range of topics that can be identified in two broad categories: accounting standards and education. The standards category includes topics dealing with conceptual frameworks, harmonization issues, e.g., those related to the efforts by the International Accounting Standards Committee (IASC) and the European Union (EU), and standard-setting issues, e.g., the justification for standards and the experience of the Financial Accounting Standards Board (FASB), and specific standards (e.g., segmental reporting, intangibles and employee reports).

The education category covers topics that deal with global challenges, internationalizing accounting courses, training accountants in China, and accounting practices and education in Russia and other republics of the Commonwealth of Independent States (CIS).

The book contains several papers that would be most useful in a course of instruction in international accounting. It begins with a thought-provoking paper entitled "Global Challenges for Accounting Education," by Gerhard G. Mueller. The paper identifies several issues that are important in ensuring that accounting education is relevant to the changing environment. The paper on "Accounting for the Global Economy: Is National Regulation Doomed to Disappear," by John Hegarty, the secretary general of the Fédération des Experts Comptables Européens, provides an excellent account of the harmonization efforts undertaken by the EU at different stages, highlighting the challenges and opportunities for the profession. The experiences described in this paper would be useful in addressing similar issues in other contexts.

The paper on "How to Succeed as a Standard Setter by Trying Really Hard," by Dennis R. Beresford, the FASB's chairman, is a very interesting reading that contains

first-hand experience of a key individual who has been closely involved in the process of setting accounting standards in the US for more than a decade. This would be of immense value in understanding the standard-setting process, the problems associated with that process, and the options available in addressing such problems. The paper on "Survival Strategies of a Global Organization: The Case of the International Accounting Standards Committee," by R.S. Olusegun Wallace, contains detailed information about the intentions of the IASC and its membership. Students who have an interest in the IASC's harmonization efforts should find this paper most helpful. One of the questions raised in this paper, i.e., is the development of international standards necessary to achieve harmonization?, certainly makes the reader think critically about the wisdom of the current IASC approach.

The papers that deal with China and Russia (and other CIS countries) are interesting in the sense that they introduce different perspectives and dimensions to international accounting issues. In particular, the paper on China makes the important point that, although many economies are moving toward free markets, all are doing so differently, and those involved in training have to be aware of their individual characteristics so that support can be tailored to make a meaningful contribution.

This book has several weaknesses. First, there seems to be some confusion about the purpose of the book and the selection of papers. While the title is "Readings in International Accounting," the stated purpose seems to be focused on current trends in international accounting standards. If the focus was to be on international accounting standards, the papers on education do not seem particularly relevant. If, on the other hand, the book was intended to be a collection of readings on international accounting, the coverage of the topics is inadequate. For example, the whole area of the classification of accounting systems has been omitted.¹ Second, some of the papers are not suitable as readings for an international accounting course, because the information they contain is outdated or misleading, or both, e.g., the papers on "conceptual frameworks" and "international segment reporting standards." The former, which was published in 1989, does not help students understand the current situation with regard to conceptual frameworks on a comparative basis, particularly in view of the fact that there have been major developments in this area in the 1990s, for example, in the UK and Australia. The latter, which was published in 1992, contains confusing and misleading information (e.g., Table 1 on p. 244). Third, the appropriateness of including conference papers (in this case, five papers from the same conference) in a book of readings is questionable. With the exception of major thought-provoking speeches made by distinguished scholars at conferences (e.g., the paper on global challenges, by Mueller), conference papers by definition are not final expressions of opinion. Partly developed ideas, gaps in logic and even factual errors are not uncommon in conference papers. Fourth, the level of a course of instruction at which this collection is aimed, i.e., postgraduate or undergraduate, is not clear. Finally, the order in which the 14 papers appear in the book follows no evident sequence, without classifying or organizing them in any useful way. This makes it difficult to understand their relevance and the rationale for selecting them.

Overall, the book has a number of excellent papers, but there are also several weaknesses, as identified above. By way of suggestions for improvement, it is important to (a) state clearly the purpose of the book, including whether the relevant course of instruction is at the postgraduate or undergraduate level, (b) select papers to suit the stated

purpose, (c) classify the papers under appropriate headings, and (d) use articles recently published in recognized journals.

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NOTE

1. For a recently published paper on the subject, see Nobes, Christopher W., (1998). Towards a General Model of the Reasons for International Differences in Financial Reporting, *Abacus*, 34 (2): 162–187.

Accounting, Auditing and Taxation in the Russian Federation, by Adolf J.H. Enthoven, Yaroslav V. Sokolov, Svetlana M. Bychkova, Valery V. Kovalev and Maria V. Semenova, *The IMA Foundation for Applied Research and the Center for International Accounting, University of Texas at Dallas, 1998, 300 pp., US\$40.*

Despite the 1998 economic crisis, the interest by foreign investors in Russia as a potential market has not been entirely eliminated. Under those circumstances, transparency and stability of the accounting and tax rules could be viewed as positive developments by potential investors. The complexity and uncertainty relating to the current Russian accounting and tax legislation are not encouraging factors for investors. It is well known that Russia is undergoing a period of intense change, but usually the information on the direction and nature of changes in the legislation is not sufficient.

Step by step, Russian accounting and auditing are approaching internationally accepted practices, principles and procedures. Russian accounting standards are being reviewed within the framework of the International Accounting Standards, and Russian auditing standards are, in fact, adaptations of International Auditing Standards. The reform of taxation is not that direct and simple, but a lot has been already done in this area as well.

This book is designed as an introduction to Russian accounting, auditing and taxation. Its principal section is a summary of main regulatory documents, with brief comments appended by the authors. The book represents a general overview and description of Russian accounting, auditing and tax legislation, rather than focusing on practical guidance in its application. It presents a general understanding of the existing accounting, auditing and tax legislation in the context of Russia's history and current economic environment.

Unfortunately, due to rapid changes in the relevant legislation, the book does not reflect the latest developments in Russian accounting, auditing and taxation systems. Since the book was written, a number of accounting and auditing standards have been introduced, including, but not limited to, the new regulations on Accounting and Reporting, as well as the accounting standards on fixed assets, inventory, contingencies, and events occurring after the balance sheet date. Tax legislation has also been amended, e.g., the enforcement of Part I of the Tax Code.

Despite the above, the authors' general description of accounting, auditing and tax framework is easily adequate for the intended purpose. It is logical and easy to follow. Each chapter has a common format, i.e., an outline of the main points followed by a description of the pertinent regulations. Sometimes, the authors offer their comments on likely future developments in the relevant areas. However, the authors' use of Russian terminology sometimes does not enhance a Western reader's understanding of the comparisons between Russian and international practices and rules.

In some cases, the book presents the point of view of the authors, which could be open to argument. For example, one may not agree with the explanation of the postulates of auditing of Mautz and Sharaf and of the correctness of the postulates of auditing in Russia, as suggested by Prof. Yaroslav Sokolov (pp. 85–86).

It should be pointed out, in particular, that the Russian understanding of the term "accounting" differs from that used in the West. In the Russian language, its primary meaning is the maintenance of the accounting records, and its secondary meaning is financial reporting. In this regard, the book provides the Chart of Accounts, with the description of each account, together with an overview of management accounting in Russia. A Western reader may be interested to see the standard forms of statutory financial statements, which include the balance sheet, income statement, cash flow statement, flow of equity and funds statement, and disclosure in the form of notes. The forms are followed by the translation of detailed instructions for their preparation.

The historical outlook of the development of Russian accounting and auditing (e.g., pp. 113–122, 211–215, etc.) may be particularly useful as part of the introduction to Russian accounting and auditing. On the one hand, it facilitates an understanding of the problems and current situation in those areas, and, on the other, it may call into question some Western stereotypes.

With the Russian economy becoming an inseparable part of the world economy, the book becomes a valuable source of information which may be helpful in understanding the peculiarities of doing business in the Russian Federation. Thus, for both professionals and a general audience, if one seeks an overview of the framework of Russian accounting, auditing and taxation, this is the right book to choose.

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Taxation Reforms in China, edited by Stella Cho, Department of Accountancy, The Hong Kong Polytechnic University, Hong Kong, 1998, ii + 106 pp., first edition, price US\$30 (inclusive of airmail postage).

China's economy has been witnessing a number of significant developments and structural changes since its liberalization. Factors such as the foreign investment brought in by China's open door policy, the establishment of multinational industrial and commercial enterprises, and the change from regulating the economy by capital and resource allocation driven by policy directives to governmental reliance on fiscal policy, made taxation reforms indispensable. These reforms concern the Chinese corporate income tax system.

its indirect tax system, the individual income tax system and others, which are dealt with in this book.

Taxation Reforms in China is addressed as essential reading and valuable reference material to students and professionals who have an interest in learning about China's present taxation system. The articles provide readers who are interested in the evolution of China's tax system with in-depth background information and provide professionals with a quick overview of China's present taxation system.

The book is a reader consisting of 10 articles, dealing with various taxation topics and problems. Most of the articles were published earlier in the professional journal, *The Hong Kong Accountant*.

The first article, written by the editor, Stella Cho, gives a brief overview of the three major phases in the reform of China's taxation system since the founding of the People's Republic of China (PRC) in 1949. Furthermore, it provides a good insight into the evolution of taxation development and the material changes since 1980, as well as into the current taxation system, which was enacted five years ago in the 1994 tax reform. The following nine articles refer to the changes in, and the characteristics of, the major new taxes, the emerging tax implications, including tax exemptions and incentives, as well as the planning opportunities for foreign entities or foreign individuals operating in China. The major taxes with which foreign investors have to cope include the Enterprise Income Tax for Foreign Investment Enterprises and Foreign Enterprises, the Individual Income Tax, the Value Added Tax (VAT), the Business Tax (BT), and the Real Property Gains Tax (RPGT).

The title of the second article is "The 1991 Income Tax Law for Foreign Investment in China—Changes and Implications for Foreign Investors."¹ This chapter deals briefly with the major defects in the two old (i.e., before 1991) Income Tax Laws and explains the necessity for their revision. The major changes in the new Income Tax Law are, among others, the consolidation of the two old laws into one, the adoption of a uniform flat tax rate, and the establishment of additional tax incentives. The implications and impacts of the new Income Tax Law for Foreign Investment Enterprises and Foreign Enterprises—also known as the Unified Enterprise Income Tax Law (1991, UEITL)—on the economic and business environment are dealt with in the following article.² The fourth article in the book³ discusses the background leading to China's individual income tax reform in 1994, the changes arising from the revised law, and its significance and implications for individuals in China.

Articles 5 and 6 discuss the newly established unified and reasonably neutral multi-stage VAT which, in January 1994, became the principal turnover tax in China and which is applicable to domestic and also foreign enterprises. Before 1994, four different kinds of sales turnover taxes were found in China: VAT, Product Tax (PT), BT, and the Consolidated Industrial and Commercial Tax (CICT). The first two taxes applied to domestic enterprises that imported or produced goods, BT applied to domestic enterprises that ran their business in the services industry, and the last-mentioned CICT was applied to foreign enterprises or individuals in industrial production. The fifth article informs readers about the features of the new VAT and provides a comparison with the tax systems in the U.K., Canada and Singapore. The sixth article treats the major changes in VAT since January 1994, including increase in customs duty and the VAT exemptions on certain imported goods, as well as the new regulations concerning the VAT refund on exports.

The eighth article⁴ illustrates the new role of the BT in China, which is the principal tax on the services industry, and payable by all units or individuals who offer taxable services, transfer intangible assets or sell immovable properties. The article gives an overview of the historical development of the tax and of its administration, and it discusses the economic impacts of the Chinese Business Tax. Further, it informs the reader of the various tax rates, depending on the taxable items and the taxation system, because VAT and BT are mutually exclusive taxes, with the consequence that, if a taxpayer's income is subject to VAT, no BT will be charged on the same income.

The new RPGT was introduced in the course of the taxation reforms in 1994 to limit speculative activities in the Chinese real estate market. This new tax is explained in the seventh article⁵ by the editor and Samuel Y. S. Chan, including an overview of the history of real estate ownership in China, the rapid growth of the real estate market, the problems in the Chinese real estate market and resulting reasons for introducing RPGT, the comprehensiveness of the tax, the tax rates and so on. Profits and gains arising from the sale or transfer of land, buildings and structures in China are subject to this new RPGT. The RPGT is in addition to the BT, the Income Tax for Enterprises or Individuals, and certain other taxes, and it is computed by a different set of progressive tax rates.

Since China opened its doors to foreign investors, the inflow of foreign investments and advanced technology have come to play an important role of China's economy. Multi-national companies try to transfer—under international practice—profits from high-tax countries to low-tax regions, and so China was faced with the problem of foreign companies trying to avoid Chinese tax in many circumstances, while trying to take advantage of its tax incentives. So the last but one article of the book deals with China's Tax Administration and its Transfer Price Issues, like the tax audit procedure for transfer pricing, which were necessary to protect China's economy from the harmful effects of the transfer pricing practices of foreign companies.

The last article in the book is a discussion of the future direction of China's Tax Reform, and it presents brief statistics and overviews of China's sales taxes (VAT and BT), its Individual Income Tax and the Tax Administration.

The authors, in short, have produced a well-organized collection of revised articles which give a good and valuable insight into various tax reforms, their consequences, and current tax laws in China. They try to go behind the written rules and abstract the policy reasons that led to each rule change in order to enable the reader to understand China's taxation system. This makes the book suitable for practitioners who seek an overview of China's taxation system. It can also serve as a resource material for courses in international taxation to provide examples of how the national and cultural environment influences national tax laws. However, its suitability as a textbook for students is limited, because it lacks an explanation in detail of the taxation system and of the indispensable basics which are required for a full understanding of the Chinese system, as well as to be able to compare it with other national tax systems.

Reviewed by Birgit Schönauer
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NOTES

1. This article was published in *The Hong Kong Accountant*, September/October 1991, pp. 39–42.
2. The article, “Foreign Entities Operating in China: Income Tax Perspective,” was first published in *The Hong Kong Accountant*, November/December 1994, pp. 82–89. The version in the book is updated and revised from the original.
3. “PRC Individual Income Tax Reform: Changes and Implications from the Perspective of Professional Accountants” was first published in *The Hong Kong Accountant*, May/June 1994, pp. 50–54. The article in the book is updated and revised.
4. This is a revised and updated version of the article, “Business Tax in China,” which was first published in *The Hong Kong Accountant*, September/October 1995, pp. 63–70.
5. The article “The Real Property Gains Tax in China — Issues and Implications for Foreign Investors” was published for the first time in *The Hong Kong Accountant*, March/April 1995, pp. 42–48. In the book, a revised and updated version is included.

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The Future of Financial Reporting in Europe: Its Role in Corporate Governance

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Key Words: Financial reporting; Financial accounting standards; International harmonization of accounting standards; Corporate governance; Accountability

Abstract: At a recent congress of the European Accounting Association, the President of the Belgian Institute of Registered Auditors, Paul Behets, delivered a plenary speech with the title: *Are Financial Statements an Obsolete Product?* Behets' answer was "no," that financial statements are an essential component of the financial reporting system that is necessary for the proper functioning of capital markets. In this article, we reach a similar conclusion, but for somewhat different reasons. A central argument of this article is that an effective system of corporate governance requires an effective financial reporting system, and that an effective financial reporting system requires a well-ordered system of financial accounting. Behet's speech provides evidence that financial reporting, and the role of traditional audited financial statements within financial reporting, are undergoing a period of change. The future of financial reporting is difficult to predict with any degree of certainty, but it is likely to be a future marked by change. One possible path for change has been suggested by Elliott (1994), who has indicated that the currently accepted model of financial reporting might be replaced by electronic information systems providing financial and other forms of information about companies, not necessarily in the form of audited financial statements, which would be widely available via the Internet. Under this scenario, decision-makers could decide on the types information that are important, and then arrange the information in the ways they see fit. Financial reports in their present form (i.e. audited financial statements) might become obsolete as users decided individually on the types of information that are important to them. If this scenario were to come into being, the question arises at to whether there would be a continuing need for financial reports as presently constituted. It is the argument of this article that even if it is technologically feasible for financial reports to be changed from their present form, there would still be a need for financial reports as an important component of corporate governance.

A central argument of this article is that an effective system of corporate governance requires an effective system of financial reporting, and that an effective system of financial

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reporting requires a well-ordered system of financial accounting. In a broad sense, financial reporting consists of those customary and legally required reports that managing directors of limited liability companies provide to shareholders and other interested parties. In the European Union (EU), company laws define the scope and content of financial reports, but generally, financial reports comprise audited financial statements prepared in accordance with accepted accounting standards (i.e. those standards established by law or those which are generally accepted in the country in which a company operates). An effective financial reporting system contemplates the regular issuance of audited financial statements prepared in accordance with accepted accounting standards. The company laws of all the member states of the EU require financial reports to include audited financial statements. We argue that audited financial statements constitute an essential part of the financial reporting system that is required for effective corporate governance. In the remainder of this article, the term financial reporting will refer to the issuance of audited financial statements in accordance with the laws of the country in which the reports are issued.

During the last century, financial reporting has evolved from being a relatively simple practice, primarily of interest to small groups of industrialists and financiers, into a highly complex activity that is of considerable interest to many persons throughout modern industrial societies. Financial reports, and the audited financial statements which they contain, influence the allocation of capital in society, which in turn affects many other aspects of economic life, not just investor decision-making (e.g. labor negotiations, trade policies, anti-trust activities, fiscal policies, etc.) The future of financial reporting is difficult to predict with any degree of certainty, but it is likely to be a future marked by change. Elliott (1994) suggests the likelihood that financial reports in their present form (i.e. audited financial statements) will evolve into electronic information systems containing financial and other forms of information about companies, not necessarily in the form of audited financial statements, which would be widely available via the Internet.¹ Under this scenario, a decision-maker could decide on the types of information that are important to them and then arrange the information in ways they see fit. Advances in information technology may cause changes in financial reporting. The role of audited financial statements within financial reporting may also be changing. Traditional financial reports may become obsolete as users decide individually which types of information are important to them (Behets, 1998). The question arises whether there will be any continuing need for traditional financial reports. We argue that there is a need for financial reports, including audited financial statements, to serve the needs of corporate governance.

The remaining sections of this article discuss this argument in more detail. The first section places the argument in a historical context and suggests that the development of financial reporting is an on-going enterprise,² one that presents difficulties and challenges, including attempts to increase the international harmonization of accounting standards. The second section of the article suggests that there are several models of financial reporting, and that the currently accepted model of financial reporting may not reflect the manner in which investment decisions are actually made, consequently raising the question of whether investor decision-making should be the principal *raison d'être* of financial reporting. This section also presents an alternative view of financial reporting which we believe is more congruent with the way in which investment decisions are actually made. The final section of the article argues that financial reporting should not be

focused entirely on investor decision-making, but ought to serve the needs of corporate governance.³ We conclude that the role of financial reports (i.e. audited financial statements) should be to serve the needs of corporate governance for the benefit of a wide range of stakeholders and for society, in general.

THE HISTORICAL CONTEXT OF FINANCIAL REPORTING

Every country has its own history which influences the development of financial reporting within that country.⁴ There have been a number of research studies, which describe the historical developments in different European countries (Nobes, 1983; Nobes and Parker, 1995; Gray, 1988; Standish, 1990; Weetman and Gray, 1991). There is no need to recapitulate these studies here. In this section, the focus will be on two particular aspects of the development of financial reporting in Europe; first, the attempts to introduce the true and fair view concept into the European company law, and second, the attempts made towards the international harmonization of accounting standards. Our objective in presenting this discussion is to demonstrate the difficulties involved in reaching a consensus on the goals and purposes of financial reporting.

Efforts to Articulate a True and Fair View

The directives of the European Commission require limited liability companies in the EU to issue audited financial statements that “give a true and fair view of the company’s assets, liabilities, financial position and profit or loss” (EC Commission, 1978). This requirement was introduced into European company laws by the Fourth Directive of the European Commission, but the precise meaning of the phrase “true and fair view” remains unclear. The relevance of this issue for financial reporting lies in its implications for the underlying goal and purpose of financial reporting. The British view has traditionally been that the primary purpose of financial reporting is to provide information for investor decision-making, while the continental European view has articulated several purposes for financial reports which may be collectively gathered under the term “corporate governance” (Ordelheide, 1993; Kuhner, 1997). Included under the heading of corporate governance are the functions of determining legally allowable dividend payments, income tax liability, and assessing the stewardship of corporate resources (Ball et al., 1998). The true and fair view is a product of the British tradition with its focus on investor decision-making (Ball et al., 1998). The background of attempts to introduce the true and fair view in European company law is discussed further below.

The British Joint Stock Companies Act of 1844 was one of the first attempts in Europe to define the purpose of financial reports. This act required limited liability companies to produce a “full and fair balance sheet.” In 1845, the Companies Clauses Consolidation Act, also in Great Britain, required the preparation of an “exact balance sheet” which ought to show a “true statement of the assets and liabilities” and a “distinct view of the profit or loss account.” Various other British companies acts during the course of the nineteenth century introduced variations on the terms true and fair, but according to Rutherford (1985), the precise term, “true and fair view,” is attributable to the Institute of Chartered Accountants in England and Wales (ICAEW), which recommended it to a

British government committee in 1944. Specifically, the ICAEW proposed that profit and loss accounts should be required to give a "fair presentation of earnings for the period," and also that the phrase "true and fair view" should be used in the statutory audit opinion (Rutherford, 1985).

The true and fair view was introduced into European company laws by the Fourth Directive of the European Commission in 1978 (EC Commission, 1978; Alexander, 1993). Thereafter, member states of the EU amended their company laws to incorporate the true and fair view as a component of their own laws. However, as Alexander (1993) points out, the interpretation of the true and fair view differs substantially among the member states of the EU. These differences focus on the question of whether the requirement contained in Article 2 (3) of the Fourth Directive (i.e. "the annual accounts shall give a true and fair view of the company's assets, liabilities, financial position and profit or loss") can be achieved through compliance with accepted accounting standards or whether the requirement for a true and fair view is a more pervasive concept which transcends the accounting standards of any particular country (Alexander, 1993; Burlaud, 1993; Ordeltheide, 1993). Furthermore, questions concerning compliance with tax laws and other forms of legislation, which are an important element of financial reporting in continental Europe, are issues that remain unresolved in debates concerning the true and fair view.

Van Hulle (1993) points out that the interpretation of the true and fair view should not be based exclusively on British law because the true and fair view is now part of the laws of the EU. Therefore, the interpretation of the true and fair view must lie with the European Court of Justice (Van Hulle, 1993, p. 99). Van Hulle indicates that even though there are similarities between the interpretations of the true and fair view in the UK and in other countries, the context in which the true and fair view is defined differs among countries. Van Hulle states that "Comparability and equivalence are the main objectives of the harmonization of accounting standards in the EU." He goes on to state that "It is therefore perfectly possible that annual accounts which are regarded as true and fair in one Member State would not be interpreted as such in another Member State" (1993, p. 99).

Although Van Hulle's interpretation of the true and fair view differs from the interpretation of several British commentators (e.g. Stewart, 1988; Alexander, 1993; Lee, 1993), given his position within the European Commission, it may be accepted as authoritative. Thus, the European true and fair view does not necessarily mean that audited financial statements should be true and fair in any substantive sense, but rather, that the financial statements have been prepared in accordance with the accounting standards of the country in which the company is located. Furthermore, Van Hulle argues that the way forward to a clear articulation of the true and fair view can be found in the international harmonization of accounting standards (Van Hulle, 1993, p. 101). This, of course, begs the question of whether the accounting standards of any country, let alone internationally harmonized accounting standards, are capable of giving a true and fair view of the economic condition of a complex, global business enterprise.

Efforts Towards the Harmonization of Accounting Standards

Prior to 1960, there was little effort devoted to the international harmonization of accounting standards (Schweikart et al., 1996). As multinational corporations began to

increase the scope of their activities in the decades after World War II, there began to be calls for international uniformity in accounting standards (e.g. Kraayenhof, 1960). In 1966, the President of the ICAEW, Sir Henry Benson, formed the Accountants International Study Group (AISG), which became a predecessor body to the International Accounting Standards Committee (IASC) (Mueller and Walker, 1976). The IASC was created in 1973 by 16 professional accounting bodies from nine countries, primarily from Europe and North America (Benson, 1976). Since 1976, the IASC has issued 34 statements of accounting standards. Many of these standards are similar to those issued by the US Financial Accounting Standards Board and the UK Accounting Standards Board. Due to the influence of the British and American participants in the IASC, the IASC has generally taken an investor decision-making perspective towards the formulation of accounting standards rather than a corporate governance focus (Pacter, 1998).

The activities of the IASC have been an important step forward towards the international harmonization of accounting standards. At the same time, it appears that the acceptance of IASC standards is far from complete (Schweikart et al., 1996). There continue to be significant differences in the accounting standards of different countries (Zarewski, 1996). McComb (1982) has suggested that the lack of acceptance of uniform standards can be attributed to variations in socio-economic and political attitudes concerning the organization and control of society, institutional pressures from capital markets and financial institutions, and differences in professional and educational standards among the accounting professions in different countries. As an example, in the Dutch environment, stewardship reporting for the benefit of long-term stakeholders occupies a more central position than providing information to short-term investors. Comparability among companies is not an important feature of Dutch companies' legislation (Zeff et al., 1992, p. 365). Furthermore, there appears to be a significant amount of opposition in the UK to the possibility that IASC standards may be imposed on British companies (Financial Times, 1999).

While the above stated factors are likely to be explanatory variables for the lack of progress towards the international harmonization of accounting standards, there might also be another explanation which focuses on differing views concerning the purpose of financial reporting. In order to explain this concept more fully, the following section will discuss several models of financial reporting and the differences between them. These differences illuminate the difficulties of achieving a consensus on the purpose of financial reports.

MODELS OF FINANCIAL REPORTING

Napier (1997) indicates that the historical understanding of the relationship between directors, auditors, and shareholders of a limited liability company under British company law was that all of the parties were members of the same company (see Fig. 1). Pursuant to this understanding, shareholders might be directors at certain times and at other times they might be auditors and then return to being only shareholders. Under this form of corporate governance, financial reports (i.e. perhaps in oral form and limited in scope) were issued by managing directors to other directors and to shareholders, some of whom were elected to serve as auditors. The purpose of these financial reports was to reflect the managing

The Company

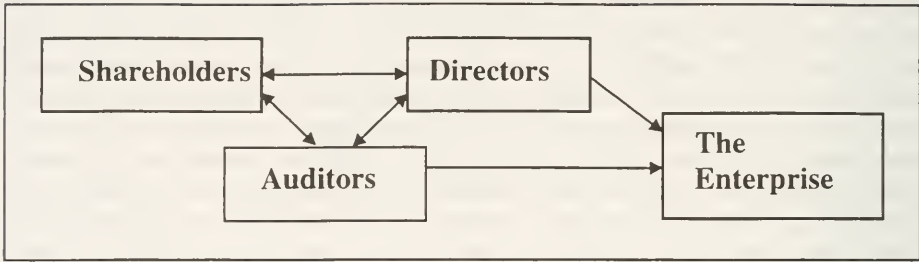


Figure 1. Historical Model of Financial Reporting (Approximately 1400–1850 A.D.). Based on Watts and Zimmerman (1983) and Napier (1997).

directors' stewardship of the company during their tenure in office (Watts and Zimmerman, 1983). Managing directors were deemed to be the agents of the company as a whole. The whole company consisted of directors, shareholders, and part-time auditors. Financial reports within this context were primarily directed towards providing assurances regarding lack of fraud or defalcation (Watts and Zimmerman, 1983; Mills, 1990).

As limited liability companies began to emerge as the principal form of company organization during the nineteenth century, the separation of ownership and management became increasingly distinct. Although company laws in the UK continued to view directors and shareholders as being members of the same company, it became increasingly evident that shareholders were unable to obtain a complete understanding of the economic condition of the companies in which they invested. Hence, company laws in the later part of nineteenth century and the first half of the twentieth century began to require specific forms of financial reports (i.e. at first, balance sheets, and later, income statements) and for independent audits of financial statements by professionally trained auditors who were neither shareholders nor directors (Napier, 1997). Consequently, external auditors began to play an important role in the system of financial reporting and the system of corporate governance.

Company laws in the member states of the EU provide the framework for the currently accepted model of financial reporting (see Fig. 2). Pursuant to this model, financial reports are required by law to be issued periodically to shareholders of limited liability companies. The financial reports consist primarily of audited financial statements prepared in accordance with accepted accounting standards (i.e. either those specified by law or promulgated by private sector accounting standards setting bodies). The financial statements must be audited by statutory auditors (i.e. those who are licensed by the country or state in which the audit takes place). The shareholders are not considered to be part of the company and do not have any means of directly ascertaining the veracity of the financial reports provided by the directors. The auditor's legally defined role is to express an opinion whether the financial statements present a true and fair view of the financial position and results of operations of the company. This model of financial reporting has become the accepted model in most industrialized countries, and it is essentially this model of financial reporting which was adopted by the Fourth European Directive.

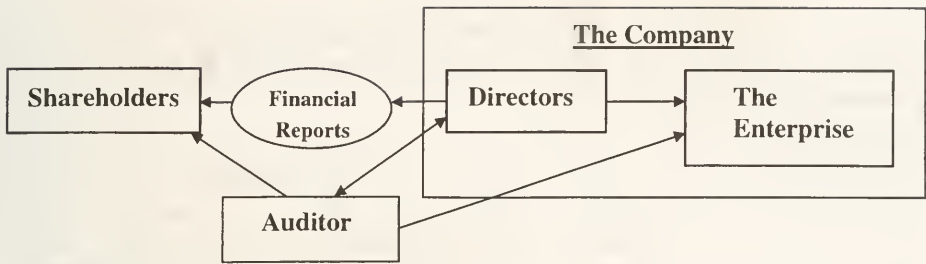


Figure 2. The Accepted Model of Financial Reporting (Approximately 1850 A.D.–Present). Based on Napier (1997) and EC Commission (1978).

There are two difficulties associated with the accepted model of financial reporting. The first difficulty lies with the fact that audited financial statements are incomplete representations of economic reality. This allows an opportunity for directors to misrepresent or hide the true economic condition of their companies. The second difficulty concerns the possibility that auditors may be subject to the influence of the directors of the company (Tinker, 1991; Byrne, 1998). For auditors to obtain a full understanding of the economic condition of the company, they must obtain access to the accounting records and related supporting documents, which are prepared under the supervision of the directors. This can pose a dilemma for auditors in that if they are to obtain appropriate access, they must obtain the trust and assistance of the directors, but in order to obtain such trust and assistance, it may be necessary to sacrifice a certain amount of independence.

To address the difficulties of the accepted financial reporting model, European legislators have enacted standards for the preparation of financial statements, either through accounting codes, as in Germany and France, or indirectly through private sector accounting standards setting bodies, as in the UK. An important goal of this legislation has been to provide investors and other decision-makers with reliable information. Attempts to introduce the true and fair view into the European company law and to increase the international harmonization of accounting standards are consistent with this goal. In addition, the company laws stress the need for auditor independence and objectivity, and the assurance of complete access for auditors to accounting records and related supporting documents (Nobes and Parker, 1995). At the same time, as demonstrated above, it is clear that there continues to be a lack of consensus on the goal and purpose of financial reporting. We believe that this lack of consensus may be due to the possibility that accepted financial reporting model does not fully reflect the actual financial reporting system in use today. The following section discusses this argument in greater detail.

The Actual Financial Reporting Model

Financial reports are issued to shareholders within a time frame ranging from several weeks to 9 months after the end of an accounting period. For purposes of investment decision-making in global capital markets this delay is clearly not acceptable. Therefore, it can be argued that global capital markets do not rely on traditional financial reports (i.e. audited financial statements) to make investment decisions.

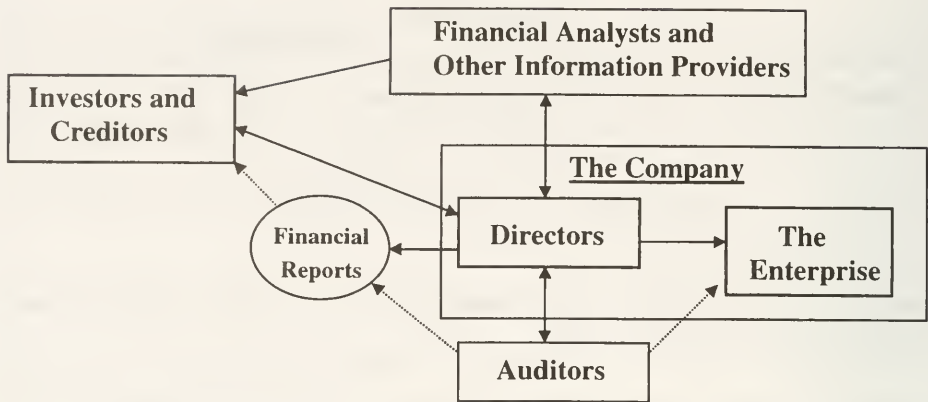


Figure 3. Actual Model of Financial Reporting. Based on Williams (1996) and Frost and Pownall (1996).

Evidence shows that investment decisions are made on the basis of financial analysts' forecasts, unaudited interim earnings' announcements and privately obtained information (Williams, 1996). Large multinational companies, and the sophisticated financial analysts and portfolio managers who follow them, operate largely in an environment where audited financial statements are not directly relevant to their decision-making processes (Frost and Pownall, 1996). This is not to say that the global capital markets would operate in an unchanged manner if there were no traditional financial reports. Rather, it is to say that the accepted model of financial reporting does not reflect the manner in which information actually flows to investors.

Advances in information technology have allowed investment decision-making to become on-line and real time. The AICPA Special Committee on Financial Reporting (the Jenkins Committee) (AICPA, 1994, p. 132) has implicitly recognized that the accepted financial reporting model shown in Fig. 2 does not represent the manner in which information actually flows to investors. We believe that the manner in which financial reporting currently takes place can be better described as shown in Fig. 3.

In the model of financial reporting shown in Fig. 3, the institutional investor is increasingly able to obtain direct access to management (Holland, 1995). This access is facilitated by advances in information technology. Institutional investors are able to exert pressure on managing directors to manage companies in ways that enhance the economic position of key investors. The dotted lines in Fig. 3 indicate that the role of the external auditor in this model of financial reporting may be changing. The focus of the auditor is directed towards information technology and improving management controls which assist management to manage more effectively (Cadbury, 1992; Elliott, 1994; EC Commission, 1997).

The positioning of the auditor more closely to management suggests that the auditor may not be perceived in the same manner as under the accepted model of Fig. 2. Institutional investors appreciate the work of the external auditor, but they also seek other ways of validating information (Byrne, 1998). Hence, the role of the financial analyst and other information providers is becoming increasingly important.⁵ In particular, institu-

tional investors rely extensively on financial analysts for information concerning prospective investments (Griffioen, 1995; Byrne, 1998). Moreover, the media that financial analysts and other information providers use to disseminate information has become on-line and real time, thus providing an instantaneous updating of information. For example, Williams (1996) discusses how unaudited earnings forecasts made by management are used by financial analysts in an iterative process to revise their own earnings forecasts which in turn become the primary source of information for investor decision-making.

If the model of financial reporting shown in Fig. 3 can be accepted as a reasonably accurate representation of the way information flows to investors at present, one may ask, what is the purpose of traditional audited financial statements? It is unlikely that sophisticated investors will abandon the on-line information technologies that are now available to them. Thus, it may not be unreasonable to suggest that traditional audited financial statements will become less important to investor decision-making than previously. Perhaps, they will even become obsolete (Behets, 1998).

Changes in investment decision-making have prompted accounting standards setting bodies to issue complex accounting standards in order to provide information that is perceived to be relevant for investment decision-making (FASB, 1978; ASB, 1995; Schweikart et al., 1996). However, McCartney (1996), among others, has pointed out, that the investment decision-making criterion for establishing accounting standards is not without its critics (see for example, Heath, 1988; Hines, 1991; Tinker, 1991). It remains questionable whether investors do in fact use audited financial statements in making investment decisions.⁶ If the accepted model of financial reporting does not reflect the manner in which investment decisions are actually made, and if the investor decision-making criterion can be criticized as being unrealistic, then the question remains, what is the purpose of traditional audited financial statements. In the following section, we attempt to address this question.

A NEW MODEL OF FINANCIAL REPORTING

In this section, we argue that the role of financial reporting should not be confined to the needs of investor decision-making, but should also be viewed in relation to the more general concerns of corporate governance.⁷ Thus, the role of financial reporting should be to serve the needs of corporate governance for the benefit of a wide range of stakeholders and for society, in general.

In 1993, the Institute of Chartered Accountants of Scotland (ICAS) issued *Auditing into the Twenty-first Century* (McInnes, 1993), which contained a number of recommendations concerning the future of auditing prepared by a well-respected institute of chartered accountants. We have adapted some, but not all, of the recommendations of the ICAS document in developing the arguments of our article. We believe that the arguments of our article are relevant for all the member states of the EU. This does not imply that the Scottish Institute intended their recommendations to apply to all of Europe.

The ICAS document suggested several changes to the currently accepted model of financial reporting. Firstly, the ICAS document suggests that financial reports ought to provide assurances regarding the following matters: (1) that the financial statements are right; (2) that the company will not fail; (3) that there has been no fraud; (4) that the

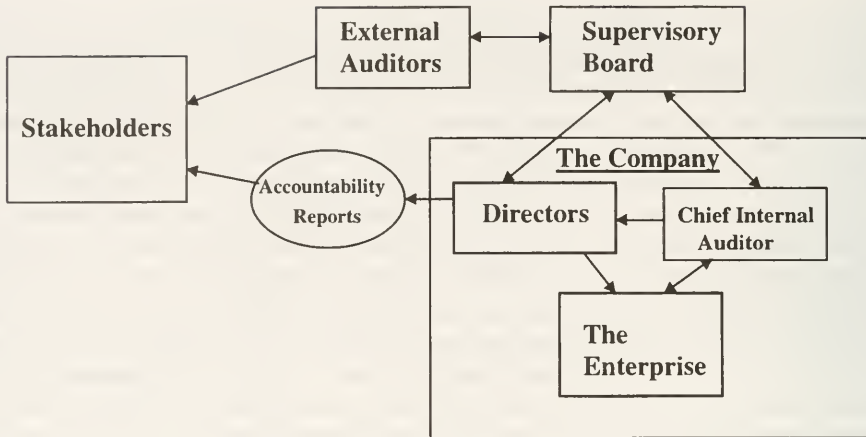


Figure 4. A New Model of Financial Reporting. Based on Schilder (1996).

company has acted within the law; (5) that the company has been competently managed; and (6) that the company has adopted a responsible attitude to environmental and societal matters.⁸ The ICAS document concluded that it is reasonable to expect managing directors to take responsibility for all six of these items, and that, furthermore, managing directors should make specific affirmations that they have fulfilled these responsibilities. It would then be the responsibility of the external auditors to provide assurances that the managing directors have fulfilled their responsibilities in these six areas. It is clear that adopting these recommendations would change financial reporting considerably and move it well beyond its traditional focus on the issuance of audited financial statements for the benefit of shareholders and other interested parties.

The ICAS document also focused on the issue of auditor independence. The document argued that auditors should be (1) independent of the managing directors of the company being audited; (2) responsible for reporting to a third party if they suspect that the managing directors are involved in fraud or other illegal acts; (3) accountable to a wide range of stakeholders; and (4) financially liable if they fail in their duties. The ICAS document argued that the currently accepted financial reporting model is deficient in these areas. With regard to independence, the ICAS noted that auditors may be perceived to be not completely independent because managing directors influence the appointment of the auditors. With regard to accountability to a wider range of stakeholders, the ICAS document noted that the notion of corporate accountability has evolved beyond the traditional concept that a company is accountable only to its shareholders. In fact, there are other stakeholders, including employees, customers, suppliers, governments and the public, in general, who have an interest in financial reports. Financial reports should provide accountability to these stakeholders.

The ICAS document recommends some radical changes to the accepted financial reporting model. We do not necessarily agree with all of the recommendations of the ICAS document. However, Fig. 4 presents a new model of financial reporting, based on the ICAS document, which could provide a basis for achieving a consensus on the goals and purposes of financial reporting in the twenty-first century.

One recommendation of the ICAS document relates to the establishment of a strong internal audit function.⁹ A Chief Internal Auditor would be appointed by, and would report to, a Supervisory Board (as in Germany or The Netherlands) or an Audit Committee of the Board of Directors composed entirely of non-executive directors (as in the UK). Internal auditors, under the direction of the Chief Internal Auditor, would do much of the detailed audit work formerly performed by external auditors. The Chief Internal Auditor's reports would provide evidence regarding the reports issued by the managing directors concerning the fulfillment of their responsibilities.

Under the new financial reporting model, the work of the external auditors would be less procedural and more judgmental than under the accepted model of financial reporting. The external auditors would cooperate with, and assess the work of, the internal auditors, and they would opine independently on the managing directors' statements concerning their responsibilities as directors. It would, of course, be important under this new financial reporting model that the external auditors be independent from the managing directors of the company. This would depend, to a large extent, on the strength of the Supervisory Board or the independent Audit Committee.

Another feature of the new financial reporting model would be an increased emphasis placed on the accountability of managing directors to a wider group of stakeholders. The suggested extension of accountability to a wider group of stakeholders, and with regard to a wider range of matters not directly related to financial performance, may be more controversial than the other recommendations of the ICAS document, which were primarily directed towards enhancing the independence of external auditors. However, in many ways, these suggestions focus directly on the heart of the problem. If decision usefulness is the primary criterion upon which financial reports are to be judged, then there must be a reasonably clear idea of who the decision-makers are. At present, the decision-makers that accounting standards setters have in mind are shareholders and not the larger group of stakeholders contemplated by the ICAS document. If the focus of accounting standards setting bodies were to shift to a wider notion of decision-making and stakeholder groups, it is likely that financial reports, including audited financial statements, would look quite different than they do at present.

If adopted, the recommendations of the ICAS document would mean significant changes to the accepted financial reporting model and the current system of corporate governance. Some of the changes are already embodied in partial form in the company laws of various countries. For example, two-tier boards of directors, comprising a Supervisory Board and a Managing Board, are mandated under the company laws of several countries, including Germany and The Netherlands. However, the primary purpose of the Supervisory Board as contemplated under German or Dutch company laws is not necessarily to enhance the independence of the external auditor or to increase the accountability of managing directors to a wider spectrum of stakeholders. In general, the purpose of Supervisory Boards has been to enhance the relative strength of trade unions vis-a-vis the management of the company. We concur with the EC Commission (1997, 4.17) view that there should be a discussion concerning which mechanisms would be most appropriate to ensure that a consensus reached at the EU level would be likely to be adhered to in practice. Realigning the focus of the Supervisory Board towards the interests of a wide range of stakeholders, combined with the suggested

changes from the ICAS document, may be the way forward towards achieving a consensus on a new financial reporting model.

In comparison with the Cadbury report (1992), the ICAS proposal focuses less than we would like on internal control. We feel that the ICAS proposal insufficiently emphasizes the importance of internal control.¹⁰ The EC Commission (1997) also recognizes this point. In other words, there ought to be assurances on the functioning of internal controls, not only for the purpose of providing reliable information for investor decision-making, but also for assuring effective corporate governance.

SUMMARY AND CONCLUSIONS

Financial reports have evolved from relatively simple documents into complex documents that are of considerable importance to many people throughout society. The future of financial reporting is difficult to predict, but it is likely to be a future marked by change. One possible path for change lies in the possibility that financial reporting will evolve into electronic information systems providing financial and other forms of information concerning companies, not necessarily in the form of audited financial statements, which will be widely available via the Internet. Under this scenario, decision-makers could decide on the types of information that are important to them and then arrange the information in ways that they deem fit. Financial reports, including audited financial statements, might become obsolete as users decided individually which types of information are important to them. If this scenario were to come into existence, the question arises as to whether there would be any continuing need for traditional financial reports as presently seen in Europe and other parts of the world.

It is the argument of this article that even if it is technologically feasible for financial reports to be changed from their present form, there will still be a need for financial reporting as an essential component of effective corporate governance. Above all, to improve financial reporting, the institutional processes by which changes are developed and implemented must be effective, oriented to the public interest, focused on the right objectives, open to new ideas, proactive in obtaining the needed information, and free of needless barriers to progress (AICPA, 1994, p. 120). With regard to the future of financial reporting, we would like to end with the following quote: "The challenge facing us all is to take a new approach to regulation, one which supports the international practice of accountancy rather than impeding it, and one which is responsive to the changing dimension of the public interest in a world where national frontiers become less relevant" (Hegarty, 1997). Financial reporting is important not only for investor decision-making but also to meet the information needs of all stakeholders.

NOTES

1. See, for example, the homepage of Microsoft (www.microsoft.com) where a variety of financial and non-financial information, both audited and unaudited, is available about the company.
2. We have chosen to sketch the ongoing European experience and developments in harmonization of financial reporting standards. We believe that the European experience may foreshadow future developments on a global basis.

3. Ball et al. (1998) distinguish between “shareholder” corporate governance and “stakeholder” corporate governance. “Shareholder” corporate governance is oriented towards public disclosure of information for the benefit of investors in capital markets, while “stakeholder” corporate governance is oriented towards adjudicating the proper payout of reported earnings to employees, managers, shareholders, and governments (Ball et al., 1998, p. 1). Ball et al. find that shareholder corporate governance is practiced primarily in what they refer to as “common-law” countries (Australia, Canada, US, and UK) while stakeholder corporate governance is practiced primarily in “code-law” countries (France, Germany, Japan).
4. Factors affecting differences in financial reporting include differences in economic history, political systems, legal systems, culture, and traditional providers of capital (Zeff et al., 1992, Chap. 7).
5. See Byrne (1998) for an interesting description of the role played by a prominent financial analyst in uncovering fraudulent financial reporting.
6. See AICPA (1994, p. 136).
7. See Note 3 above for a discussion of the distinction between “shareholder” corporate governance and “stakeholder” corporate governance.
8. It is interesting to note that the same items are included in the EC Greenpaper (EC Commission, 1997), except for item 5 “competently managed” which is lacking in the Greenpaper.
9. This idea has been fully adopted by the EC Greenpaper (1997, p. 4.24).
10. Also, compare the US experience with management references to internal control in annual reports. See, for example, Raghunandan and Rama (1994).

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A Further Examination of Income Shifting Through Transfer Pricing Considering Firm Size and/or Distress

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Key Words: Transfer pricing; Income shifting; Global taxes; Firm size

Abstract: This study evaluates the effect of firm size on income shifting between tax jurisdictions through the use of transfer prices both before and after the passage of the Tax Reform Act of 1986 (TRA86). Prior research addressing income shifting through transfer pricing analyzes larger, financially sound firms. This empirical study extends the transfer pricing literature by including smaller and in some cases financially distressed firms in the sample and testing the effect by firm size on income shifting. Our findings suggest that smaller and/or distressed firms are less likely to shift income through transfer pricing than larger firms.

When income is taxed at different rates in different countries, multinational enterprises are typically concerned with the allocation of income to the various countries. Income shifting policies in multinational companies are increasingly recognized as important given the rapidly changing economic and sociopolitical environment. Many multinational enterprises engage in income shifting policies that attempt to maximize profits while minimizing taxes. Various methods are available to multinational firms to shift income from one jurisdiction to another. In most multinational firms, goods and services are routinely transferred among related entities in different tax jurisdictions. The prices at which these goods and services are transferred (transfer pricing) can have a significant impact on global taxes. The most popular methods of shifting income include the location of debt, rent on leases, royalties on licenses, and transfer pricing (Scholes and Wolfson, 1992). A number of research studies address issues surrounding the use of different methods for shifting income between foreign jurisdictions. These studies evaluate such issues as whether changes in international tax rates, country specific regulations (tax/tariff/customs), and the flexibility of the firm to react to changes influence income shifting.

As discussed in the section "Literature Review," recent empirical research (Harris, 1993; Klassen et al., 1993; Cravens and Shearon, 1996; Jacob, 1996) explores the

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consequences of international transfer pricing policies; concentrating on the enterprise wide effects of transfer pricing policies and tax law changes. This research addresses the question of whether firms with subsidiaries facing lower foreign tax rates shift income out of the US while those facing higher foreign tax rates shift income into the US. Harris (1993) finds evidence of income shifting in various degrees, for certain types of firms, into the US after enactment of the Tax Reform Act of 1986 (TRA86). (TRA86 reduced the highest marginal tax rate in the US from 46% to 34%.) This line of inquiry was extended by Jacob (1996) who hypothesized that the 1986 US tax law change would be accompanied by an increase in intrafirm transfers in order to shift income using transfer pricing policies. This study extends the income shifting literature by examining the impact of firm size on income shifting using transfer pricing. We extend the work of Jacob (1996) by including smaller firms in the sample and analyzing the impact of firm size on income shifting through transfer pricing policies.

Our findings show that Jacob's results change when the smaller firms are included, suggesting that smaller and/or distressed firms with missing COMPUSTAT data are less likely to shift income through transfer pricing than larger firms. Analyzing the results by size deciles suggests that firm size has some influence on the use of transfer pricing to shift income. Our results indicate that prior to TRA86, only the largest firms (decile 10) used transfer pricing to shift income in order to reduce global taxes. After TRA86, a broader group of firms with intrafirm transfers (firms in deciles 2, 4, 6, and 8) appear to use transfer pricing policies to shift income to reduce global taxes.

Research investigating the effect of firm size on income shifting is important for several reasons. First, it provides evidence regarding what types (size) of firms are most likely to income shift. Given the concern in the US that the US receives too small a share of income taxes on worldwide income,¹ this information may help direct the US transfer pricing policy enforcement efforts. Second, if the ability (or willingness) of firms to react to changes in tax rates varies by size, then Congress should consider these differences in determining the potential revenue impact of tax law changes. Third, it provides some indirect evidence on the potential trade-offs between tax and non-tax factors in reporting profits. Shifting profits geographically can have implications for internal performance evaluation and incentives of managers in different countries as well as the level of investment in foreign locations.² In addition, to the extent users of financial statements cannot distinguish the tax-planning impact on reported profits by geographic segment from real changes in underlying profitability, significant non-tax costs can arise if geographic data is used to draw inferences about firm value.³

The remainder of the article is organized as follows. The next section reviews previous research investigating transfer pricing and database errors. This is followed by the section on the development of the hypotheses and next to that is the section that contains the research methodology. The section that discusses the research results follows next and the last section summarizes the conclusions.

LITERATURE REVIEW

TRA86, with the lowering of the US corporate tax rate from 46 percent to 34 percent, created tax incentives for US multinational firms to shift income into the US. While tax

regulations (Internal Revenue Code Section 482) are intended to limit discretion in firms' geographic reporting of profits, it appears that discretion remains and that firms, in establishing their transfer pricing, financing, and operating policies, consider both tax and non-tax factors.⁴

The extant research into cross-jurisdictional income shifting, although suggesting income shifting, is inconclusive. Harris (1993) examines whether US multinationals shifted income into the US and deductions out of the US after the lowering of the corporate tax rate under TRA86. His study covers the period 1984–1990, with the analysis of the post-TRA86 period including the years 1987–1990. His results provide little evidence of income shifting for his entire sample. However, he does find evidence of income shifting to the US after TRA86 for firms with “high flexibility.” Harris defines “high flexibility” firms as those with higher levels of interest, research and development, rent, and advertising expenses. He argues that these expenses are less firmly fixed to a particular place or time and, therefore, can be shifted between locations without incurring significant costs.

Klassen et al. (1993) evaluate changes in the reporting of taxable income by US multinationals in response to worldwide relative changes in income tax rates during the period 1984–1990. They evaluate shifts in income between specific geographic regions on a year by year basis. They found that multinational firms shifted income into the US in 1987 in response to TRA86. However, their results reverse in 1988, consistent with multinationals shifting income out of the US in 1988. They attribute the 1988 change either to lower rates in other countries (such as Canada, France, and Japan) or to the large non-tax costs of shifting income into the US. The lack of consensus between Harris (1993) and Klassen et al. (1993) supports the need for additional research in order to understand if, when, and how multinational firms shift income to minimize taxes.

In a discussion of the research by Harris (1993) and Klassen et al. (1993), Shackelford (1993) suggests that their results indicate a possible size effect. Scholes et al. (1992) found income shifting in response to TRA86's phase-in of rate reductions was concentrated among larger companies, suggesting that larger companies use tax planning strategies to a greater extent than smaller companies. Shackelford (1993) suggests that if the size bias results are generalizable, then the advantages of income shifting are more fully realized by larger multinational firms. This study specifically investigates the impact of firm size on income shifting through transfer pricing policies.

Jacob (1996) extends the work of Harris (1993) by attempting to link the level of taxes paid by firms and reported profits in the US and various foreign jurisdictions to the volume of intergeographic area transactions within firms. Jacob assumes that if firms use transfer pricing to minimize taxes, then multinationals with the greatest volume of transfers and the greatest differences in tax rates between the US and foreign jurisdictions have the most opportunities and the greatest incentive to shift income through transfer pricing policies. Given this assumption, Jacob suggests that (1) if firms use transfer prices to shift income, then firms with large volumes of transfers should pay lower global taxes; (2) if firms use transfer prices to shift income to the US, then firms with large volumes of transfers should pay greater US taxes; and (3) if firms with large differences in tax rates between jurisdictions use transfer prices to shift income, then firms with large volumes of transfers and greater differences in tax rates should report greater differences in profitability between the US and foreign jurisdictions in order to minimize taxes. Jacob investigates

these hypotheses for periods before and after TRA86. Jacob found that firms with substantial intrafirm geographic transfers paid lower global taxes in both periods, before and after TRA86. These firms paid lower levels of US taxes in the pre-TRA86 period (when foreign tax rates were lower than US tax rates) and higher levels of US taxes in the post-TRA86 period (when US tax rates were lower than foreign tax rates). The results are consistent with global tax minimization using transfer prices to shift income between jurisdictions in both time periods. He also found that profitability differences between US and foreign operations were consistent with the management of transfer prices to minimize taxes in both time periods.

Motivation

This study began as a replication of Jacob (1996) in order to evaluate the impact of adding certain control variables (Nichols and Conover, 1999). Jacob selected a random sample of firms from the COMPUSTAT database that reported foreign sales in 1988. We obtained the list of firms from Jacob and collected the data for the included firms from either the COMPUSTAT database or from the firm's annual report or Form 10-K. The section "Methodology" discusses the sample selection and data collection process in further detail. After completing the data collection process, our sample included more observations than Jacob's final sample. In a number of instances, our regression results using Jacob's models and our expanded sample were not consistent with the results reported by Jacob (1996). Given this lack of consistency, we attempted to identify the reasons for the discrepancy in results. Further analysis of Jacob's final sample indicated that Jacob had eliminated firms with missing information on COMPUSTAT. Our sample included the firms with missing information because this information was hand collected from the annual report or Form 10-K. After identifying the reason for the expanded sample, we reviewed the literature regarding the COMPUSTAT database in order to identify possible explanations for the difference in regression results.

Database errors and omissions are widely criticized in prior research (Rosenberg and Houglet, 1974; San Miguel, 1977; Banz and Breen, 1986; Kinney and Swanson, 1993; Alford et al., 1994; Kern and Morris, 1994; Kothari et al., 1995). The research on COMPUSTAT shows that the errors and omissions are non-random and that the missing information is often based on the type of information as well as the firm characteristics.

Kinney and Swanson (1993) specifically addressed COMPUSTAT errors and omissions involving the tax fields. Since research investigating transfer prices involves the impact of such policies on global and US taxes, the accuracy and completeness of the COMPUSTAT tax information is important to the study of transfer pricing. Kinney and Swanson (1993) found that the coded tax items that were "straightforward" (such as income statement and balance sheet items) contained few errors, but the "difficult to code" (such as footnote items) or missing items were more problematic. Kinney and Swanson determined that "A further problem in using the current and deferred (tax) fields arises from COMPUSTAT's policy of coding these fields as missing when the current and deferred amounts reported in the financial report do not sum to tax expense on continuing operations. If firms are included in a sample (or subsample) only when an amount is reported in one of these fields, bias may result because the sample would omit many firms that report special items,

and these firms are more likely to be experiencing financial difficulties.” This result indicates a problematic bias in the COMPUSTAT database and suggests that prior research on income shifting using only information contained on the COMPUSTAT database concentrated disproportionately on financially sound firms.

Although we are concerned by the COMPUSTAT errors, the hand collection of specific data from the tax and geographic segment footnotes and the review of the COMPUSTAT data for obvious errors reduces the potential impact of COMPUSTAT errors in this study. Our greater concern, based on the existing research cited above and especially the findings of Alford et al. (1994), is that the COMPUSTAT omissions are non-random for certain types of firms and the omitted information is linked to firm size and financial distress.⁵ Thus the extant studies of income shifting may have been biased by the use of databases (survivorship bias) and may have concentrated on large, financially secure firms.

Our inconsistent regression results using an expanded sample of firms, the COMPUSTAT database research indicating that firms with omitted information are generally smaller and/or financially distressed, and Shackelford's (1993) concern that income shifting may be concentrated in larger firms led us to investigate further the possible impact of size on income shifting after TRA86.

HYPOTHESIS DEVELOPMENT

Following Jacob (1996), we examine whether firms used the prices for intergeographic area transfers to shift income over time periods before and after the enactment of TRA86. We parallel the research of Jacob, but mitigate the survivorship bias that may have been present in previous research by including firms with missing COMPUSTAT data in the sample. If the firms eliminated from Jacob's sample due to missing data are less likely to use transfer pricing to shift income, then we expect the results using the expanded sample to differ from Jacob's results.

If firms use transfer pricing to shift income to minimize total global taxes, then firms with larger volumes of intrafirm intergeographic transfers should pay lower global taxes. Firms with larger amounts of intrafirm intergeographic transfers have a greater opportunity to shift income through transfer prices than firms with smaller amounts of transfers. This premise is the basis for the first hypothesis.

H1: Firms with larger levels of intrafirm intergeographic transfers pay lower global taxes.

Firms using transfer prices to shift income may have higher or lower levels of US taxes depending on the incentives for shifting income into the US. If firms use transfer prices to shift income into the US, then the US taxes paid by these firms should be higher than otherwise similar firms. However, if firms use transfer prices to shift income out of the US, then the US taxes paid by these firms should be lower than otherwise similar firms. With the reduction in the maximum US tax rate from 46 percent to 34 percent after TRA86, we would expect firms to have shifted income into the US after TRA86. Given the high rate of tax in the US prior to TRA86, we would expect firms to have shifted income out of the US prior to TRA86. This leads to the following hypothesis.

- H2:** Firms with larger levels of intrafirm intergeographic transfers paid lower levels of US tax pre-TRA86 and higher levels of US tax post-TRA86.

The greater the difference in tax rates between regions, the greater the potential tax savings from locating income in the lower-tax rate jurisdiction. Given that tax authorities monitor transfer prices, the opportunity for shifting income using transfer prices appears to be greatest for firms with sizable transfers between regions. For these firms, a small change in the transfer price could have a significant impact on profitability in the region and the taxes paid. Tax-motivated manipulation of transfer prices would result in greater differences in reported profitability between regions. Therefore, firms with greater levels of intrafirm transfers and large differences in tax rates between regions would have greater incentives and opportunity for shifting income between regions. This leads to the following hypothesis.

- H3:** Firms with greater differences in tax rates between regions and larger amounts of intrafirm intergeographic transfers report the greatest differences in profitability between regions.

If size has a systematic impact on the ability or willingness of firms to use transfer prices to shift income, then we would expect that the advantages of income shifting are more fully realized by larger multinational firms with larger amounts of intrafirm geographic transfers. In order to determine whether firm size has an impact on Hypotheses 1–3, the hypotheses are expanded as follows.

- H4:** Larger firms with greater levels of intrafirm intergeographic transfers pay lower levels of global taxes than smaller firms.
- H5:** Larger firms with greater levels of intrafirm intergeographic transfers paid lower levels of US tax pre-TRA86 and higher levels of US tax post-TRA86.
- H6:** Larger firms with greater differences in tax rates between regions and larger amounts of intrafirm intergeographic transfers report the greatest differences in profitability between regions.

METHODOLOGY

Sample Selection

Our sample is drawn from the random sample of firms identified by Jacob. Jacob randomly selected a sample of firms from the COMPUSTAT database that reported pre-tax earnings separately for US and foreign operations for the fiscal year 1988.⁶ Jacob's random sample consisted of 206 firms for the 1982–1984 time period and 289 firms for the 1988–1990 time period.⁷ Firms were eliminated from the random sample if they did not report information regarding all three factors used in the study: foreign sales, foreign operating profit or loss and identifiable assets. Although firms are required under

Statement of Financial Accounting Standards (SFAS) 14 to report these three factors, not all firms provided the required disclosures in the annual report or Form 10-K.

The final number of observations included in this study is 490 for the 1982–1984 period and 657 for the 1988–1990 period. Our final sample includes 127 additional observations in the pre-TRA86 period and 136 additional observations in the post-TRA86 time period than the number of observations included in Jacob's study. The majority of additional observations included in our final sample had missing information on COMPUSTAT related to either the current or deferred tax expense numbers. Jacob eliminated firms that had missing data on COMPUSTAT while we obtained the information from company-generated documents (annual reports and SEC 10-K reports). The exclusive use of firms with complete information available on COMPUSTAT generates a survivorship bias problem in that firms with complete data are usually larger (Alford et al., 1994). While Jacob includes a size variable, this does not mitigate the survivorship bias. Using the expanded set of observations in this study prevents a bias in the sample toward large firms and firms with no fiscal distress.

Replication of Jacob with Expanded Sample

Following Jacob's (1996) methodology, this study uses three cross-sectional regression models to analyze whether firms used transfer prices for intergeographic area transfers to shift income in order to minimize taxes after TRA86. We test income shifting prior to TRA86 and subsequent to the enactment of TRA86 using the expanded sample of firms.

Hypothesis 1 addresses the impact of intrafirm transfers on global taxes paid by firms. If firms manipulate the price of intergeographic transfers in order minimize taxes by shifting income, then firms with larger volumes of intrafirm transfers should pay lower global taxes. Using the same model as Jacob (1996), we test income shifting with respect to global taxes using our expanded sample. The model used to test income shifting for global taxes is as follows:

$$\text{GLTAX}_{j,t} = a + \beta_1 \text{GLPROF}_{j,t} + \beta_2 \text{TRANS}_{j,t} + \beta_3 \text{MN}_{j,t} + \beta_4 \text{SIZE}_{j,t} + \sum \gamma_k \text{IND}_{k,j,t} + \sum \delta_l \text{YEAR}_{l,j,t} + \varepsilon_{j,t}. \quad (1)$$

The variables used in the model are defined as follows: $\text{GLTAX}_{j,t}$ is currently payable global taxes scaled by global assets, $\text{GLPROF}_{j,t}$ is global pre-tax profits of the firm scaled by global assets, $\text{TRANS}_{j,t}$ is the dollar amount of intrafirm intergeographic area transfers for the firm scaled by global sales, $\text{MN}_{j,t}$ is a proxy for the degree of multinationality of the firm defined as the ratio of foreign sales to global sales. $\text{SIZE}_{j,t}$ is the natural logarithm of global assets, a size proxy, $\text{IND}_{k,j,t}$ is a vector of industry dummies, $\text{YEAR}_{l,j,t}$ is a vector of year dummies, and $\varepsilon_{j,t}$ is the residual.

The ratio of intrafirm intergeographic area sales to total sales revenue is used as the proxy for the amount of intrafirm international transfers. SFAS 14 requires firms to disclose the amount of intrafirm sales between geographic areas using the price charged within the firm. Global profitability is included because the level of taxes paid is expected to depend on the profitability level of the firm. The multinationality

variable controls for the possibility that global taxes vary based on the extent of foreign operations. The size variable controls for the influence of firm size on taxes paid. The industry dummy variables serve as a control for any industry influences on the level of taxes paid. The year dummy variables serve as a control for changes across the 3-year period.

Hypothesis 2 addresses the impact of intrafirm transfers on US taxes paid by firms. If firms use transfer pricing to shift income into the US, then the US taxes paid by these firms should be higher than otherwise similar firms. Conversely, if firms use transfer pricing to shift income out of the US, then the US taxes paid by these firms should be lower than otherwise similar firms. We use the same model as Jacob to test income shifting for US taxes. The model is as follows:

$$\text{USTAX}_{j,t} = \alpha + \beta_1 \text{GLPROF}_{j,t} + \beta_2 \text{TRANS}_{j,t} + \beta_3 \text{MN}_{j,t} + \beta_4 \text{SIZE}_{j,t} + \sum \gamma_k \text{IND}_{k,j,t} + \sum \delta_l \text{YEAR}_{l,j,t} + \epsilon_{j,t} \quad (2)$$

The independent variables (except for size) remain the same as the global tax model and the dependent variable is as follows: $\text{USTAX}_{j,t}$ is currently payable US taxes scaled by US assets and $\text{SIZE}_{j,t}$ is the natural logarithm of US assets.

Global profitability is used, rather than US profitability, since the US taxes global income of US multinationals. The level of firm multinationality controls for the deferral of US taxes on income earned abroad and not repatriated to the US.

Hypothesis 3 addresses the impact of intrafirm transfers on firms' reported profitability. Firms with larger differences in tax rates between regions can realize larger tax savings by reporting income in the lower-tax jurisdiction. To test Hypothesis 3, we examine the difference in the reported profitability of the expanded set of firms between their operations in the US and abroad using the following model:

$$\text{DIFFPROF}_{j,t} = a + \beta_1 (\text{TUS}_{j,t} - \text{TF}_{j,t}) * \text{TRANS}_{j,t} + \beta_2 (\text{TUS}_{j,t} - \text{TF}_{j,t}) + \beta_3 \text{TRANS}_{j,t} + \beta_4 \text{MN}_{j,t} + \sum \gamma_k \text{IND}_{k,j,t} + \sum \delta_l \text{YEAR}_{l,j,t} + \epsilon_{j,t} \quad (3)$$

where the variables are as previously defined except for: $\text{DIFFPROF}_{j,t}$ is $(\text{TI US}_{j,t} / \text{ASSETS US}_{j,t}) - (\text{TI F}_{j,t} / \text{ASSETS F}_{j,t})$, $\text{TI US}_{j,t}$ is estimated US taxable income,⁸ $\text{ASSETS US}_{j,t}$ is identifiable US assets from the geographic segment footnote, $\text{TI F}_{j,t}$ is estimated foreign taxable income,⁸ $\text{ASSETS F}_{j,t}$ is identifiable foreign assets from the geographic segment footnote. $\text{TUS}_{j,t}$ is the statutory corporate tax rate in the US in the period if US current tax expense is positive, set to missing otherwise, $\text{TF}_{j,t}$ is ratio of current foreign taxes to estimated foreign taxable income if the average foreign tax rate is greater than 0 and less than 1.

The model segregates the firm's operations into two regions, US and foreign. An average foreign tax rate is used to capture the income-shifting incentive of the foreign locations. Using an average foreign tax rate assumes that the foreign operations are either principally in one location or that the various foreign locations have similar tax rates.⁹ The marginal US tax rate, estimated as the top US statutory tax rate (46% in 1982–1984 and 34% in 1988–1990), is used in the years where the US current tax expense is positive. Observations with negative tax expense or zero tax expense are excluded due to the uncertainty regarding the marginal tax rate.

The model uses the difference in profitability between regions as the dependent variable since income shifted out of one region is presumably shifted into the other region. The interaction variable between the differences in tax rates between regions and the level of intrafirm transfers attempts to capture tax-motivated income shifting. The difference in tax rates and intrafirm transfers are included as individual variables to control for any effects that are independent of their interaction. If firms do not shift income, then we expect a zero coefficient on the interaction variable. If firms shift income, but not through transfer prices, then we expect a zero coefficient on the interaction variable and a negative coefficient on the difference in tax rate variable (the lower-taxed area should exhibit higher than expected profitability, but it is unrelated to the volume of transfers). If firms shift income through transfer prices, then we expect a negative coefficient on the interaction variable and a positive coefficient on the difference in tax rate variable.

Tests of Differences Across Size Deciles

In the previous discussion, we suggest that firm size could be a significant factor in determining whether firms use transfer pricing to shift income. Harris (1993), Klassen et al. (1993), and Shackelford (1993) indicate that size is one of the dimensions along which income shifting may differ systematically. To directly test for possible size effects, we add a vector of dummy variables for firm size and a vector of interaction variables with firm size to each of the three regressions in order to capture differences across size deciles. We use the following regression equations to test Hypotheses 4–6:

$$\text{GLTAX}_{j,t} = \alpha + \beta_1 \text{GLPROF}_{j,t} + \beta_2 \text{TRANS}_{j,t} + \beta_3 \text{MN}_{j,t} + \gamma_1 \text{SIZE}_{j,t} + \gamma_2 \text{TSIZE}_{j,t} + \sum \delta_k \text{IND}_{k,j,t} + \sum \lambda_l \text{YEAR}_{l,j,t} + \epsilon_{j,t} \quad (4)$$

$$\text{USTAX}_{j,t} = \alpha + \beta_1 \text{GLPROF}_{j,t} + \beta_2 \text{TRANS}_{j,t} + \beta_3 \text{MN}_{j,t} + \gamma_1 \text{SIZE}_{j,t} + \gamma_2 \text{TSIZE}_{j,t} + \sum \delta_k \text{IND}_{k,j,t} + \sum \lambda_l \text{YEAR}_{l,j,t} + \epsilon_{j,t} \quad (5)$$

$$\text{DIFFPROF}_{j,t} = \alpha + \beta_1 (\text{TUS}_{j,t} - \text{TF}_{j,t}) * \text{TRANS}_{j,t} + \beta_2 (\text{TUS}_{j,t} - \text{TF}_{j,t}) + \beta_3 \text{TRANS}_{j,t} + \beta_4 \text{MN}_{j,t} + \gamma_1 \text{SIZE}_{j,t} + \gamma_2 \text{DSIZE}_{j,t} + \sum \gamma_k \text{IND}_{k,j,t} + \sum \gamma_l \text{YEAR}_{l,j,t} + \epsilon_{j,t} \quad (6)$$

where the variables are as previously defined except for: SIZE, which is the vector of dummy variables corresponding to the largest nine size deciles based on global firm assets, TSIZE, which is the vector of interaction variables equal to TRANS*SIZE for the largest nine size deciles, and DSIZE, which is vector of interaction variables equal to [(TUS–TF)*TRANS]*SIZE for the largest nine size deciles

The addition of the size and interaction variables allows us to evaluate each of the regression models relative to firm size and analyze the impact of intrafirm geographic transfers on global taxes paid by firm size. With the addition of the size and interaction variables, the intercept term represents the impact of size for the smallest firms and the TRANS coefficient represents the impact of intrafirm transfers on global taxes for the smallest firms (decile 1).

Table 1. Descriptive Statistics

	<i>Pre-TRA86 period</i>		<i>Post-TRA86 period</i>	
	<i>Mean</i>	<i>Median</i>	<i>Mean</i>	<i>Median</i>
GLTAX	0.0344	0.0288	0.0291	0.0248
USTAX	0.0305	0.0179	0.0245	0.0163
GLPROF	0.0970	0.1017	0.0840	0.0821
TRANS	0.0681	0.0351	0.0704	0.0239
MN	0.2637	0.2457	0.3124	0.2863
GASSETS	3,250.24	722.09	4,155.32	451.03
FASSETS	747.29	130.04	1,153.21	105.89
FSALES	1,050.88	169.77	1,102.53	124.63
TRANSFER	330.04	10.26	327.30	5.34
GPRETAX	339.16	58.11	260.84	32.45
N	490	490	657	657

Variable definitions: GLTAX = global current taxes scaled by global total assets; USTAX = US current taxes scaled by US assets; GLPROF = global pre-tax income scaled by global total assets; TRANS = intergeographic area sales scaled by global sales revenue; MN = ratio of foreign sales to total sales revenue; GASSETS = global total assets in millions; FASSETS = foreign assets in millions; FSALES = foreign sales in millions; TRANSFER = intergeographic area sales in millions; GPRETAX = global pre-tax income in millions.

RESULTS

Replication of Jacob with Expanded Sample

Our results vary from those found by Jacob although we began with the same random sample of firms and tested the same time periods. The differences can be attributed to the non-random exclusion of firms with certain characteristics from the COMPUSTAT database and, therefore, from Jacob's study. Our study shows that the factors found to be important in income shifting in prior research are still important, but we also identify additional firm characteristics that influence income shifting, specifically firm size. Our results vis-a-vis the research by Jacob show that the expanded sample of firms are less likely (able) to shift income than larger firms via transfer pricing mechanisms.

Table 1 shows descriptive statistics for the pre- and post-TRA86 time periods. A comparison of our descriptive statistics and Jacob's indicates significant differences between the two samples. Jacob's median intrafirm transfers (as a percentage of sales) were pre-TRA86 5.4 percent and post-TRA86 7.3 percent. With the expanded sample, our median intrafirm transfers are pre-TRA86 3.5 percent and post-TRA86 2.4 percent. Thus, a more inclusive sample of firms shows a lower use of intrafirm transfers. The percentage of firm transfers in Jacob's study increased from the pre- to the post-period (from 5.4 to 7.3) while ours decreased (from 3.5 to 2.4). Similarly, the level of multinationality (ratio of foreign sales to total sales) from Jacob's study for pre-TRA86 is 28 percent and post-TRA86 34.3 percent while ours shows pre-of 24.7 percent and post-28.6 percent. Thus, an expanded sample of firms shows a lower percentage of multinationality than Jacob. The reduced percentage of multinationality may impact the regression results if (a) there is a learning curve with regard to foreign operations or (b) the relative size of foreign operations proxies for the age of these operations resulting in firms with larger foreign

Table 2. Regression Results for Global Taxes Paid

$$\text{GLTAX} = \alpha + \beta_1 \text{GLPROF} + \beta_2 \text{TRANS} + \beta_3 \text{MN} + \beta_4 \text{SIZE} + \Sigma \gamma \text{IND} + \Sigma \delta \text{YEAR} + \varepsilon$$

Variable	Pre-TRA86 period		Post-TRA86 period	
	Ours	Jacob's	Ours	Jacob's
Intercept	0.015860 (2.483)*	0.013 (1.16)	0.005493 (1.744)***	-0.0007 (-1.27)
GLPROF	0.255112 (23.334)*	0.328 (24.49)*	0.219626 (30.883)*	0.254 (13.77)*
TRANS	-0.039482 (-2.68)*	-0.058 (-3.16)**	-0.027201 (-4.179)*	-0.037 (-3.55)*
MN	0.018004 (2.086)**	-0.005 (-0.43)	0.015965 (3.913)*	0.03 (3.79)*
SIZE	-0.001384 (-2.073)**	-0.0004 (-0.49)	-0.000097 (-0.28)	0.0007 (1.23)
Adjusted R^2	0.591	0.717	0.641	0.67
N	490	363	657	521

Notes: * Significant at the 0.01 level.

** Significant at the 0.05 level.

*** Significant at the 0.10 level.

Coefficients and t -statistics for industry and year dummy variables are not reported (t -statistics are in parentheses). Variable definitions: GLTAX = global current taxes scaled by global total assets; GLPROF = global pre-tax income scaled by global total assets; TRANS = intergeographic area sales scaled by global sales revenue; MN = ratio of foreign sales to total sales revenue; SIZE = natural logarithm of total assets (in US\$ millions); IND = vector of industry dummies based on two-digit SIC codes; YEAR = vector of year dummies which takes the value 1 when year = t and 0 otherwise.

operations being relatively more profitable and utilizing transfer pricing techniques to reduce global taxes more than firms with smaller foreign operations. The combination of lower intrafirm transfers and a lower level of multinationality implies that the additional firms included in the expanded sample are smaller, less multinational firms, and appear to be less likely to income shift.

Table 2 shows the regression results for global taxes paid. While the shift in R^2 for our pre- and post-TRA86 models is consistent with the pre/post-shift in Jacob's study, our lower R^2 indicates that the model does not explain global taxes as well for the expanded sample as it does for the larger firms included in Jacob's sample. Both the level of multinationality (MN) and the size variable are significant in our pre-TRA86 regression. Both variables were insignificant using Jacob's sample. The change in significance of these two variables indicates that firm size and level of multinationality does impact global taxes paid, given an expanded sample including smaller, less multinational firms.

Table 3 shows the regression results for US taxes paid. As with the global tax model, the size variable is significant in the pre-TRA86 period, given the expanded sample. This result supports the concern regarding a large firm bias when COMPUSTAT data is used. In the post-TRA86 period, the coefficient on intrafirm transfers (TRANS), although positive in both regressions, is not significant in the expanded sample but

Table 3. Regression Results for US Taxes Paid

$$\text{USTAX} = \alpha + \beta_1 \text{GLPROF} + \beta_2 \text{TRANS} + \beta_3 \text{MN} + \beta_4 \text{SIZE} + \Sigma \gamma \text{IND} + \Sigma \delta \text{YEAR} + \epsilon$$

Variable	Pre-TRA86 period		Post-TRA86 period	
	Ours	Jacob's	Ours	Jacob's
Intercept	0.0348 (3.936)*	0.017 (0.65)	0.0169 (4.144)*	0.015 (1.40)
GLPROF	0.3254 (21.16)*	0.345 (10.82)*	0.229 (24.528)*	0.286 (22.88)*
TRANS	-0.0333 (-1.606)**	-0.045 (-1.62)**	0.0006 (0.077)	0.033 (2.61)*
MN	-0.0179 (-1.463)	-0.020 (-1.29)	-0.0161 (-3.036)*	-0.023 (-2.56)*
SIZE	-0.0037 (-4.046)*	-0.00003 (-0.01)	-0.0006 (-1.354)	0.001 (1.28)
Adjusted R^2	0.5391	0.644	0.529	0.577
N	490	377	663	516

Notes: * Significant at the 0.01 level.

** Significant at the 0.10 level.

Coefficients and *t*-statistics for industry and year dummy variables are not reported (*t*-statistics are in parentheses).

Variable definitions: USTAX = US current taxes scaled by US assets; GLPROF = global pre-tax income scaled by global total assets; TRANS = intergeographic area sales scaled by global sales revenue; MN = ratio of foreign sales to total sales revenue; SIZE = natural logarithm of US assets (in US\$ millions); IND = vector of industry dummies based on two-digit SIC codes; YEAR = vector of year dummies which takes the value 1 when year = *t* and 0 otherwise.

was significant with Jacob's sample. A positive coefficient on transfers indicates that firms with greater intrafirm transfers paid more US taxes than firms with lower transfers. A possible explanation for this result is that the marginal cost of reporting income in the US was lower than the marginal cost in foreign countries, increasing the attractiveness of reporting income in the US. The average foreign tax rate for the expanded sample of firms in the post-TRA86 period is 35 percent and the marginal US tax rate is 34 percent. The closeness of the two tax rates for the expanded sample may suggest that the lowering of the tax rate under TRA86 did not increase the incentive to shift income to the US after TRA86. The insignificance of intrafirm transfers in the expanded sample may be explained by the lower level of multinationality in the sample, indicating that the smaller, less multinational, firms do not use intrafirm transfers as a tool for income shifting to the same degree as larger, more multinational firms. The insignificance of intrafirm transfers in the post-period is also consistent with Klassen et al.'s (1993) insignificant results for income shifting into the US during the 1988-1989 and 1989-1990 time periods.

Table 4 shows the regression results of the difference in profitability between regions. Descriptive statistics (not reported) indicate that both the US marginal rate (46% pre and 34% post) and the average foreign rate (39% pre and 35% post) decline between the pre- and post-periods. The statistics show that the average foreign rate is

Table 4. Regression of Difference in Profitability Between Regions

$$\text{Model : } \text{DIFFPROF} = \alpha + \beta_1(\text{TUS} - \text{TF}) * \text{TRANS} + \beta_2(\text{TUS} - \text{TF}) + \beta_3\text{TRANS} + \beta_4\text{MN} + \Sigma\gamma\text{IND} + \Sigma\delta\text{YEAR} + \epsilon$$

Variable	Pre-TRA86 period		Post-TRA86 period	
	Ours	Jacob's	Ours	Jacob's
Intercept	0.122 (2.463)**	0.315 (3.56)*	0.0036 (0.114)	0.043 (0.64)
(TUS-TF)*TRANS	-0.281 (-0.394)	-0.161 (-1.85)***	-1.103 (-4.081)*	-0.336 (-4.61)*
(TUS-TF)	-0.110 (-1.392)	-0.010 (-0.89)	-0.091 (-1.878)***	-0.002 (-0.25)
TRANS	0.434 (2.098)**	0.101 (0.46)	-0.155 (-1.666)***	0.619 (3.90)*
MN	-0.367 (-3.379)*	-0.152 (-1.89)***	-0.055 (-0.938)	-0.111 (-1.56)
Adjusted R^2	0.1800	0.279	0.1331	0.225
N	311	242	490	407

Notes: * Significant at the 0.01 level.

** Significant at the 0.05 level.

*** Significant at the 0.10 level.

Variable definitions: DIFFPROF = difference in profitability (defined as ratio of estimated taxable income to assets) between the US and foreign operations; TUS = statutory corporate tax rate in the US in the period if US current tax expense is positive, set to missing otherwise; TF = ratio of current foreign taxes to estimated foreign taxable income; MN = ratio of foreign sales to total sales of firm; TRANS = ratio of intergeographic area sales to the total sales of firm; IND = vector of industry dummies based on two digit SIC codes; YEAR = vector of year dummies which takes the value 1 when year = t and 0 otherwise.

less than the US rate in the pre-period and greater than the US rate in the post-period, consistent with Jacob. The results reported in Table 4 indicate differences between the use of transfer prices for the expanded sample and Jacob's sample. The interactive variable between the proportion of transfers (TRANS) and the difference in tax rates between the US and foreign operations (TUS-TF) is negative for all four regressions. However, the coefficient is not statistically significant in the pre-TRA86 period for the expanded sample although it was significant for Jacob's sample. A significant negative coefficient is consistent with firms that have larger amounts of intrafirm transfers and larger differences in tax rates between regions using intrafirm transfers to manage the location of reported income. The insignificant coefficient in the pre-TRA86 period for the expanded sample suggests that smaller, less multinational firms do not use intrafirm transfers to manage the location of reported income to the same extent as larger, more multinational firms. The coefficient on the intrafirm transfer variable (TRANS) is positive in both pre-TRA86 regressions. The positive coefficient indicates the shifting of income into the US during the period, independent of tax rates. The coefficient is significant for the expanded sample and insignificant for Jacob's sample. The significant coefficient for the expanded sample suggests that smaller, less multinational firms report a larger portion of their income in the US, regardless of tax rate differentials. Although there are many possible explanations for this result including

Table 5. Regression Results for Global Taxes Paid

$$GLTAX = \alpha + \beta_1 GLPROF + \beta_2 TRANS + \beta_3 MN + \gamma_1 SIZE + \gamma_2 TSIZE + \Sigma \lambda YEAR + \Sigma \delta IND + \epsilon$$

Variable	Pre-TRA86		Post-TRA86	
Intercept	0.013896 (2.481)*	0.012820 (1.981)**	0.004269 (1.426)	0.000747 (0.215)
GLPROF	0.253283 (22.650)*	0.252949 (22.521)*	0.210817 (29.542)*	0.212416 (29.564)*
TRANS	-0.039993 (-2.670)*	-0.026021 (-0.632)	-0.026419 (-3.933)*	0.021608 (0.889)
MN	-0.016512 (1.899)**	0.014301 (1.596)	0.015459 (3.683)*	0.015832 (3.614)*
SIZE 2	-0.008559 (-1.68)***	-0.012518 (-1.811)***	0.001638 (0.590)	0.008302 (2.514)*
SIZE 3	-0.008048 (-1.587)	-0.013930 (-2.082)**	0.001833 (0.660)	0.004560 (1.322)
SIZE 4	-0.007220 (-1.443)	-0.003321 (-0.502)	0.002448 (0.878)	0.005488 (1.643)***
SIZE 5	-0.004264 (-0.837)	-0.002660 (-0.438)	0.003244 (1.149)	0.005235 (1.568)
SIZE 6	-0.006337 (-1.247)	-0.005321 (-0.850)	0.002545 (0.906)	0.007180 (2.181)**
SIZE 7	-0.013401 (-2.630)*	-0.014389 (-2.215)**	0.002509 (0.872)	0.004308 (1.261)
SIZE 8	-0.005937 (-1.124)	-0.007670 (-1.123)	0.001420 (0.498)	0.005059 (1.397)
SIZE 9	-0.010957 (-2.141)**	-0.009602 (-1.491)	0.000860 (0.300)	0.002526 (0.727)
SIZE 10	-0.009169 (-1.720)***	-0.000958 (-0.136)	-0.001026 (-0.340)	0.000068 (0.018)
TSIZE 2		0.039533 (0.699)		-0.112525 (-3.514)*
TSIZE 3		0.118057 (1.613)***		-0.040197 (-1.146)
TSIZE 4		-0.060006 (-0.960)		-0.048934 (-1.799)**
TSIZE 5		-0.03489 (-0.687)		-0.033049 (-1.104)
TSIZE 6		-0.15474 (-0.294)		-0.065475 (-2.448)*

(continued)

political instability abroad and restrictions on repatriation of profits to the US, this result may also be another indication of a "learning curve" for firms operating abroad with regard to the use of transfer pricing to reduce taxes.

In the post-TRA86 period, the coefficient on the intrafirm transfers variable (TRANS) is negative and significant for the expanded sample and positive and significant for Jacob's sample. The negative coefficient for the expanded sample indicates that firms shifted income out of the US, independent of the tax rates. The

Table 5. (Continued)

Variable	Pre-TRA86		Post-TRA86	
TSIZE 7		0.018458 (0.303)		-0.031880 (-1.083)
TSIZE 8		0.014501 (0.245)		-0.057269 (-1.705)***
TSIZE 9		-0.025097 (-0.481)		-0.025069 (-0.695)
TSIZE 10		-0.123596 (-1.856)***		-0.027853 (-0.905)
Adjusted R ²	0.5821	0.5862	0.6257	0.6326

Notes: * Significant at the 0.01 level.
 ** Significant at the 0.05 level.
 *** Significant at the 0.10 level.

Coefficients and *t*-statistics for industry and year dummy variables are not reported (*t*-statistics are in parentheses). Variable definitions: GLTAX = global current taxes scaled by global total assets; GLPROF = global pre-tax income scaled by global total assets; MN = ratio of foreign sales to total sales revenue; TRANS = intergeographic area sales scaled by global sales revenue; SIZE = the nine size variables (size 2, size 3, size 4, size 5, size 6, size 7, size 8, size 9, and size 10) are equal to 1 if the firm falls in the second, third, fourth, fifth, sixth, seventh, eighth, ninth or tenth decile, respectively, 0 otherwise, based on global firm assets. TSIZE = the nine interaction variables (tsize1, tsize2, tsize3, tsize4, tsize5, tsize6, tsize7, tsize8, tsize9, and tsize10) are equal to TRANS*SIZE for deciles 2-10; IND = vector of industry dummies based on two-digit SIC codes; YEAR = vector of year dummies which takes the value 1 when year = *t* and 0 otherwise.

coefficient on the difference in tax rates between regions (TUS-TF) is negative in all the regressions and is significant for the expanded sample in the post-TRA86 time period. The significant coefficient indicates that the difference in tax rates between regions impacts the difference in profitability, independent of the level of firm transfers. This result could suggest that firms are using other methods of shifting income between regions, such as interest and royalty charges, or that the smaller, less multinational firms are not shifting as much income between regions as larger firms, resulting in differing levels of profitability in different regions. Previous research (Hines and Hubbard, 1990) explains that firms expanding abroad typically do not repatriate funds to the US. These firms generally reinvest foreign source earnings. Hines and Hubbard (1990) find that reinvesting earnings is the preferred method of increasing the level of foreign investment. If the additional firms included in the expanded sample are in the early stages of global expansion, they may be building their level of foreign investment through reinvested foreign earnings rather than transferring profits back to the US.

Tests of Differences Across Size Deciles

The differing results between the regressions using an expanded sample of firms compared to Jacob's sample indicates that firm size may affect the use of transfer pricing policies to shift income. In order to test for differences based on firm size, we included a vector of size variables and interaction variables to each regression. The results of these regressions are reported in Tables 5-7.

Table 6. Regression Results for US Taxes Paid

$$\text{USTAX} = \alpha + \beta_1 \text{GLPROF} + \beta_2 \text{TRANS} + \beta_3 \text{MN} + \gamma_1 \text{SIZE} + \gamma_2 \text{TSIZE} + \Sigma \lambda \text{YEAR} + \Sigma \delta \text{IND} + \varepsilon$$

<i>Variable</i>	<i>Pre-TRA86</i>		<i>Post-TRA86</i>	
Intercept	0.019031 (2.411)*	0.016068 (1.748)***	0.017350 (4.471)*	0.012204 (2.714)*
GLPROF	0.323062 (20.494)*	0.323023 (20.247)*	0.219597 (23.743)*	0.225020 (24.209)*
TRANS	-0.038746 (-1.835)***	0.008444 (0.144)	0.003357 (0.390)	0.107382 (3.417)*
MN	-0.012234 (-0.998)	-0.013104 (-1.030)	-0.017831 (-3.320)*	-0.019669 (-3.511)*
SIZE 2	-0.012271 (-1.708)***	-0.013412 (-1.366)	0.000503 (0.140)	0.007800 (1.826)**
SIZE 3	-0.010901 (-1.525)	-0.008472 (-0.891)	-0.007620 (-2.114)**	-0.002487 (-0.557)
SIZE 4	-0.010426 (-1.479)	-0.001044 (-0.111)	-0.003537 (-0.978)	-0.000753 (-0.174)
SIZE 5	-0.002846 (-0.396)	0.002130 (0.247)	-0.002281 (-0.623)	-0.000213 (-0.049)
SIZE 6	-0.003423 (-0.478)	-0.001077 (-0.121)	-0.000871 (-0.239)	0.004029 (0.946)
SIZE 7	-0.13895 (-1.934)*	-0.006725 (-0.729)	-0.004234 (-1.149)	-0.000195 (-0.045)
SIZE 8	-0.012173 (-1.636)***	-0.005805 (-0.598)	-0.003123 (-0.844)	0.006129 (1.308)
SIZE 9	-0.015675 (-2.173)**	-0.011850 (-1.295)	0.002611 (0.701)	0.005713 (1.271)
SIZE 10	-0.023205 (-3.088)*	-0.025273 (-2.532)*	-0.007906 (-2.020)**	-0.005660 (-1.151)
TSIZE 2		-0.000691 (-0.009)		-0.156541 (-3.779)*
TSIZE 3		-0.029460 (-0.283)		-0.119768 (-2.640)*
TSIZE 4		-0.135239 (-1.523)		-0.103813 (-2.950)*
TSIZE 5		-0.075963 (-1.054)		-0.075943 (-1.962)**
TSIZE 6		-0.030141 (-0.402)		-0.110784 (-3.202)*
TSIZE 7		-0.113790 (-1.313)		-0.095971 (-2.523)**

(continued)

Table 5 reports the results of the regression analyzing the impact of intrafirm geographic transfers on global taxes paid. With the addition of the size and interaction variables, the intercept term includes the impact of size for the smallest firms and the intrafirm transfer (TRANS) coefficient represents the impact of intrafirm transfers on global taxes for the smallest firms (decile 1). In the pre-TRA86 period, the addition of the

Table 6. (Continued)

Variable	Pre-TRA86	Post-TRA86
TSIZE 8	-0.081689 (-0.974)	-0.168483 (-3.878)*
TSIZE 9	-0.047543 (-0.642)	-0.080396 (-1.722)***
TSIZE 10	0.038454 (0.407)	-0.078163 (-1.964)**
Adjusted R ²	0.5272	0.5214

Notes: * Significant at the 0.01 level.

** Significant at the 0.05 level.

*** Significant at the 0.10 level.

Coefficients and *t*-statistics for industry and year dummy variables are not reported (*t*-statistics are in parentheses). Variable definitions: USTAX = US current taxes scaled by US assets; GLPROF = global pre-tax income scaled by global total assets; TRANS = intergeographic area sales scaled by global sales revenue; MN = ratio of foreign sales to total sales revenue; SIZE = the nine size variables (size 2, size 3, size 4, size 5, size 6, size 7, size 8, size 9, and size 10) are equal to 1 if the firm falls in the second, third, fourth, fifth, sixth, seventh, eighth, ninth or tenth decile, respectively, 0 otherwise, based on global firm assets. TSIZE = the nine interaction variables (tsize1, tsize2, tsize3, tsize4, tsize5, size6, tsize7, tsize8, tsize9, and tsize10) are equal to TRANS*SIZE for deciles 2–10; IND = vector of industry dummies based on two-digit SIC codes; YEAR = vector of year dummies which takes the value 1 when year = *t* and 0 otherwise.

interaction variables between size and intrafirm transfers (TSIZE 2–10 for deciles 2–10) indicates that the largest firms significantly reduce their global taxes through the use of intrafirm transfers as compared to the smallest firms, given the significant negative coefficient on intrafirm transfer variable for firms in decile 10 (TSIZE 10). An *F* test (*F* value = 2.5965, *p* = .0978) indicates a significant difference between the smallest firms (deciles 1 and 2) and the largest firms (deciles 9 and 10) use of intrafirm transfers to reduce global taxes. In the post-period, the coefficient on intrafirm transfers (TRANS) is positive, indicating that for the smallest firms (decile 1) the use of intrafirm transfers resulted in higher global taxes. The significant negative coefficients for firms in deciles 2, 4, 6, and 8 (TSIZE 2, 4, 6, and 8) indicate that these larger firms used intrafirm transfers to reduce their global taxes. The coefficients on the transfer variable for the remaining deciles (3, 5, 7, 9, and 10) are not significant. Although not significant, the coefficients on the remaining deciles are all negative, indicating the use of intrafirm transfers to reduce global taxes. An *F* test (*F* value = .3739, *p* = .5411) indicates that there is not a significant difference between the smallest firms (deciles 1 and 2) and the largest firms (deciles 9 and 10) use of intrafirm transfers to reduce global taxes. The results for the post-period provide limited evidence regarding the use of transfer pricing to reduce global taxes. Firms in deciles 2–10 appear to use intrafirm transfers to reduce global taxes, as evidenced by the negative coefficient on TSIZE 2–10, although the impact is not significant in all cases. The smallest firms in the sample (decile 1) with intrafirm transfers report higher levels of global taxes, as evidenced by the positive coefficient on TRANS, although the impact is not significant.

Table 6 reports the results of the regression analyzing the impact of intrafirm geographic transfers on US taxes paid. In the pre-period, the interaction of size and intrafirm transfers is not significant for any of the deciles. However, the size variable for decile 10 (TSIZE 10) is significant and negative, indicating that the largest firms paid lower US taxes than smaller firms. An *F* test (*F* value = .0628, *p* = .4379)

Table 7. Regression of Difference in Profitability Between Regions

$$\text{Model : } \text{DIFFPROF} = \alpha + \beta_1(\text{TUS} - \text{TF})^* \text{TRANSF} + \beta_2(\text{TUS} - \text{TF}) + \beta_3 \text{TRANSF} \\ + \beta_4 \text{MN} + \gamma_1 \text{SIZE} + \gamma_2 \text{DSIZE} + \sum \lambda \text{IND} + \sum \delta \text{YEAR} + \varepsilon$$

Variable	Pre-TRA86		Post-TRA86	
Intercept	0.123531 (1.815)***	0.127782 (1.830)***	-0.061338 (-1.504)	-0.058942 (-1.464)
(TUS-TF)	0.037895 (0.052)	0.120697 (0.092)	-1.178752 (-4.250)*	-3.096364 (-4.218)*
TRANS*	-0.146253 (-1.796)***	-0.140817 (-1.674)***	-0.062214 (-1.234)	-0.060290 (-1.166)
TUS-TF	0.455137 (2.178)**	0.603265 (2.533)*	-0.168041 (-1.786)***	-0.134634 (-1.219)
TRANS	-0.371015 (-3.382)*	-0.397250 (-3.566)*	-0.054191 (-0.912)	-0.040320 (-0.682)
MN	0.028975 (0.472)	0.029952 (0.471)	0.079378 (2.117)**	0.063868 (1.701)***
SIZE 2	-0.009255 (-0.151)	-0.012610 (-0.196)	0.072250 (1.920)**	0.070528 (1.884)***
SIZE 3	-0.016555 (-0.272)	-0.015862 (-0.248)	0.069495 (1.774)***	0.070178 (1.790)
SIZE 4	-0.043026 (-0.718)	-0.024858 (-0.393)	0.067249 (1.732)***	0.043717 (1.121)
SIZE 5	0.103311 (1.610)***	0.112378 (1.701)***	0.083990 (2.197)**	0.071782 (1.902)**
SIZE 6	0.025085 (0.403)	0.027266 (0.419)	0.029128 (0.758)	0.014187 (0.366)
SIZE 7	-0.013586 (-0.209)	-0.031996 (-0.459)	0.090909 (2.355)*	0.088829** (2.306)
SIZE 8	-0.016953 (-0.274)	-0.019928 (-0.295)	0.118531 (2.950)*	0.105543 (2.655)*
SIZE 9	-0.058755 (-0.906)	-0.061931 (-0.924)	0.088213 (2.112)**	0.073102 (1.770)***
SIZE 10				
DSIZE 2		-1.939870 (-0.809)		2.965919 (1.731)***
DSIZE 3		0.311088 (0.115)		2.890763 (3.230)*
DSIZE 4		-0.972164 (-0.388)		0.668846 (0.702)
DSIZE 5		-2.441832 (-1.163)		2.388038 (2.704)*

(continued)

indicates that there is no significant difference between the smallest firms (deciles 1 and 2) and the largest firms (deciles 9 and 10) in the use of intrafirm transfers to reduce US taxes in the pre-period. Although the intrafirm transfer variable was significant for the entire sample (Table 3), the analysis of the variable by deciles does not indicate any differences based on firm size. In the post-period, the coefficient on intrafirm transfers (TRANS) is significant and positive, indicating that for the smallest firms (decile 1) the presence of intrafirm transfers resulted in higher US taxes. The coefficients for intrafirm

Table 7. (Continued)

Variable	Pre-TRA86		Post-TRA86	
DSIZE 6		2.803059 (1.135)		1.608460 (1.799)*
DSIZE 7		-1.104371 (-0.223)		1.490985 (1.152)
DSIZE 8		1.27058 (0.566)		-2.959921 (-1.204)
DSIZE 9		-0.146784 (-0.051)		2.660476 (1.909)**
DSIZE 10		-0.252019 (-0.152)		3.920526 (3.334)*
Adjusted R^2	0.1786	0.1686	0.1397	0.1720

Notes: * Significant at the 0.01 level.
 ** Significant at the 0.05 level.
 *** Significant at the 0.10 level.

Coefficients and t -statistics for industry and year dummy variables are not reported (t -statistics are in parentheses). Variable definitions: (TUS-TF)*TRANS = difference in profitability (defined as ratio of estimated taxable income to assets) between the US and foreign operations; TUS = statutory corporate tax rate in the US in the period if US current tax expense is positive, set to missing otherwise; TF = ratio of current foreign taxes to estimated foreign taxable income; MN = ratio of foreign sales to total sales of firm; TRANS = ratio of intergeographic area sales to the total sales of firm; SIZE = the nine size variables (size 2, size 3, size 4, size 5, size 6, size 7, size 8, size 9, and size 10) are equal to 1 if the firm falls in the second, third, fourth, fifth, sixth, seventh, eighth, ninth or tenth decile, respectively, 0 otherwise, based on global firm assets. DSIZE = the nine interaction variables (tsize1, tsize2, tsize3, tsize4, tsize5, tsize6, tsize7, tsize8, tsize9, and tsize10) are equal to [(TUS-TF)*TRANS]*SIZE for deciles 2-10; IND = vector of industry dummies based on two-digit SIC codes; YEAR = vector of year dummies which takes the value 1 when year = t and 0 otherwise.

transfers are negative and significant for the remaining 9 deciles (TSIZE 2-9). Negative coefficients less than the coefficient for decile 1 (TRANS, 0.1073) indicate that firms used intrafirm transfers to increase their US taxes where negative coefficients greater than the coefficient for decile 1 (TRANS, 0.1073) indicate that firms used intrafirm transfers to decrease their US taxes. The coefficients for deciles 2, 3, 6, and 8 (TSIZE 2, 3, 6, and 8) indicate that these firms used intrafirm transfers to reduce US taxes. The coefficients for deciles 4, 5, 7, 9, and 10 (TSIZE 4, 5, 7, 9, and 10) indicate that these firms used intrafirm transfers to transfer income into the US after TRA86, thereby increasing US taxes. The significant coefficients for all deciles suggest that firm size does impact the use of transfer pricing to either increase or decrease US taxes. This result contrasts to the regression for all firms presented in Table 3 where the intrafirm transfer variable (TRANS) is not significant in the overall regression. However, when the impact of intrafirm transfers is analyzed by firm size, the variable is significant for all 10 deciles.

Table 7 reports the results of the regression analyzing the difference in profitability with the inclusion of the size and interaction terms. The interaction term in this regression (DSIZE) represents size times the interactive variable ((TUS-TF)*TRANS). In the pre-period, none of the interaction coefficients (DSIZE) are significant. Given that the interactive term ((TUS-TF)*TRANS) is not significant in the pre-period for the entire sample (Table 4), this result is not surprising. In the post-period, the interaction of size and the interactive variable ((TUS-TF)*TRANS) is significant for 7

of the 10 deciles. The interaction variable coefficients on DSIZE 2–10 represent the difference between the coefficient on $((TUS-TF)*TRANS)$ for decile 1 and each of the other deciles. The significant negative coefficient for $((TUS-TF)*TRANS)$ (-3.096) indicates that decile 1 firms with larger amounts of intrafirm transfers and larger differences in tax rates between regions use intrafirm transfers to manage the location of reported income. Although the significant coefficients for DSIZE 2, 3, 5, 6, and 9 are positive, the net impact (compared to decile 1 firms) is still negative, although to a lesser extent than the coefficient for decile 1. This result is consistent with these firms managing the location of reported income to minimize tax liabilities through intrafirm transfers when the differences in tax rates between regions is large. The interaction variable for deciles 4, 7, and 8 is not significant; indicating that these firms did not use intrafirm transfers to manage the location of reported income based on differences in tax rates. The coefficient for decile 10 (DSIZE 10) is significant and positive. This result indicates that the largest firms managed the location of reported income through intrafirm transfers when the differences in tax rates was large, but the shifting of income resulted in increased tax liabilities, contrary to the expected result. For the nine other deciles, the results indicate that these firms transferred income into the US after TRA86 since the US tax rate is lower than the average foreign tax rate. The results for the largest firms, decile 10, indicate that these firms transferred income out of the US, even though the US tax rate was lower. This result may indicate that the largest firms did not adjust their transfer pricing policies as quickly as smaller firms in response to the reduction in US tax rate. If large firms face greater scrutiny by the IRS regarding transfer pricing policies, then the largest firms may have been more cautious about adjusting their transfer prices immediately following a tax law change than other firms. The addition of size interaction variables by decile provides some evidence that firm size does impact the use of transfer pricing policies to shift income between jurisdictions. In the pre-TRA86 period, the largest firms were the only group of firms using intrafirm transfers to reduce their global taxes. In the post-TRA86 period, a majority of the firms used intrafirm transfers to increase their US taxes, indicating shifting of income into the US after the reduction in US tax rates. In the post-period, most firms appear to have managed the location of reported income to minimize tax liabilities through intrafirm transfers when the differences in tax rates between regions is large. However, for the largest firms (decile 10), the result is contrary to the expectation, indicating that other factors influenced these firms use of transfer prices to shift income.

CONCLUSIONS

This study extends the investigation of income shifting through transfer pricing to include smaller, less multinational firms. We extend the literature by replicating Jacob's (1996) study using an expanded sample of firms and by analyzing the results by size. This helps eliminate the survivorship bias that existed in earlier studies and gives us a better understanding of the size effect and characteristics of firms that income shift. By expanding the sample used by Jacob (1996) to include firms with missing information on COMPUSTAT, we show that firms that income shift using transfer prices tend to be larger, less-financially distressed firms that are included in the databases commonly used for empirical work.

Jacob (1996) found that “firms with substantial international intrafirm transfers pay lower global taxes than otherwise similar firms in both the pre- and post-TRA86 periods, but these same firms appear to have paid lower US taxes than otherwise similar firms in the pre-TRA86 period and higher US taxes in the post-TRA86 period.” This result supports the use of transfer prices to minimize global taxes. Using an expanded sample of firms, we find that the factors identified by Jacob are indeed important. However, the explanatory power of the models is reduced and the size variable becomes a significant factor in explaining the level of global and US taxes in the pre-TRA86 period. In addition, we find that the level of intrafirm transfers is no longer a significant factor in determining US taxes in the post-TRA86 period. This result is consistent with previous research by Klassen et al. (1993).

We find that the profitability difference between US and foreign operations is consistent with income shifting through transfer pricing only in the post-TRA86 period. Jacob (1996) found a significant result in both periods. The inclusion of smaller, less multinational firms in the expanded sample may explain the differences between Jacob’s results and our results. These differences demonstrate the impact of a survivorship bias on studies relying on research databases such as COMPUSTAT. The resulting differences also provide some support to the belief that there is a “learning curve” for firms operating abroad with regard to the use of transfer pricing to reduce taxes.

In order to investigate whether size influences income shifting through transfer pricing policies, we separated the firms into deciles based on assets and added interaction variables between size and intrafirm transfers to the regression equations. The results of adding the size interaction variables indicates that in some instances firm size does appear to influence the use of transfer pricing policies to shift income. This research identifies the potential influence of firm size on transfer pricing policies and hopefully will encourage other researchers to consider firm size in their analysis of transfer pricing issues.

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NOTES

1. See, for example, Martz and Thomas (1991) and Wartzman (1992) for discussions.
2. See, for example, Bushman and Indejikian (1993) and Sloan (1993) for discussion of the use of accounting information in management compensation contracts.
3. Collins et al. (1998) investigate whether investors differentially capitalize shifted income and find that investors recognize firms’ income-shifting patterns when valuing the foreign versus domestic components of reported earnings.
4. Analytical research by Halperin and Srinidhi (1987, 1991) shows that the existence of tax regulations change the resource allocation in both centralized and decentralized MNEs.
5. Alford et al. (1994) investigate whether firms with delayed 10-Ks are experiencing significant economic events. They find that 26 percent of the firms filing delayed 10-Ks are experiencing very unfavorable economic events. The firms that delay are generally small, have negative accounting rates of return, negative earnings changes, low liquidity, and high financial leverage.

6. A sample of firms was used instead of the population of firms on COMPUSTAT because data on the volume of intergeographic transfers were hand collected from annual reports.
7. The random sample size differs between time periods because a number of firms reporting foreign operations in the later time period did not report foreign operations in the earlier time period.
8. Consistent with Jacob (1996), the estimates of US and foreign taxable income are computed as: $TI = \text{PRETAX} - \text{DEF}/T$, where PRETAX is the pre-tax income, DEF is the deferred income tax expense, T is the estimated tax rate set to the statutory rate in the US and the ratio of income tax expense to pre-tax income abroad
9. Given the level of geographic aggregation in the segment footnote (e.g., Europe, Asia-Pacific, Africa, and the Middle East), it is difficult to specifically identify the extent of operations in any single country. Therefore, the average foreign tax rate is used rather than country specific tax rates. The average tax rate is the weighted average of multiple (unobservable) foreign tax rates and includes both provincial and local foreign taxes. Using the average rate is consistent with the fact that the US foreign tax credit limitation is based on aggregate foreign taxes paid rather than on a country-by-country comparison and the credit includes all foreign income taxes.

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The Reintroduction of the True and Fair Override and Harmonization with IASC Standards in Australia: Lessons from the EU and Implications for Financial Reporting and International Trade

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Key Words: True and fair view; Override; Harmonization; Accounting directives; Internationalization

Abstract: Two issues currently facing Australia having implications for financial reporting and trade are first, calls for the reintroduction of the true and fair view (TFV) override and second, the move to harmonize Australian accounting standards with those of the International Accounting Standards Committee (IASC). The purpose of the article is to examine the likely effects of such moves given the increasing globalization of both financial and product markets. The conclusions of the article suggest first, a reintroduction of the TFV override would be consistent with its role in the Fourth Directive as the fundamental principle of financial reporting. Second, harmonization with IASs by default will allow an override, as IAS 1 now provides for one. Third, Australia's harmonization of financial reporting requirements with the wider global community may be impeded because of inconsistencies between IASs, US GAAP, and EU Directives. Hence, the proposed reintroduction of the TFV override together with IASC reporting is unlikely to enhance Australia's link to the wider global community, leading to potential negative consequences in both financial and product markets.

Two issues currently facing Australia having implications for financial reporting and trade are first, calls for the reintroduction of the true and fair view (TFV) override and second, the move to harmonize Australian accounting standards with those of the International Accounting Standards Committee (IASC). Prior to 1991, Australia had allowed the application of a TFV override when necessary. Under the 1983 amendments to the Corporations Act, if it were considered that the preparation of financial statements in accordance with a particular standard would fail to give a TFV, then directors were permitted to depart from the standard, thereby providing them with an

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override (Deegan et al., 1994). A number of companies subsequently took the position that compliance with one or more approved accounting standards would not give a TFV (McGregor, 1992).

McGregor (1992) reported that for the period June 1990 to June 1991, there were 114 separate cases of non-compliance with 16 approved accounting standards by Australian companies. This suggests, as proposed by Deegan et al. (1994), that the TFV override might have been used by company directors as justification for not complying with particular accounting standards. As the meaning of TFV was unclear in both the Corporations Law and the standards, they argued that some directors may have opportunistically invoked the override on the basis that it would have been difficult for regulators to prove that their disclosure practices were not motivated by TFV considerations.

In 1991, however, the true and fair override was removed (Nobes, 1993). The Australian Corporations Act now provides that if financial statements prepared in accordance with applicable approved accounting standards and the prescribed requirements of the law do not otherwise give a TFV, then directors need to make available such information and explanation as will give a TFV (Nobes, 1993; Deegan et al., 1994). Consequently, directors are required to comply with existing accounting standards, even if they believe that they may not be appropriate (Deegan et al., 1994). In eliminating the TFV override, the amendment mandates adherence to accounting standards approved by the Accounting Standards Review Board (ASRB) (Deegan et al., 1994).

Against this backdrop, calls have been made for the reintroduction of the TFV override. Gearin and Khandelwal (1995) reported that the debate about whether a TFV override should be allowed once more over Australian accounting standards has been gathering strength. There is little agreement, however, as to whether this proposition should proceed. Moreover, they argued that since globalization, consistency, and comparability of financial information is crucial to international users, a TFV override could seriously affect the international perception of the quality of Australian financial statements in an environment in which international requirements are allegedly becoming increasingly standards-based. This may have considerable ramifications for the Australian Accounting Standards Board (AASB), as it intends to ensure that Australian standards are consistent with those of the IASC in the near term. An override may provide additional reporting flexibility not envisioned by the IASC in 1996 (IASC, 1996), but now forming part of IAS 1 (IASC, 1997). How the AASB will resolve this dilemma is unclear.

The purpose of the article is to explore the issues surrounding the use of the TFV and to consider implications likely to follow in Australia from the proposed reintroduction of the override together with the employment of IASC consistent standards. First, the article examines the TFV override within the framework primarily of the Fourth Directive in harmonizing financial reporting between EU member states, together with its role in facilitating international harmonization. Second, it explores the proposed linking of Australian accounting standards with those of the IASC from an international perspective.

The structure of the article is as follows. In the next section, the proposal to reintroduce the TFV override into Australia and the EU's experience with the application of the TFV provision are reviewed. The subsequent section draws together issues relating to the proposed linking of Australian standards to those of the IASC. In the final section, a number of conclusions are drawn with respect to the reintroduction of the TFV override and the use of IASC consistent accounting standards in Australia.

THE TFV REINTRODUCTION PROPOSAL AND THE EU EXPERIENCE

The removal of the TFV override by the Australian Corporations Act in 1991 has resulted in additional disclosures in corporate financial reports. For example, two sets of financial statements have been presented by both QBE Insurance and NRMA since 1992, the first set following the requirements of AASB 1023 and the second set “using their own preferred approach,” which the respective directors believed better reflected a TFV (Deegan et al., 1994). Similarly, Washington H. Soul Pattinson has issued two sets of financial statements since 1992, one set referred to as “ASC Standard Consolidated” and the second set referred to as “True and Fair Consolidated.” In the opinion of the directors, the “application of AASB 1024 has not resulted in the financial statements giving a true and fair view” (Annual Report, 1996). Hence, the issue of what constitutes a TFV may have been legislatively resolved, but not from the perspective of the directors of some major corporations.

Support for the reemergence of a TFV override has been building in Australia. Bice (1997) reported that the Australian Institute of Company Directors has called on the Australian Government to reintroduce the directors’ option to override accounting standards, arguing that on occasions, they may not reflect an entity’s economic reality. Although previously adopted by a number of countries including Australia, the TFV, together with an override facility, more recently has been implemented by member states of the EU via the Fourth Directive to contribute to the harmonization of accounting practice between them (Nobes and Parker, 1991; Van Hulle, 1993a; Alexander, 1996). The TFV concept, together with the accounting rules embodied in the Directives, have been incorporated into the law of each EU member state (Higson and Blake, 1993; Van Hulle, 1993b). Implications arise from the EU’s experience with the TFV as to the possible financial reporting outcomes if the TFV is reintroduced into Australia.

The EU Experience

One major feature of the requirements of the Fourth Directive is that the TFV prevails over specific accounting provisions where circumstances justify it (Burlaud, 1993; Thorell and Whittington, 1994; Van Hulle, 1997). If a particular requirement of the Directive is not sufficient to give a TFV, additional information must be given and in exceptional cases where that information would not be enough to give a TFV, the specific provision in the Directive must be departed from (Burlaud, 1993; Van Hulle, 1993a). Under such circumstances, the departure must be disclosed in the notes, together with an explanation of the reasons for it and an assessment of its effect on the company’s assets, liabilities, financial position and profit, or loss (Van Hulle, 1993a; Alexander, 1996).

Using the TFV as an override means that it is intended to be the governing criterion by which financial statements are to be judged (Zeff, 1993). In being the statutory objective of financial reporting, the TFV principle has achieved significant symbolic status within the EU (Houghton, 1987; Walton, 1993). Forker and Greenwood (1995) argued that the TFV provides scope to depart from the mechanical application of accounting rules. In the context of EU harmonization particularly, and with the increased formal regulation of accounting, the TFV has an essential role to play as a defense against the unsuitability of

general rules in specific circumstances (Forker and Greenwood, 1995). In such instances, comparability is attained by disclosing the quantified effect of the departure from the rule (Forker and Greenwood, 1995). Consequently, the TFV override is frequently argued to provide scope for the exercise of professional judgment in specific cases, particularly with the need to depart from accounting rules (Hopwood, 1994; Forker and Greenwood, 1995). Given the diversity of legal and institutional frameworks that exist across countries within the EU, reflecting a TFV while preserving comparability is seen as crucial to the success of the EU harmonization program (Van Hulle, 1993a; Thorell and Whittington, 1994; Forker and Greenwood, 1995). Moreover, Van Hulle (1993a) argued that the TFV adds flexibility to financial reporting because of the socio-economic and cultural differences between EU member states.

Forker and Greenwood (1995) warned, however, that broad-based flexibility facilitates discretionary compliance, thereby undermining the comparability of accounts and restricting the scope of accounting regulators to outlaw unsatisfactory practice. The EU has taken the position that it is not necessary to develop uniform rules, and as such, options are acceptable as long as they can be considered equivalent and are supplemented by appropriate disclosures in the notes (Van Hulle, 1993b). Moreover, Adams et al. (1993) reported that the EU does not regard the availability of options as undermining the objective of international comparability. In what may be interpreted as an implied form of justification for this perspective, Thorell and Whittington (1994) argued that even though standardization may eliminate some ambiguity, it is unlikely to lead to uniform accounting practice as the variety of business circumstances and the methods of describing them will invariably necessitate a degree of choice being allowed by those standards.

Nevertheless, concerns have been expressed on whether the TFV provisions of the Fourth Directive have promoted harmonized financial reporting in the EU. For example, Van Hulle (1993a) noted that it is possible for annual accounts to be true and fair in one member state and not in another. Despite being true and fair in their country of origin, he indicated that for them to be true and fair in another member state requires different explanation and elaboration, given the provisions of the Fourth Directive. Although the Directive has achieved a uniform minimum degree of regulation of accounting, Thorell and Whittington (1994) argued that it has been more effective in the areas of format and disclosure than measurement.

Despite its importance, the meaning of the TFV concept remains unclear even though the literature contains numerous attempts to define it (e.g. Rutherford, 1985; Houghton, 1987; Stewart, 1988; Alexander, 1993, 1996; Nobes, 1993; Ordelheide, 1993, 1996; Walton, 1993). Walton (1993) reported that a contemporary view considers the TFV as no more than a code for generally accepted accounting practice, which in turn reflects pragmatic responses to measurement problems. Numerous studies have empirically explored the perceived meaning of the TFV phrase, together with its implications for practice, if the override were to be reintroduced into Australian Corporations Law.

For example, Nobes and Parker (1991) concluded from their study of 463 UK companies that they take no specific action to ensure that accounts give a TFV. Moreover, and of some concern, they reported that true and fair was not seen as inconsistent with creative accounting and income smoothing. In a later study, Higson and Blake (1993) interviewed 22 technical audit partners from the top 30 UK firms and found that a significant number of them considered the concept as being vague, ambiguous, and

misleading. Sucher et al. (1996) reported that the TFV principle in the Czech Republic differs in what it signifies to initiators, users, and preparers of financial statements. Such variance in perspectives is unlikely to be conducive to financial reporting harmony and transparency if the override were to be reintroduced into Australia.

Higson and Blake (1993) expressed concern that in Australia and the UK, the TFV has been shown to be too vague to form the basis for legal action. They reported that in the UK, there has only been one minor prosecution of failure to provide a TFV. There have been no TFV prosecutions in Australia (Deegan et al., 1994). In a study conducted by the *Fédération des Experts-comptables de la CEE* (1992), 475 European companies' financial statements were examined and it was found that only 10 used the TFV override to depart from national law, out of six of the nine countries that had implemented the Fourth Directive (Van Hulle, 1993a). Given there were only 10, it has been suggested that the importance of the TFV concept should not be overemphasized (e.g. Higson and Blake, 1993; Van Hulle, 1993a).

Clearly, the weight of evidence suggests, however, that the implementation of the TFV principle in the context of the EU has contributed to the harmonization of accounting regulation within the framework facilitated by the accounting Directives¹ (e.g. Alexander, 1993; Van Hulle, 1993a). Even though its meaning has not been well-articulated, it has enabled diverse national groupings to consolidate the main thrust of their financial reporting. This has come at what might be considered a cost, that is, the considerable flexibility it provides both within and between member states in their corporate reporting requirements. The variance that the TFV override would provide may reflect negatively on the comparability and quality of financial reports prepared in Australia. Whether this matters might be considered in terms of potential effects on international harmonization.

The TFV and International Harmonization

Thorell and Whittington (1994) argued that the development of global capital markets has provided an impetus for the international harmonization of accounting particularly for those companies whose shares are traded on these markets and which have to satisfy the information needs of investors of different countries. Companies are no longer limited in their fund raising and investment activities to their home countries, and as such, this brings into focus the issue of the accounting practices that underlie the numbers on which cross-border financing and investment decisions are predicated (Emenyou and Gray, 1996). Thorell and Whittington (1994) argued that harmonizing the accounting standards of different countries should, in principle, first, assist in comparing the financial information of companies based in different countries, and second, make it easier for firms to engage in cross-border activities, such as raising finance.

These considerations raise the question of whether the application of the TFV override is conducive to international trade and finance, although it may have utility in managing differences in accounting regulation within a specific group of countries. The EU experience may provide guidance to Australia not only in terms of whether to support the reintroduction of the TFV override, but also whether the adoption of specific accounting standards might either hinder or facilitate international corporate operations. Although the provision of a TFV override helped to facilitate harmonization across

member states of the EU, such a facility is not an issue in the Australian context as applicable laws and standards are implemented at the national level.

LINKING AUSTRALIAN STANDARDS TO THOSE OF THE IASC

The AASB plans to ensure that Australian accounting standards comply with IASs (Peirson and McBride, 1997). The AASB's program of harmonization involves both the modification of existing standards and the development of new ones (Peirson and McBride, 1997). In order to address effectively problems in various exposure drafts and standards, the planned December 1998 AASB deadline for completion of the harmonization program has been extended (Institute of Chartered Accountants in Australia (ICAA), 1998; Ravlic, 1998). The objective of the AASB is consistent with the goal of the IASC and the International Organization of Securities Commissions (IOSCO) for the completion of a core set of IASs to be used in the preparation of financial reports for cross-border fund raising and stock exchange listing (Peirson and McBride, 1997). Spencer (1998) reported that the AASB believes the IASC standards represent the best prospect for achieving a globally accepted set of standards within a reasonable period of time.

Although the IASC is an accounting standard setting body, its standards are not enforceable by law; hence, compliance is purely voluntary, relying for their implementation on their constituencies to encourage harmonization of national bodies with its standards (Adams et al., 1993; Van Hulle, 1993b; Thorell and Whittington, 1994). Endorsement by both IOSCO and member Securities Commissions is an essential prerequisite for the enforcement of IASs and ultimately for the global harmonization of accounting standards (Peirson and McBride, 1997; Weetman et al., 1998). Sharpe (1998) argued that international users of financial information have neither the time nor the desire to understand Australian accounting standards, and as such, IASs provide the way forward.

In their 1996 E53 exposure draft, the IASC proposed that financial statements should present fairly an enterprise's financial performance and position. For financial statements prepared using IASs, a fair presentation was suggested to require compliance in all material respects with all applicable standards (IASC, 1996). This proposal, together with a requirement to report that financial statements comply with IASs, with details of any departures, was designed to enhance the reliability and comparability of financial statements (IASC, 1996).

The position taken by the IASC in 1996 on international comparability has received support. Emenyou and Gray (1996) argued that "the increasing trend of multinationality of companies raises serious questions as to the adequacy and suitability of ethnocentric accounting guidelines, as conflicting standards of national reporting pose additional problems and costs both for multinational corporations and information users." Carsberg (1998) stressed that the IASC is trying to achieve international accounting harmonization to address such concerns.

Underlying the position taken by the AASB in adopting IASC standards is the presumption that they represent the position taken internationally. There is little evidence, however, that IASC standards are now, or are becoming, globally accepted. They have been difficult to gain acceptance in countries such as Japan, where professional accounting

Table 1. Countries' Share of World Market Capitalization

Country	%
Australia	1.25
France	3.21
Germany	3.86
Hong Kong, China	1.21
Japan	11.63
Malaysia	0.23
Singapore	0.18
Switzerland	3.04
UK	10.90
US	51.67

Adapted from the *Australian Financial Review*, January 20, 1998, as reported in Spencer (1998).

organizations do not have a significant role in the standard setting process (Emenyou and Gray, 1996). Although Gould (1995) argued that the IASC has served the accounting profession well in establishing a framework within which international accounting reporting standards can be debated, and however great the perceived need for common standards, there is little evidence of increasing support for IASs. He concluded that the concept of common standards has appeal, but it is unlikely to be accepted in practice, and furthermore, even though the IASC effort is notable, it does not appear to be sufficient for internationally accepted accounting standards. This suggests that the objective of the AASB to link Australian standards with those of the IASC will not materially add value to international harmonization on the grounds that first, there is very little evidence that such harmonization exists and second, it is far from clear that IASs are the appropriate vehicle for an attempt at building harmonization. Furthermore, Spencer (1998) argued that IASC standards are not as rigorous as Australian standards, due in part to the alternative accounting policies they currently allow.

In terms of international acceptance, Spencer (1998) reported that only a few countries so far have adopted the substance of IASC standards and emphasized that none of them, as Table 1 indicates, is significant in terms of world market capitalization. He argued that IASC standards would need to be accepted for domestic reporting purposes in countries like the US, the UK, and Japan if they are to be considered internationally accepted.

For example, difficulties have been encountered by a number of large European companies listed on stock exchanges outside Europe, most commonly the NYSE, in meeting reporting requirements (Cairns, 1997; Flower, 1997). Flower (1997) reported that the financial statements prepared by these companies in accordance with national legislation, and based on the accounting Directives, are not sufficient for international capital market purposes. Batt (1998) indicated that under new French law, listed companies will continue to be permitted to prepare consolidated accounts in accordance with IASs. However, if the accounts of those French companies conflict with EU Directives, Barthes, the president of the Conseil National de la Comptabilité and a former IASC chairman was reported to have specified that "they will have to publish two sets of accounts—one according to French rules and one according to IASs" (Cairns, 1998). Thorell and Whittington (1994) warned that a process of internal harmonization, which increases differences between EU members and the rest of the

world, might be damaging to the EU's economic competitiveness in the global economy. Until the harmonization matter is clarified, both Flower (1997) and Batt (1998) warned that there is a risk that large companies will be increasingly drawn towards US GAAP. In the US, the governing criterion is conformity with GAAP, as financial statements are required to be presented fairly in conformity with generally accepted accounting principles (Nobes, 1993; Zeff, 1993).

Diversity Reduction

Evidence of one resultant outcome of the adoption of IASC standards would be a reduction in the diversity of accounting practice internationally. Emenyou and Gray (1996) examined the extent to which accounting measurement and associated disclosure practices of major companies in France, Germany, Japan, the UK, and the USA have become less diverse in the context of efforts made since the 1970s; that is, the period essentially since the formation of the IASC to reduce or eliminate differences in accounting policies and practices internationally. They found from their analysis of the financial reports of 293 companies that the impact of efforts to reduce international accounting diversity over the 20-year period from 1971–1972 to 1991–1992 has been quite modest. They reported that the average reduction in diversity was only 10.8 percent, and that of the 26 major accounting measurement issues they identified, the results showed that 14 reduced diversity and 12 increased diversity. Emenyou and Gray (1996) concluded that international harmonization remains a desirable but elusive objective.

In a study by Adams et al. (1993) of 17 Finnish companies listed on the London Stock Exchange for the period 1989–1991, an analysis of their corporate reports indicated major differences between Finnish accounting standards and IASs to the extent that there were significant quantitative differences relating to profit or loss and balance sheet equity. They also found that there was a lack of consistency in the presentation of statements reconciling Finnish accounting standards with IASs. Although Finnish companies produced supplementary financial statements in conformity with IASs, the study indicated that users would not be aware of many of the problems inherent in the adjustment process or the need to provide more specific descriptions of accounting policies used by them. Moreover, Gould (1995) reported that there are material differences between IASs and German regulatory requirements, and as such, it is unlikely that IASs would replace current German provisions. Although this may be the case, German legislation of 1998 provides for German listed enterprises to produce consolidated financial statements in compliance with either the German Commercial Code, US GAAP, or IASs (IASC, 1999).

The User's Perspective

In attempting to shed light on the user's perspective, Kenny and Larson (1993) investigated the role of lobbying in accounting standard setting and found that few firms lobbied the IASC. Of the 50 respondents to ED35, 15 were from industry or financial institutions, while the remaining 35 were from professional organizations and standard setting bodies. They speculated that the dearth of corporate respondents to

ED35 implied that multinational corporations did not see the IASC as a serious regulatory organization.

Nevertheless, Hopwood (1994) argued that although much is made of the functional nature of accounting reports and the needs of capital market users in setting accounting policy, he remarked that such users are rarely present. Hopwood (1994) reported that they are often referred to indirectly by representatives of the audit industry or capital market regulators who claim to articulate the needs, interests, and perspectives of the user community. Moreover, Hopwood (1994) disagreed that the process of international accounting harmonization is necessarily demand-driven by the needs of international business as there is little evidence supporting such a claim. No appeal, he emphasized, is made either to supportive empirical studies or to the views of the user community. The user perspective, Hopwood (1994) concluded, is taken to be one of such obviousness that it requires neither a physical manifestation nor an appeal to conventionally accepted evidential bases. If so, this suggests that the demand for IASC standards is not overwhelming. How this might impact the Australian proposal is of some concern.

The IASC and the Provision of an Override

The IASC's position, with respect to the use of an override, has changed. The IASC Board rejected in 1996 the use of an override stating (p. 4) that an "override would impair the ability of international investors to rely on the comparability of financial statements prepared in accordance with International Accounting Standards." The revised version of IAS 1 (IASC, 1997), however, now allows at paragraph 13 an override, "in the extremely rare circumstances when management concludes that compliance with a requirement in a standard would be misleading, and therefore that departure from a requirement is necessary to achieve a fair presentation" This provision stands in stark contrast with the current requirement under Australian Corporations Law that financial statements are to adhere to accounting standards approved by the AASB, without recourse to an override.

The prospect of the reintroduction of an override in Australia adds a degree of complexity to the IASC move. The Securities Institute of Australia argued in its submission to the Australian Government's Corporate Law Economic Reform Program that Australia should move towards US accounting standards, which it says are recognized as world's best practice (Bice, 1997). If US standards are the way forward as a means of enhancing international harmonization, then the adoption of standards consistent with those of the IASC may not be constructive. Furthermore, as the US SEC currently views IASs as being not sufficiently comprehensive in terms of coverage and quality (e.g., Hegarty, 1997; Sharpe, 1998), then linking Australian standards to those of the IASC may be fraught with difficulty.

Although Crofts (1998) argued that there are important differences between IASs and US GAAP, Gould (1995) reported that increased competition in the international securities markets may pressure the SEC into considering IASs as appropriate for US securities filings. The Chairman of the FASB objected to this, on the grounds that the US accounting and reporting system is the most sophisticated in the world (Gould, 1995). Importantly, the SEC has set three conditions, which will have to be met before considering to endorse IASs. These requirements are that a core set of standards have to be completed, those

Table 2. Financial Reporting in Transition

	<i>EU</i>	<i>USA</i>	<i>Australia</i>
Financial reporting focus	TFV; override; interpreted by individual member states	present fairly in accordance with GAAP	TFV; no override, though being lobbied
IASC standards	no link	no link	planned by middle of 1999; present fairly; override
Link to EU directives		no link	no link
Link to SEC requirements	no link		no link

standards have to be of high quality, and they will have to be rigorously interpreted and applied (Hegarty, 1997; Sutton, 1997; Sharpe, 1998). According to Gould (1995), the FASB chairman suggested that it would be inappropriate to require US registrants to comply with a strict system while allowing foreign registrants to follow one that is less strict. Sutton (1997) reported that the SEC provides a regulatory system based on the principle of full disclosure, supported by market oversight and enforcement. As such, he argued that investors have confidence in the integrity of US capital markets. Sending an implicit message, Sutton (1997) concluded from his perspective as Chief Accountant of the SEC that the tenets, which have proven successful in the US, will be equally so in the international capital market environment.

Table 2 provides a summary of the financial reporting focus, the use of IASC standards, the application EU Directives as well as SEC requirements in the context of the EU, the USA, and Australia. The table illustrates that there is little evidence of international harmonization in terms of either the TFV or presenting fairly, apart from the nature of the underlying standards used.

CONCLUSIONS

The analysis of the theoretical and empirical literature suggests the following. First, a reintroduction of the TFV override in Australia would be consistent with its role in the Fourth Directive as a fundamental principle of financial reporting. Second, harmonization with IASs by default will allow an override, as IAS 1 now provides for one. Third, Australia's harmonization of financial reporting requirements with the wider global community would confront a number of impediments because of inconsistencies between IASs, US GAAP, and EU Directives. Hence, the proposed reintroduction of the TFV override, together with IASC consistent reporting, is unlikely to enhance Australia's link to the wider world community, particularly if the move to US GAAP gains further momentum. As such, this could lead to potential negative consequences in both financial and product markets. Nevertheless, Hegarty (1997) argued that purely national regimes are not conducive to the internationalization of markets, since differences in approach give rise to barriers to trade and investment.

Based on Emenyoun and Gray's (1996) results, moves to link Australian accounting standards to those of the IASC may be premature, since there is little evidence to

suggest that this necessarily will improve international product and financial relations for companies reporting under Australian requirements. This does not mean that the Australian and IASC standards will be the same, as some IASs contain alternatives not considered appropriate to the Australian context (ICAA, 1998). Furthermore, it is difficult to envisage how such standards will interface effectively with the current TFV provision and the prospective one of presenting fairly, as required by IAS 1. The EU experience has shown that as the meaning of TFV differs between member states (Alexander, 1993; Burlaud, 1993), then its contribution to the consistency of financial reporting is far from clear. As Forker and Greenwood (1995) noted, reporting flexibility undermines the comparability of accounts. Moreover, if as Van Hulle (1993a) indicated that it is possible for annual accounts to be true and fair in one member state but not in another, then Australia's re-adoption of a TFV override or its introduction through IAS 1 can hardly facilitate Australia's contribution to effective global reporting consistency.

The evidence is quite clear that the flexibility allowed by a TFV override does not contribute to financial statement comparability. In terms of corporate oversight, the TFV requirement has been argued to be too vague to form the basis of legal action in the UK or Australia and as such, it is hard to consider how it would further Australia's interest through its reintroduction. As the literature has warned, inconsistencies facilitated through flexibility associated with the TFV in terms of the EU's accounting Directives or through IAS 1 may precipitate a greater move towards the adoption by capital market participants of US reporting standards. This is not a position that we necessarily advocate, but one that is receiving increasing support in the literature (e.g. Irvine, 1999; McGregor, 1999).

A grave concern arising from the reintroduction of an override either by way of a TFV override or one provided by way of IASs may potentially allow company directors to act opportunistically. Moreover, the introduction of IASC consistent standards will substitute the current position of uniformity of practice for flexibility of practice, reflecting compromises inherent in IASs. Those companies seeking to raise capital on international markets may be further motivated to adopt US GAAP.

The essential implications of Australia harmonizing its standards with those of the IASC are as follows. For internal purposes, Australian reporting companies will incur transaction costs in adapting to IASC harmonized standards, together with the need to explain to domestic and international investors the nature and the effect of those changes. The major impact will be felt by companies continuing or contemplating external listings. IASs are not generally accepted in the EU nor are they accepted in the US. Hence, there is little incentive, other than regulatory, to adopt IASs. Anecdotal evidence suggests that recent capital raisings by Australian companies have not been impeded by non-harmonized standards. This implies that overseas investors are comfortable with the current Australian regulatory reporting system. If so, then the undue haste to harmonize with IASC standards is of some concern. The incremental benefits of this approach have not been demonstrated.

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NOTE

1. However, as emphasized by one reviewer, harmonization of regulation does not necessarily imply harmonization of practices.

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Fundamental Analysis and the Valuation of IPOs in the Construction Industry

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Key Words: IPOs; Construction industry; Fundamental analysis; Valuation

Abstract: This study shows that: (1) In addition to past earnings, incomplete contracts disclosed in the prospectuses of construction firms' IPOs is an important explanatory variable of earnings forecasts made by investment bankers. (2) Earnings forecasts can explain the offer prices set by investment bankers in the IPOs of construction firms. (3) Stock returns subsequent to the initial public offering are predictable on the basis of incomplete contract information available in the prospectuses. This last finding is robust to the inclusion of control variables for ex ante uncertainty, size, book-to-market, leverage, and earnings-to-price effects. The association between stock returns subsequent to the equity offering and incomplete contracts is consistent with both market inefficiency and the presence of risk factors for which investors expect greater underpricing of the IPO.

Recent research on residual income accounting has provided theoretical arguments and empirical support for the view that the book value of equity, as well as earnings, is a key determinant of company value (Ohlson, 1995; Barth et al., 1998; Collins et al., 1999). Other work has examined the ability of additional signals, beyond earnings and the book value of equity, to predict future earnings, and explain company value (Lev and Sougiannis, 1996; Abarbanell and Bushee, 1997; Myers, 1999).

One possible extension of the residual income approach is to incorporate additional determinants of company value which consider specific factors that influence firms in particular industrial sectors. This study explores one specific sector, construction, where one particular variable, incomplete contracts, is likely to be value relevant.

This study investigates the ability of incomplete contracts information to explain the earnings forecasts associated with the IPOs of construction firms in the Athens Stock Exchange (ASE). In addition, this study examines the ability of such information to explain the offer price of the IPO and the stock returns subsequent to the IPO.

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Specifically, this study examines three main questions about the fundamental signals: book value of equity, earnings, and incomplete contracts. First, are the earnings forecasts significantly influenced by the fundamental signals: book value of equity, past earnings, and incomplete contracts? The prediction of future earnings is an important aspect of fundamental analysis that was highlighted by Penman (1992), while Penman (1996) investigates the ability of the book value of equity and past earnings to predict future earnings.

Second, with respect to the determination of the offer price, are earnings forecasts sufficient, or do book values of equity and incomplete contracts contain information over and above earnings forecasts which is also relevant for determining the offer price?

Finally, the study examines the relevance of incomplete contracts in explaining the stock returns beyond the launch of the IPO once controls for changes in earnings, the level of earnings, and variables that proxy for risk premiums have been established. The changes in earnings and the level of earnings, which were originally used by Easton and Harris (1991), can be interpreted as testing the relative informativeness of earnings and book values in explaining stock returns (Penman, 1996). The control variables that proxy for risk premiums and possible underpricing of the IPOs are along the lines suggested by Beatty and Ritter (1986) and Fama and French (1992).

The tests for the association between incomplete contracts and stock returns subsequent to the IPO allow the researcher to assess the informational efficiency of the stock market with respect to this fundamental item of information. Moreover, this study demonstrates that research on financial statement analysis can benefit from exploiting the additional information, such as incomplete contracts, which is published in the IPO prospectuses, but it is not published routinely after the IPO.

The empirical findings of the study reveal that the earnings forecasts provided by investment bankers in the prospectuses of initial public offerings are positively associated with the fundamental signals: earnings prior to the public offering and incomplete contracts at the moment of the public offering. Furthermore, the offer prices of IPOs are positively associated with the earnings forecasts, while the incomplete contracts and the book values of equity do not provide incremental explanatory power in explaining offer prices. The study also shows a strong positive association between stock returns subsequent to initial public offerings and incomplete contracts, which is present even after controlling for other possible omitted variables. This significant association between stock returns subsequent to the public offering and incomplete contracts is consistent with inefficient utilization of the incomplete contracts information by both the investment bankers, who set the offer prices of the construction firms, and the stock market. Alternatively, incomplete contracts may reflect extra risk factors for which investors expect greater underpricing of the IPO. The cyclical nature of the construction industry represents one such risk factor.

The remainder of this study is structured as follows: The next section describes the institutional framework prevailing in Greece over the study period. This is followed by a description of the data. The remaining sections present empirical findings on the use of fundamental signals for the estimation of earnings forecasts, the determination of offer prices and the explanation of stock returns subsequent to the equity offering. The last section of the study presents the conclusions.

THE INSTITUTIONAL FRAMEWORK

Presidential Decree No. 348 of 1985 and the Board of Directors of the ASE lays down the information that must be included in the prospectus of an initial public offering. The prospectus of a new public offering usually contains information about the following items.

1. The individuals responsible for providing the information in the prospectus
 - The names of the chief executive officer and the chief financial officer.
 - The names of the underwriter's employees responsible for the offering.
 - The name of the auditor.
 - Statements of all the above individuals assuring the new stockholders that the information in the prospectus is consistent with reality and that there are no omissions.

2. A description of the shares that will be offered
 - The number and the face value of the shares.
 - The rights of the shares.
 - The offer price, the total proceeds, and a budget based on the proceeds.
 - The underwriter's charges.
 - The number of shares that will be placed privately.

3. The business entity and its capital
 - Information from the charter of incorporation.
 - The amount of the contributed capital.
 - The types of shares and the rights of each type.
 - Changes in the contributed capital for the last 3 years.
 - Major stockholders and their percentages of ownership.

4. The activities of the issuing entity
 - The major activities of the issuing corporation.
 - A geographical analysis of sales.
 - The location and the importance of the different productive facilities.
 - The investment policy.
 - The financing policy.
 - The research and development activities.
 - The number of employees and the type of employment.
 - Any extraordinary events and pending litigation.

5. The financial position of the issuing entity
 - The financial statements of the issuer for the last 3 years.
 - Consolidated financial statements for the last 3 years.

- The earnings per share (EPS) for the last 3 years.
- The dividends per share for the last 3 years.
- Financial statements for the first 6 months of the current fiscal year.
- Investments in other entities that exceed 10 percent of the investee's capital.

6. The management of the issuing entity

- The names, addresses, education, and criminal record of top executives and members of the board of directors.
- The number of shares of the entity that the members of the board of directors own.
- The compensation arrangements of the top executives and the members of the board of directors.
- The duties of the board of directors.
- Any related-party transactions.

7. Recent developments and prospects of the issuing entity

- Recent developments since the issuance of the last financial statements on production, sales, inventories, costs, and sales prices.
- The prospects of the issuing company at least for the current fiscal year.

The last part of the prospectus usually contains the earnings forecasts for the year of the public offering and, in rare instances, for the subsequent year. The Board of Directors of the ASE requires that the earnings forecasts of construction firms must be based only on the contracts that have been signed at the date of the public offering.

The last part of the prospectus also provides information on the amount of incomplete contracts. This amount is presented both for contracts that the company has undertaken alone and for contracts that the company has undertaken in cooperation with other construction companies. The ASE has also requested, in recent public offerings of construction firms, that the firms present a detailed list of: all the contracts that they have signed, the percentage that has been completed, the revenues that have been recognized, the profits that have been earned, participation in the ownership of the completed project, and the percentage of that ownership.

THE SAMPLE

The sample includes all firms in the construction sector of the ASE with the exemption of BIOTER. BIOTER was not included as it went public before 1985 and did not have to file a prospectus with the ASE. A prospectus was required for all public offerings after the year 1985 when the Presidential Decree 350/1985 was effective. The prospectus contains not only financial information for the year before the public offering, year $t-1$, but also information for the year of the public offering, year t .¹ Financial information for the measurement of the fundamental signals was hand-collected from the prospectus and the publicly available financial statements. Stock returns were estimated from stock

Table 1. Summary Statistics

<i>Panel A: Frequency of new issues</i>			
<i>Year</i>	<i>Number of issues</i>		
1990	1		
1991	0		
1992	0		
1993	4		
1994	19		
1995	3		
1996	2		
1997	1		
Total	30		

<i>Panel B: Characteristics of IPOs</i>			
<i>Variables</i>	<i>Mean</i>	<i>Median</i>	<i>Standard deviation</i>
Gross proceeds (in millions of GRD)	4,316	1,538	10,566
Market value (in millions of GRD)	8,647	6,813	5,805
Offer Price	1,932	1,800	742
1-week return ^a	0.3197***	0.3767	0.3165
1-month return	0.8352***	0.4799	1.0581
3-month return	0.5972***	0.3433	0.7419
6-month return	0.5011***	0.3211	0.5471
12-month return	0.5571***	0.3000	0.7634
24-month return	0.5105***	0.2249	0.7990
EPS _{<i>t-1</i>} = (Reported Earnings _{<i>t-1</i>}) / (Total Shares _{<i>t-1</i>})	261.017***	243.548	91.962
BVPS _{<i>t-1</i>} = (Book Value _{<i>t-1</i>}) / (Total Shares _{<i>t-1</i>})	551.38***	564.86	176.128
Incomplete Contracts _{<i>t</i>} (in millions of GRD)	12,215	10,209	11,494
ICPS _{<i>t</i>} = (Incomplete Contracts _{<i>t</i>}) / (Total Shares _{<i>t</i>}) ^b	3,236.74***	2,402.27	4,018.61
FEPS _{<i>t</i>} = (Forecasted Earnings _{<i>t</i>}) / (Total Shares _{<i>t</i>})	317.46***	300.66	114.26
EPS _{<i>t</i>} = (Reported Earnings _{<i>t</i>}) / (Total Shares _{<i>t</i>})	322.62***	299.86	133.70

Notes: ^a We compute stock returns as follows: $(P_t - P_{\text{offer}}) / P_{\text{offer}}$, where P_t is the market price of the stock at the end of the 5th, 25th, 75th, 150th, 300th, and 600th trading day for the respective measurement of the 1 week, 1, 3, 6, 12, and 24 months stock return.

^b Total Shares_{*t*} represents the number of shares after the public offering.

*** Significant at the 0.01 level of significance.

prices adjusted for stock splits and stock dividends and stock prices were retrieved from the ASE database.

Panel A of Table 1 shows the frequency of new issues over time, with the largest number of issues taking place in 1994. Around that time, a large inflow of capital was expected from the European Union to finance new major public works in Greece and the small private construction firms had to increase their capital base to be able to participate

in major construction projects. The inflow of capital from the European Union also generated an environment of intense competition in the construction industry that narrowed the profit margins of the construction firms.

Panel B of Table 1 presents the characteristics of the firms in the sample. The mean (median) amount of gross proceeds raised from the public offering is GRD 4,316 (1,538) millions, while the mean (median) market value of the sample firms, estimated at offering prices, is GRD 8,647 (6,813) millions. This suggests that the old stockholders maintain at least 50 percent ownership interest after the IPO.

The mean (median) offer price is GRD 1,932 (1,800). The average raw stock returns, based on offer prices, over the intervals of 1 week, 1, 3, 6, 12, and 24 months are, respectively: 31.97, 83.52, 59.72, 50.11, 55.71, and 51.05 percent. The mean and the median stock returns reach the highest level at the end of the first month and there is a decline thereafter. Positive stock returns can be earned by investors who acquire shares even at the end of the first week.

The mean (median) EPS for the year before the public offering (EPS_{t-1}) is GRD 261.017 (243.548), the mean (median) book value per share for the year before the public offering ($BVPS_{t-1}$) is GRD 551.38 (564.86). The mean (median) amount of incomplete contracts and incomplete contracts per share ($ICPS_t$) are, respectively, GRD 12,215 (10,209) millions and GRD 3,236.74 (2,402.27). Information about incomplete contracts for the year of the public offering t and expected earnings for the year t ($FEPS_t$) become publicly available when the prospectus is published, i.e., in the weeks prior to the flotation. The mean (median) forecast of EPS of the year t ($FEPS_t$) is GRD 317.46 (300.66), while the mean (median) reported EPS of the year t (EPS_t) is GRD 322.62 (299.86) and the difference between the two, i.e., the forecast error, is not significantly different from zero. The EPS grow from the year prior to the year of the public offering at an average rate of 23.37 percent.²

Panel A of Table 2 presents the correlation matrix of the variables used to explain earnings forecasts and offer prices. In this panel, there is significant correlation of the variable OFFER PRICE with each of the variables $FEPS_t$, EPS_{t-1} , and $ICPS_t$, as well as of the variable $FEPS_t$ with the variables EPS_{t-1} , $ICPS_t$, and $BVPS_{t-1}$, while the highest correlation (0.714) is observed between the variables $BVPS_{t-1}$ and EPS_{t-1} . The correlation between $FEPS_t$ and $ICPS_t$ is not unexpected as some of the incomplete contracts that were known to the investment bankers before the public offering were considered in the development of the earnings forecasts.

Panel B of Table 2 presents the correlation matrix of the variables used to explain stock returns subsequent to the IPOs. This panel shows particularly high correlation of the variable $FEMV_t$ with the variables $\Delta FEMV_t$, $\ln(MV_t)$, and $EPS_{t-1}/\text{Offer Price}$, as well as of the variable $\ln(MV_t)$ with the variable $EPS_{t-1}/\text{Offer Price}$, and of the variable $ICMV_t$ with the variable $EPS_{t-1}/\text{Offer Price}$. These findings suggest that the use of these variables in multiple regressions could generate collinearity.

The Use of Fundamental Signals in the Determination of Earnings Forecasts

This section examines the association between fundamental signals and earnings forecasts. The earnings forecasts are provided by investment bankers in the prospectus,

Table 2. Correlation Matrices

<i>Panel A: Correlation matrix for the variables of the models in Tables 3 and 4</i>							
	Offer price	FEPS _t	ICPS _t	BVPS _{t-1}			
Offer Price	1.00						
FEPS _t	0.641***	1.00					
ICPS _t	0.410**	0.549***	1.00				
BVPS _{t-1}	0.345*	0.536***	0.117	1.00			
EPS _{t-1}	0.469***	0.623***	0.086	0.714***			

<i>Panel B: Correlation matrix for the variables of the models in Table 5</i>							
	SR _t	FEMV _t	ΔFEMV _t	ln(MV _t)	ln(BV _{t-1} /MV _t)	ln(TA _{t-1} /BV _{t-1})	EPS _{t-1} /Offer price
SR _t	1.00						
FEMV _t	-0.029	1.00					
ΔFEMV _t	0.157	0.764***	1.00				
ln(MV _t)	-0.184	-0.625***	-0.416**	1.00			
ln(BV _{t-1} /MV _t)	0.122	-0.139	-0.027	0.286	1.00		
ln(TA _{t-1} /BV _{t-1})	0.010	-0.309*	-0.066	0.050	-0.194	1.00	
EPS _{t-1} /Offer Price	0.162	0.553***	0.367**	-0.751***	0.196	-0.035	1.00
ICMV _t	0.425**	0.083	0.281	-0.426**	0.035	0.456**	0.562***

Notes: Definition of the variables: FEPS_t: (Forecasted Earnings_t) / (Total Shares_t); ICPS_t: (Incomplete Contracts_t) / (Total Shares_t); BVPS_{t-1}: (Book Value_{t-1}) / (Total Shares_{t-1}); EPS_{t-1}: (Reported Earnings_{t-1}) / (Total Shares_{t-1}); SR_t: (P_t - Offer Price) / Offer Price; P_t: Market Price at end of the first month; FEMV_t: (Forecasted Earnings_t) / (Offer Price * Total Shares_t); ΔFEMV_t: (Forecasted Earnings_t - Reported Earnings_{t-1}) / (Offer Price * Total Shares_t); MV_t: The market value of the firm at offer prices, i.e., Offer Price * Total Shares; BV_{t-1} / MV_t: The book-to-market ratio; TA_{t-1} / BV_{t-1}: The total assets to book value of equity ratio, i.e., financial leverage based on book values; EPS_{t-1} / Offer Price: The earnings-to-price ratio. All firms in the sample have a net profit. ICMV_t: Incomplete Contracts_t / Total Shares_t * Offer Price.

* Significant at the 0.10 level of significance.

** Significant at the 0.05 level of significance.

*** Significant at the 0.01 level of significance.

while the fundamental signals are based on financial information, which is also included in the prospectus. All the variables are expressed on a per share basis and the following regression model is estimated:

$$FEPS_t = a_0 + a_1 BVPS_{t-1} + a_2 EPS_{t-1} + a_3 ICPS_t + \varepsilon \quad (1)$$

where FEPS_t is the forecasted earnings for the year *t*; BVPS_{t-1} is the book value of equity at the end of year *t*-1; EPS_{t-1} is the reported earnings for the year *t*-1; ICPS_t is the incomplete contracts at year *t*.

Table 3 presents empirical findings from the regression of forecasted earnings (FEPS_t) on the fundamental signals. The reported *t*-statistics for all regression models have been estimated using White's (1980) heteroskedasticity-consistent covariance matrix. These findings reveal that the reported earnings for the year before the public offering (EPS_{t-1}) as well as the incomplete contracts for the year of the public offering (ICPS_t) are positively related to earnings forecasts (FEPS_t) at the 0.01 level of

Table 3. Fundamental Signals and the Estimation of Earnings Forecasts ($n = 30$)

<i>The Regression model: $FEPS_t = \alpha_0 + \alpha_1 BVPS_{t-1} + \alpha_2 EPS_{t-1} + \alpha_3 ICPS_t$.</i>					
α_0	α_1	α_2	α_3	<i>Adjusted R²</i>	<i>F-statistics</i>
Predictions	+	+	+		
67.387	0.085	0.604	0.013	0.602	15.62***
(1.69) ^a	(0.78)	(2.89)***	(4.48)***		

Notes. Definition of the variables: $FEPS_t$: (Forecasted Earnings_{*t*}) / (Total Shares_{*t*}). $BVPS_{t-1}$: (Book Value_{*t-1*}) / (Total Shares_{*t-1*}). EPS_{t-1} : (Reported Earnings_{*t-1*}) / (Total Shares_{*t-1*}). $ICPS_t$: (Incomplete Contracts_{*t*}) / (Total Shares_{*t*}).

^a Numbers within parentheses indicate *t*-statistics.

*** Significant at the 0.01 level of significance.

significance. The insignificant association between $FEPS_t$ and $BVPS_{t-1}$ is very likely due to the high correlation of $BVPS_{t-1}$ with EPS_{t-1} which was presented in Table 2. The findings from model (1) are consistent with the theoretical expectation (Penman, 1996) that past earnings can predict future earnings, as well as the fact that incomplete contracts will be recognized by accounting in the future and they will affect future revenues and earnings.

The Use of Fundamental Signals in the Determination of Offer Prices

First, this study examines the use of earnings forecasts as a determinant of construction firms offer prices because there is extensive reference in the prospectus to the development of earnings forecasts as well as their use in earnings multiples for the valuation of IPOs. A positive association is expected between offer price and earnings forecasts which is investigated by estimating the following regression model:

$$\text{Offer Price} = a_0 + a_1 FEPS_t + \varepsilon \quad (2)$$

where $FEPS_t$ is the forecasted earnings for the year t .

Furthermore, the study augments regression (2) by introducing the book values of equity ($BVPS_{t-1}$) and incomplete contracts ($ICPS_t$) to examine their incremental explanatory power over $FEPS_t$ in explaining offer prices. Book values of equity, along with earnings, have often been used in models of equity valuation (see, for example, Feltham and Ohlson, 1995; Ohlson, 1995; Klein, 1996; Penman, 1996; Barth et al., 1998) and are included in model (3) along with the earnings forecasts. Incomplete contracts represent a case of unrecognized net assets, which have been considered determinants of equity values (Barth et al., 1998), and are introduced in regression (3). Sougiannis (1994) and Lev and Sougiannis (1996) have used R&D, which are also unrecognized assets in the Barth et al. sense, to explain market values.

The association between offer prices and the fundamental signals, $FEPS_t$, $BVPS_{t-1}$ and $ICPS_t$ is investigated using the following regression model:

$$\text{Offer Price} = a_0 + a_1 FEPS_t + a_2 BVPS_{t-1} + a_3 ICPS_t + \varepsilon \quad (3)$$

Table 4. Fundamental Signals and the Estimation of the Offer Price ($n = 30$)

<i>Panel A: The regression model: Offer price = $\alpha_0 + \alpha_1 FEPS_t$</i>					
α_0	α_1	Adjusted R^2	<i>F-statistics</i>		
Predictions	+				
611.410	4.158	0.389	19.48***		
(2.28)**	(4.48)***				
<i>Panel B: The regression model: Offer price = $\alpha_0 + \alpha_1 FEPS_t + \alpha_2 BVPS_{t-1} + \alpha_3 ICPS_t$</i>					
α_0	α_1	α_2	α_3	Adjusted R^2	<i>F-statistics</i>
Predictions	+	+	+		
629.171	3.753	0.104	0.016	0.348	6.16***
(1.76) ^{a,*}	(2.52)**	(0.14)	(0.86)		

Notes: Definition of the Variables: $FEPS_t$: (Forecasted Earnings_{*t*})/(Total Shares_{*t*}), $BVPS_{t-1}$: (Book Value_{*t-1*})/(Total Shares_{*t-1*}), $ICPS_t$: (Incomplete Contracts_{*t*})/(Total Shares_{*t*}).

^a Numbers within parentheses indicate *t*-statistics.

* Significant at the 0.10 level of significance.

** Significant at the 0.05 level of significance.

*** Significant at the 0.01 level of significance.

where $FEPS_t$ is the forecasted earnings for the year t ; $BVPS_{t-1}$ is the book value of equity at the end of year $t-1$; $ICPS_t$ is the incomplete contracts at year t .

Assuming that incomplete contracts represent value relevant unrecognized net assets (Barth et al., 1998), α_3 is expected to be positive, while α_1 and α_2 will also be positive as suggested by Ohlson (1995).

Panel A of Table 4 presents empirical findings from the estimation of the regression model (2). The primary finding from Panel A is the significant positive association between offer prices and earnings forecasts ($FEPS_t$). This finding is consistent with the use of earnings forecasts in the determination of the offer price in initial public offerings of construction firms.

Panel B of Table 4 presents empirical findings from the estimation of the regression model (3). The findings reveal a significant positive association only between earnings forecasts ($FEPS_t$) and offer prices. The other two variables $BVPS_{t-1}$ and $ICPS_t$ are not significant. Moreover, the *F*-statistic (0.11), examining the incremental explanatory power of $BVPS_{t-1}$ and $ICPS_t$ over $FEPS_t$ in explaining offer prices, is not significant, suggesting that $BVPS_{t-1}$ and $ICPS_t$ do not provide offer price relevant information when $FEPS_t$ has already been considered. This finding also reflects the significant association of earnings forecasts ($FEPS_t$) with both incomplete contracts ($ICPS_t$) and reported earnings (EPS_{t-1}), which was presented both in Tables 3 and 2.^{3,4}

The Use of Fundamental Signals in Explaining Future Stock Returns

This section examines the ability of fundamental signals to explain stock returns subsequent to the initial public offering. The level of earnings, the change in earnings, the fundamental variables suggested by Fama and French (1992) and the level of incomplete contracts are used to explain stock returns subsequent to the initial public offering. The

Table 5. Fundamental Signals and Future Stock Returns (n = 30)

The regression model: $SR_{t+1} = \alpha_0 + \alpha_1 FEMV_t + \alpha_2 \Delta FEMV_t + \alpha_3 \ln(MV_t) + \alpha_4 \ln(BV_{t-1}/MV_t) + \alpha_5 \ln(TA_{t-1}/BV_{t-1}) + \alpha_6 EPS_{t-1}/Offer Price + \alpha_7 ICMV_t$.

Measurement period for stock returns	α_0	α_1^a	α_2	α_3	α_4	α_5	α_6	α_7	Adjusted R^2	F-statistics
1 week	2.620 (0.51) ^b	-2.467 (-1.68)	1.472 (0.99)	0.029 (0.10)	-0.092 (-0.86)	-0.330 (-1.62)	1.098 (0.52)	0.001 (0.24)	-0.208	0.28
1 month	8.655	-5.865	4.794	-0.625	0.275	-1.155	-4.326	0.079	0.103	1.47
3 months	(0.83) -2.123 (-0.53)	(-1.02) -0.888 (-0.20)	(0.97) 2.871 (0.80)	(-0.91) 0.013 (0.04)	(0.72) 0.079 (0.42)	(-1.93)* -0.361 (-1.06)	(-1.02) -0.111 (-0.04)	(3.37)*** 0.079 (4.10)***	0.580	6.73***
6 months	-0.593 (-0.11)	2.069 (0.76)	1.854 (0.76)	0.100 (0.36)	-0.052 (-0.34)	-0.186 (-0.79)	-1.057 (-0.50)	0.056 (5.92)***	0.369	3.42**
12 months	5.734 (1.03)	3.990 (0.77)	-0.440 (-0.09)	-0.205 (-0.62)	-0.019 (-0.10)	-0.171 (-0.47)	-4.240 (-1.53)	0.088 (6.31)***	0.401	3.783***
24 months	6.258 (0.82)	-4.620 (-1.37)	0.947 (0.24)	-0.537 (-1.45)	0.218 (1.19)	1.223 (1.79)*	0.257 (0.10)	0.010 (0.62)	0.341	2.775**

Notes: Definition of the variables: SR_t : (P_t -Offer Price)/Offer Price; $FEMV_t$: (Forecasted Earnings/Total Shares); $\Delta FEMV_t$: (Forecasted Earnings-Reported Earnings_{t-1})/Offer Price*Total Shares); MV_t : The market value of the firm at offer prices, i.e., Offer Price*Total Shares; BV_{t-1}/MV_t : The book-to-market ratio; TA_{t-1}/BV_{t-1} : The total assets to book value of equity ratio, i.e., financial leverage based on book values; EPS_{t-1} /Offer Price: The earnings-to-price ratio. All firms in the sample have a net profit. $ICMV_t$: Incomplete Contracts_t/Total Shares*Offer Price.

^a The expectation is that each coefficient will be insignificant if efficient pricing occurs.

^b Numbers within parentheses indicate t-statistics.

* Significant at the 0.10 level of significance.

** Significant at the 0.05 level of significance.

*** Significant at the 0.01 level of significance.

level of earnings and the change in earnings were originally proposed by Easton and Harris (1991) and can be interpreted as testing the relative informativeness of book values and earnings, respectively, in explaining stock returns. The fundamental variables suggested by Fama and French (1992) are: firm size (market capitalization), the book-to-market ratio, financial leverage, and the earnings-to-price ratio. The effect of including these independent variables in the regression is to control for risk and possible mispricing associated with the book-to-market or the earnings-to-price ratios. The level of incomplete contracts is also included as an explanatory variable because it provides information that will be recognized by the accounting system in future periods. The change in incomplete contracts is not included, as it cannot be estimated; there is publicly available information for the amount of incomplete contracts only in the year of the public offering. Hence, for the estimation of the association between fundamental signals and subsequent stock returns, the following regression model is estimated:

$$SR_t = a_0 + a_1 FEMV_t + a_2 \Delta FEMV_t + a_3 \ln MV_t + a_4 \ln(BV_{t-1}/MV_t) + a_5(TA_{t-1}/BV_{t-1}) + a_6(EPS_{t-1}/\text{Offer Price}) + a_7 ICMV_t + \varepsilon$$

where SR_t is the $(P_t - \text{Offer Price}) / \text{Offer Price}$; $FEMV_t$ is the $\text{Forecasted Earnings}_t / \text{Total Shares} * \text{Offer Price}$; $\Delta FEMV_t$: $(\text{Forecasted Earnings}_t - \text{Reported Earnings}_{t-1}) / \text{Total Shares} * \text{Offer Price}$; MV_t is the the market value of the firm at offer prices, i.e., $\text{Offer Price} * \text{Total Shares}$; BV_{t-1} / MV_t is the Book-to-Market ratio; TA_{t-1} / BV_{t-1} is the Total Assets to Book Value of equity ratio, i.e., financial leverage based on book values; $EPS_{t-1} / \text{Offer Price}$ is the Earnings-to-Price ratio; $ICMV_t$ is the $\text{Incomplete Contracts}_t / \text{Total Shares} * \text{Offer Price}$.

Assuming efficient pricing by both the investment bankers and the stock market the expectation is that each of the coefficient $a_1, a_2, a_3, a_4, a_5, a_6,$ and a_7 will be equal to zero.

Table 5 presents empirical findings for the regression model (8), when the dependent variable is measured over the intervals of 1 week, 1 month, 6 months, 1 year, and 2 years. There is a significant positive association only between incomplete contracts and stock returns, when the stock returns are measured over the intervals of 1, 3, 6, and 12 months subsequent to the IPO.⁵ The magnitude of the condition index (222) for the regression models of Table 5 and the evidence from Panel B of Table 3 are consistent with the presence of collinearity among the independent variables of model (8) (see for example, Belsley et al., 1980). The significant association between incomplete contracts and stock returns, even in the presence of other control variables, suggests that there may be a mispricing of construction firms' securities. Alternatively, stock returns may reflect an extra-market risk factor associated with incomplete contracts. This risk factor could be capturing the cyclical nature of the construction industry.

Next, the study examines the efficiency of the stock market by measuring stock returns on the basis of the first day closing market price, i.e.,

$$SR_t = (P_t - \text{First Day Closing Price}) / \text{First Day Closing Price.}$$

Empirical findings for the regression model (8) with the new measure of stock returns are presented in Table 6. These findings show that $ICPS_t$ is still a significant explanatory variable of stock returns, evidence consistent with market inefficiency.

Table 6. Fundamental Signals and Future Stock Returns (n = 30)

The regression model: $SR_t = \alpha_0 + \alpha_1 FEMV_t + \alpha_2 \Delta FEMV_t + \alpha_3 \ln(MV_t) + \alpha_4 \ln(BV_t) + \alpha_5 \ln(TA_t) + \alpha_6 EPS_t + \alpha_7 \text{First Day Closing Price} + \alpha_8 \text{ICMV}_t$.

Measurement period for stock returns	α_0	α_1^a	α_2	α_3	α_4	α_5	α_6	α_7	Adjusted R^2	F-statistics
1 week	1.884 (0.98) ^b	0.248 (0.04)	-0.299 (-0.05)	-0.110 (-1.13)	0.036 (0.62)	-0.292 (-1.87)*	-1.161 (-0.30)	0.013 (1.39)	0.008	1.03
1 month	2.007 (0.22)	22.132 (0.91)	-20.997 (-0.87)	-0.642 (-1.38)	0.501 (1.80)	-1.181 (-1.57)	-24.268 (-1.33)	0.091 (1.97)*	0.220	2.17*
3 months	-1.693 (-0.31)	19.668 (1.39)	-18.165 (-1.29)	-0.282 (-1.04)	0.301 (1.85)*	-0.385 (-0.88)	-17.355 (-1.63)	0.068 (2.531)**	0.545	5.97***
6 months	2.410 (0.63)	4.002 (0.40)	-2.005 (-0.20)	-0.122 (-0.63)	0.033 (0.28)	-0.365 (-1.17)	-5.279 (-0.69)	0.036 (1.88)*	0.449	4.38***
12 months	10.573 (1.80)*	0.610 (0.03)	0.586 (0.03)	-0.489 (-1.63)	0.056 (0.31)	-0.379 (-0.78)	-5.678 (-0.48)	0.072 (2.40)**	0.390	3.65***
24 months	1.647 (0.17)	5.594 (0.20)	-6.826 (-0.24)	-0.543 (-1.26)	0.386 (1.43)	0.538 (0.64)	-7.318 (-0.36)	0.056 (1.33)	0.063	1.24

Notes: Definition of the variables: SR_t : (P_t - First Day Closing Price)/First Day Closing Price; $FEMV_t$: (Forecasted Earnings)/(First Day Closing Price * Total Shares); $\Delta FEMV_t$: (Forecasted Earnings - Reported Earnings_{t-1})/(First Day Closing Price * Total Shares); MV_t : The market value of the firm at First Day Closing Prices, i.e., First Day Closing Price * Total Shares; BV_t : 1/ MV_t; The book-to-market ratio; TA_t : 1/BV_t; The total assets to book value of equity ratio, i.e., financial leverage based on book values; EPS_t : 1/First Day Price; The earnings-to-price ratio. All firms in the sample have a net profit. $ICMV_t$: Incomplete Contracts/Total Shares/First Day Closing Price.

^a The expectation is that each coefficient will be insignificant if efficient pricing occurs.

^b Numbers within parentheses indicate t-statistics.

* Significant at the 0.10 level of significance.

** Significant at the 0.05 level of significance.

*** Significant at the 0.01 level of significance.

CONCLUSIONS

This study shows that earnings forecasts provided by investment bankers in the prospectuses of construction firms' IPOs are positively associated with earnings of the year prior to the public offering and with incomplete contracts, i.e., unrecognized revenue, at the moment of the public offering. The study also shows that offer prices are positively associated with earnings forecasts. Earnings forecasts, though, are associated with the incomplete contracts and earnings of the year prior to the IPO. Hence, not only earnings forecasts but also incomplete contracts and past earnings provide value relevant information.

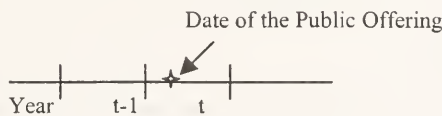
The study also provides empirical findings showing a significant positive association between stock returns subsequent to initial equity offerings and incomplete contracts. This association holds even when there are controls for ex ante uncertainty, size, leverage, earnings-to-price, and book-to-market ratios. The significant association between stock returns subsequent to the initial public offering and incomplete contracts at the moment of the public offering suggests inefficient utilization of the incomplete contracts information by the investment bankers and the stock market. Alternatively, incomplete contracts may reflect an extra risk factor associated with ex ante uncertainty for which market participants expect greater underpricing. The cyclical nature of the construction industry represents one such risk factor.

The findings of this study also point out the relevance of future revenues that have not been recognized by the accounting system in security valuation. Hence, accounting regulators should consider requiring that construction companies regularly report in footnotes to the financial statements the incomplete contracts information as it happens in the case of reserve recognition accounting measures for oil and gas firms.

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NOTES

1. The arguments presented in the article are based on the following time-line:



- Year t is the year in which the public offering occurs and year $t-1$ is the year prior to the public offering. Financial statements are available only for the year $t-1$ at the date of the public offering.
2. Untabulated evidence on the time series behavior of unexpected accruals reveals the presence of significant positive unexpected accruals both in the year of the public offering and in the prior year. The unexpected accruals of the year after the public offering were not statistically different

from zero. This evidence is consistent with the presence of earnings management. The estimation of accruals was based on DeAngelo (1986) and the modified Jones (1991) model that was proposed by Dechow et al. (1995).

3. The condition index for the regression model (3) is 9.94 and suggests the presence of collinearity among the independent variables of the model (see, for example, Belsley et al., 1980, p. 15).
4. The value relevance of fundamental signals was also examined by employing the comparable firms' approach suggested by Kim and Ritter (1999). The comparable firms' approach relies on multiples (e.g., price-to-earnings) of comparable firms as benchmarks for the valuation of IPOs. This approach is implemented empirically by estimating the following univariate models.

$$\text{Offer Price}/\text{EPS}_{t-1} = a_0 + a_1(P/\text{EPS}_{t-1})_{\text{comparable}} + \varepsilon \quad (4)$$

$$\text{Offer Price}/\text{FEPS}_t = a_0 + a_1(P/\text{FEPS}_t)_{\text{comparable}} + \varepsilon \quad (5)$$

$$\text{Offer Price}/\text{BV}_{t-1} = a_0 + a_1(P/\text{BV}_{t-1})_{\text{comparable}} + \varepsilon \quad (6)$$

$$\begin{aligned} \text{Offer Price}/\text{Incomplete Contracts}_t \\ = a_0 + a_1(P/\text{Incomplete Contracts}_t)_{\text{comparable}} + \varepsilon \end{aligned} \quad (7)$$

A comparable firm is selected for each firm involved in an initial public offering. The comparable firm is also from the construction industry but went public before the firm of immediate interest. This step implies that the first IPO in the construction industry did not have a comparable firm. We rely on one firm rather than taking the median of a number of firms because of the small number of firms in the construction industry (30). Furthermore, we select comparable firms from the same industry because Alford (1992) provides evidence that predictions of prices based on the *P/E* valuation method were more accurate when the comparable firms were selected from the same industry rather than on other dimensions such as: firm size or earnings growth. The stock price of the comparable firm is the closing price 1 day prior to the date of the public offering. Untabulated findings for the regression models (4)–(7) reveal that only in model (5) the explanatory variable P/FEPS_t comes close to being statistically significant at the 0.10 level but the overall model is not significant. This finding is consistent with the evidence presented by Kim and Ritter (1999) and with the references made by investment bankers in the prospectuses to earnings forecasts for the valuation of the IPOs of this study.

5. Beatty and Ritter (1986) have proposed that the greater the ex ante uncertainty about the value of a new public offering the greater the expected underpricing. As ex ante uncertainty about the value of a public offering increases, an investor submitting purchase orders in IPOs will be more frequently allocated shares in offerings that decline in price than offerings that appreciate, i.e., the investor will be faced with the winner's curse problem. Consequently, an informed investor submitting purchase orders in offerings with greater ex ante uncertainty will expect greater underpricing.

Beatty and Ritter (1986) have tested the implications of their proposition by using the reciprocal of the gross proceeds as a surrogate for ex ante uncertainty and found a significant positive association between stock returns and gross proceeds. Untabulated evidence, based on the regression model (8) that has been expanded by adding the gross proceeds as an additional explanatory variable, shows that this new variable is not significant. Furthermore, we used the standard deviation of the residuals from the market model as surrogate for ex ante uncertainty. Market models were estimated for each firm over 250 daily returns following the public offering. Untabulated findings for the regression model (8) with the standard deviation of the market model residuals as an additional explanatory variable reveal that the new variable is significant in all estimated regressions. There is, however, a reduction in the significance level of

the incomplete contracts (ICPS_t), which is probably due to the high correlation (0.64) between these two variables. Beatty and Ritter (1986, Note 13, p. 222) mention this surrogate for ex ante uncertainty but do not use it as it would result in significant sample size reduction.

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Accounting for Intangible Assets in Scandinavia, the UK, the US, and by the IASC: Challenges and a Solution

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***Abstract:** Improved accounting for intangible assets is one of the major challenges to future financial reporting. Conventionally, resources spent on intangibles such as knowledge, design, licenses, and trademarks have been expensed and hence treated merely as costs and not as investments with book values. Such an arbitrary way of dealing with intangible resources is believed to have increasingly reduced the value-relevance of financial reporting as the importance of intangibles in the economy has increased over time. Intangible resources that meet certain criteria for asset recognition should be capitalized as assets and their costs amortized over the best estimate of their useful lives. In this article, we argue that the value-relevance of financial statements would be further improved if previously expensed costs are partly reversed and capitalized if, at a later period, the intangible item in question meets the asset recognition criteria. The increased income variation due to reversed expenses would be a signal of earnings potential and risk.*

Since knowledge, research and development (R&D), advertising, and other intangible resources constitute an increasingly important part of modern economies, accounting for intangibles has become an increasingly important problem facing the accounting profession, especially standard-setting organizations. Traditionally, resources spent on intangible assets have not been treated as valuable investments and capitalized in the balance sheet. Instead, they have been expensed and thus reported as costs that should hardly be expected to generate future benefits, after taking into consideration the considerable risk normally associated with the future benefits of intangible assets. This could mislead investors relying upon the financial statement as their primary source of information, and make short-term behavior attractive to managers.

Capitalizing and then amortizing intangible assets over their useful lives will more properly match costs with future benefits, which is believed to increase the informa-

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tiveness of financial statements. But since intangibles are difficult to record objectively, the value-relevance of financial statements will be reduced if doubtful or even non-existing assets are recorded. How far we should go in recognizing intangible assets is determined by the trade-off between how the relevance and the reliability of intangible asset capitalization affect the informativeness of accounting—and could only be determined empirically.

The purpose of this article is to examine how intangible resources affect the value-relevance of financial reporting and, based on this analysis, to sketch a framework for intangible asset accounting that is believed to improve the informativeness of financial reporting. In addition, we look at how some regulators, through accounting standards or legislation, have responded to the increased importance of intangible resources in the economy. Their work is seen relative to the outlined principles for value relevant accounting of intangible assets.

The conclusion is that in order to improve the informativeness and hence the value-relevance of financial reports, intangibles, irrespective of their type, should be capitalized and subsequently amortized over their useful lives, provided they meet certain criteria for asset recognition. If the economic value of a portfolio of intangible assets is less than its cost, the portfolio should be written down to its economic value. If, in a later period, the economic value increases, the carrying value should be reversed/revalued—but not above cost (i.e., acquisition or production cost with the deduction of accumulated amortization).

If the asset recognition criteria are not met, intangible resources should be expensed in the period in which they are incurred. Unlike the International Accounting Standards Committee (IASC) and other standard-setting organizations, we propose that if the recognition criteria for an asset are met in a later period, some of the previously expensed costs (i.e., the development costs with deduction of accumulated amortization up to the time of recognition) should be reversed through the income statement and capitalized as an asset. Before reversion of previously expensed cost can be done, there should, nevertheless, be an initial and transparent recognition of the possibility that an intangible asset is, or could be, created as a result of the expensed costs, e.g., through a footnote disclosure in the period of precautionary expensing. This is necessary to limit the potential for earnings management through doubtful asset recognition. If no recognition is made *ex ante*, no reversion of previously expensed costs should be allowed *ex post*.

According to our view, conditional reversion would produce an informative signal to investors and other financial statement users: Earnings are affected negatively in the year the costs are expensed, signaling that the investment probably is lost. Earnings are affected positively in the year of capitalization, signaling that an intangible asset with future economic benefits has been created. The income variation caused by conditional reversion is a signal of earnings potential and risk. Better risk accounting yields valuable information to investors and other users, increasing the value-relevance of financial statements.

Definition

Assets are defined by the Financial Accounting Standards Board (FASB) in SFAC 6 *Elements of Financial Statements* as “probable future economic benefits obtained or

controlled by a particular entity as a result of past transactions or events,” and could be classified as either tangible or intangible assets. Tangibles are assets that have physical substance (e.g., property, plant, and equipment), while intangibles are without physical substance. They are instead characterized by rights or other similar benefits. Even though financial or monetary assets in many respects are close to intangible assets, they are usually considered as tangible assets (or as a separate group of assets).

The IASC, in their IAS 38 *Intangible Assets*, defines an (identifiable) intangible asset as a “non-monetary asset without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative purposes. An asset is a resource: (a) controlled by an enterprise as a result of past events; and (b) from which future economic benefits are expected to flow to the enterprise.” (Section 7; see also Accounting Standards Board’s (ASB) FRS 10 *Goodwill and Intangible Assets* for a similar definition). Examples are brand names, copyrights, covenants not to compete, franchises, future interests, licenses, operating rights, patents, record masters, secret processes, trademarks, and trade names. If identified, assets that result from activities such as advertising and R&D are identifiable intangible assets as long as knowledge or other intangible aspects about the assets are the primary outcome and not any physical element of those assets.

Closely related to intangible assets are deferred charges (to revenue) (see, e.g., Hendriksen and Van Breda, 1992). Deferred charges are expenditures not recognized as costs of the period in which they are incurred, but carried forward as assets to be written off in future periods to match future revenue. Examples that are categorized as long-term assets, because they will be amortized over more than 1 year, are advertising and promotion costs, R&D costs, organization costs, start-up costs, and legal costs. The distinction between intangibles and deferred charges is at best vague. In fact, deferred charges can, as in this article, be considered a type of intangible assets. Some, including the IASC, are reluctant to recognize deferred charges as assets (see, e.g., E60 (p. 58) where it is pointed out that the concept of deferred costs does not exist in IASC’s vocabulary, presumably because the IASC has a balance sheet-oriented view on accounting).

Externally and internally generated goodwill represents future economic benefits from synergy between identifiable assets or from intangible assets that do not meet the criteria for an identifiable intangible asset, and is measured as the difference between the (market) value of the entity and the book value of the entity’s identifiable assets (see, e.g., Johnsen and Patrone, 1998). Thus, intangible assets consist of identifiable intangible assets, including deferred charges, and unidentifiable intangible assets in terms of goodwill.

Externally generated intangible assets are assets purchased via transactions with external parties at arms-length prices, either individually or as a part of a business combination. An example is purchased goodwill arising from a business combination. Internally generated intangible assets are developed within an entity as a result of a series of external transactions; an event, process or activity; or both. An example is internally generated goodwill. Within transactional historical cost accounting, internally generated goodwill is not considered an asset because it is not based on clearly identifiable transactions or events.

The remainder of this article is organized into five sections. The section “The Generally Accepted Accounting Principles (GAAP) of Intangible Assets: A Comparison

of Major Standard-Setters” gives an overview of how intangible resources are treated by major standard-setting organizations, i.e., the FASB, the ASB, and the IASC. The section “The GAAP on Intangible Assets in the Scandinavian Countries: A Comparison” examines how intangibles are treated in some smaller countries with a history of a less restrictive attitude in their legislation towards capitalization of intangible assets than major standard-setters. The section “Intangible Assets: Value-Relevance, Reliability, and the Choice of Accounting Principles” summarizes the research related to intangible resources and the value-relevance of financial statements, and looks at the basis of a trade-off between relevance through capitalization and reliability through expensing. The section “Intangible Asset Accounting: A Proposition” sketches our normative view on how intangible resources should be accounted for. The last section concludes.

THE GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP) OF INTANGIBLE ASSETS: A COMPARISON OF MAJOR STANDARD-SETTERS

Historically, the world’s most influential standard-setting organizations have been the FASB in the US, the ASB in the UK, and the IASC, which is the organization developing international accounting standards. Continental European countries have played a less important role in the development of “good accounting practice,” but this may change with the establishment of an accounting standard-setting organization within the European Union (EU), or with a stronger involvement of Continental European countries within the IASC.

FASB/US GAAP

The FASB is a private-sector body and the major player in the determination of GAAP in the US. So far, it has issued more than 135 accounting standards (not all are active) and various interpretations, opinions, and bulletins (see, e.g., Delaney, 1998; Williams, 1998 for a comprehensive guide to US GAAP). Underlying the FASB’s accounting standards is the conceptual framework (i.e., the objectives of accounting, the qualitative characteristics of useful accounting information and the fundamental concepts in accounting) given in SFAC 1–6.

The accounting standards in the US related to intangible resources include APB 16 *Business Combinations*, APB 17 *Intangible Assets*, SFAS 2 *Accounting for Research and Development*, SFAS 44 *Accounting for Intangible Assets of Motor Carriers*, SFAS 61 *Accounting for Title Plant*, SFAS 63 *Financial Reporting by Broadcasters*, SFAS 68 *Research and Development Agreements*, SFAS 72 *Accounting for Certain Acquisition of Banking or Thrift Institutions*, SFAS 86 *Accounting for the Costs of Computer Software to be Sold, Leased, or Otherwise Marketed* (see also SOP 98-1 *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, issued by AICPA), and SFAS 121 *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*. Some of the FASB Interpretations and Technical Bulletins are also related to intangible assets (e.g., Interpretations Nos. 4, 6, and 9, and Bulletins 84-1 and 85-5).

APB 17 covers both externally and internally developed intangibles (“patents, franchises, trademarks, and the like”), but not R&D costs covered by SFAS 2. APB

17 requires that identifiable intangible assets, irrespective of whether they are externally acquired or internally developed, should be capitalized at costs and amortized over their estimated useful lives. Internally developed unidentifiable intangibles should be expensed. In accordance with APB 17, SFAS 61 recommends that broadcasting licenses should be entered as an intangible asset in the balance sheet if certain conditions are met.

SFAS 121 requires that identifiable intangible assets should be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In performing the review, the entity should estimate the future cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future cash flows (undiscounted and without interest charges) is less than the carrying amount of the asset, an impairment loss should be recognized. Otherwise, no impairment loss should be recognized. Measurement of an impairment loss for long-lived assets and identifiable intangible assets, that an entity expects to hold and use, should be based on the fair value of the asset. Restoration of previous impairment is not permitted.

The costs of developing, maintaining, or restoring intangible assets that are not specifically identifiable, have an indeterminate life, or are inherent in a continuing business, or related to the business as a whole, should be deducted from income when incurred. Thus, goodwill should only be recognized as the costs of unidentifiable intangible assets when purchased as part of a business acquired (see also APB 16). Externally acquired goodwill should be amortized, usually by the straight-line method over its estimated life not exceeding 40 years.

According to SFAS 2, all R&D costs should be written off at the time they are incurred (see also SFAS 61, SFAS 68, and SFAS 86). However, the costs of materials, equipment, and facilities that are acquired or constructed for R&D activities and have alternative uses in other projects, should be capitalized. In line with SFAS 2, SFAS 86 requires that all costs incurred in establishing the technological and/or economic feasibility of software are to be viewed as R&D costs and expensed when they are incurred. Once economic feasibility has been established, subsequent costs should be capitalized as part of product inventory and amortized based on product revenues or on a straight-line basis. From the introduction of SFAS 2 to SFAS 86, there seems to be a less restrictive attitude toward capitalization. Whether this signals a shift in attitude towards capitalization remains to be seen.

ASB/UK GAAP

The ASB is a private-sector body and a major determinant of GAAP in the UK. It has adopted the accounting standards developed by its predecessor ASC, issued 15 new standards, a few amendments to existing standards, and a number of exposure drafts and discussion papers. For a comprehensive guide to UK GAAP, see Davies et al. (1997) and for a comparison between UK and US GAAP, see Pereira et al. (1997).

The accounting standards in the UK related to intangible resources include FRS 2 *Accounting for Subsidiary Undertakings*, FRS 3 *Reporting Financial Performance*, FRS 10 *Goodwill and Intangible Assets* (which supersedes SSAP 22), FRS 11

Impairment of Fixed Assets and Goodwill, SSAP 2 *Disclosure of Accounting Policies*, SSAP 12 *Accounting for Depreciation*, and SSAP 13 *Accounting for Research and Development* (see also the Companies Act of 1985).

According to FRS 10, the costs of externally acquired intangible assets, including purchased goodwill, should be recorded as assets and amortized over their useful lives. Negative goodwill is, somewhat controversially, to be shown as a negative asset in the assets section of the balance sheet, just below any positive goodwill. The costs of internally developed intangible assets, including R&D costs under SSAP 13, should be deducted from income when incurred, unless they have a readily ascertainable market value. Accordingly, capitalization of such assets will be rare in practice.

There is a presumption that the useful lives of purchased goodwill and intangible assets are limited to 20 years. However, there may be grounds for rebutting that presumption and setting a useful economic life that is greater than 20 years, or even indefinite. Impairment reviews should be performed to ensure that goodwill and intangible assets are not carried at above their recoverable amounts (see FRS 11). Intangible assets with readily ascertainable market values may be revalued by reference to those market values. The reversal of a past impairment loss on intangible assets may be recognized only if it can clearly and demonstrably be attributed to the unforeseen reversal of the external event that caused the recognition of the original impairment loss. Still, past impairment losses may not be restored when the restoration in value is generated internally or from purchased goodwill.

According to SSAP 13, all types of research expenditure, aimed at gaining new scientific or technical knowledge, should be written off as they are incurred (see also the Companies Act 1985, Schedule 4). Development expenditure, aimed at using scientific or technical knowledge for a specific commercial project, may however be capitalized and subsequently amortized if they satisfy certain, rather strict criteria. They require that there should be a clearly defined development project; the related expenditure is separately identifiable; the outcome of such a project has been assessed with reasonable certainty; the aggregate of the deferred development costs, any further development costs, and related production, selling, and administration costs are reasonably expected to be exceeded by related future sales or other revenue; and adequate resources exist, or are reasonably expected to be available, to enable the project to be completed and to provide any consequential increases in working capital.

Finally, what happens if a company has not capitalized development expenditure because the conditions were not met, but at a later date the uncertainties that led to its write-off no longer apply? The original SSAP 13 made it clear that such expenditures could not be reinstated as an asset; the revised SSAP 13 is however silent on the matter. Davies et al. (1997) believe that in such circumstances the expenditure should not be restated as an asset.

IASC/World GAAP

The IASC is an independent private-sector body working to achieve uniformity in the accounting principles that are used by businesses and other organizations for financial reporting around the world. A total of 133 professional accountancy

organizations in 103 countries are members; another 9 organizations are associate or affiliate members. IASC has issued 39 standards (not all are active), 63 exposure drafts, and 16 interpretations (see, e.g., Cairns, 1998; Epstein and Mirza, 1999 for a comprehensive guide to applying IASs). For a comparison between IASC Standards and US GAAP, see Bloomer (1996).

Among the accounting standards that are related to intangible resources are: IAS 4 *Depreciation*, IAS 5 *Information to Be Disclosed in Financial Statements*, IAS 22 *Business Combinations* (revised), IAS 36 *Impairment of Assets*, and IAS 38 *Intangible Assets* (superseding IAS 9); see also the Exposure Drafts E60 *Intangible Assets*, its predecessor E50, and E61 *Business Combinations*.

According to IAS 38, an intangible asset, including expenditure on advertising, training, start-up, and R&D activities, should be recognized at cost if and only if it is identifiable, it is probable that specifically attributable economic benefits will flow from the asset, and its cost can be measured reliably (see also Rivat, 1997, 1998). If recognized, an intangible asset, no matter whether it is purchased externally or generated internally, should be amortized over the best estimate of its useful life. However, there should be a presumption that the useful life is less than 20 years. If an intangible asset is amortized over more than 20 years, the enterprise should both disclose the reason why and test the asset for impairment at least annually in accordance with IAS 36 *Impairment of Assets*. Revaluation of an intangible asset is allowed if there is an active market for the asset (cf. IAS 16).

It follows from the recognition criteria of an intangible asset that practically all expenditure on R&D, start-up, training, and advertising should be expensed as it is incurred. IAS 38 also specifically prohibits the recognition as assets of internally generated goodwill, brands, mastheads, publishing titles, customer lists and items of similar substance. However, some development expenditure may result in the recognition of an asset.

According to IAS 22, an enterprise should account for the acquisition of another business at cost in the same way that it accounts for the acquisition of other assets and liabilities. Any excess payment over the amounts attributed to identifiable assets is purchased goodwill that should be capitalized and amortized over its life, a period normally not exceeding 20 years (see also E61). If an intangible item involved in a business combination does not meet the criteria for a separate intangible asset, the expenditure on this item should form part of the amount attributed to goodwill at the date of acquisition.

If an intangible item does not meet both the definition and the criteria for recognition of an intangible asset, the expenditure on this item should be expensed when it is incurred. IASC does recommend that "expenditure on an intangible item that was initially recognized as an expense by a reporting enterprise in previous annual financial statements or interim financial reports should not be recognized as part of the cost of an intangible asset at a later date" (see IAS 38, Section 59). However, the IASC "acknowledges that persuasive arguments can be mounted in favor of both approaches" (see E50). In their response to E60, the Association of Chartered Certified Accountants in the UK would like the costs of intangible items that have been written off to be reinstated if the situation changes (see *Accountancy*, February 1998, p. 78).

Some Remarks

In order to get accounting standards accepted, standard-setters have to carefully balance the various considerations affecting the relevance and reliability and, hence, informativeness of financial statements. In addition, they have to take into consideration the interests of reporting entities, users, and financial analysts. Sometimes these other interests do not coincide with more informative reporting, e.g., because it is too costly or it reduces the need for interpretation (which may not be in the business interests of financial analysts).

When it comes to intangible resources, standard-setters have been reluctant to recognize them as assets, particularly assets generated from activities such as R&D. This is because such recognition would be inconsistent with the asset recognition criteria and give reporting entities larger possibilities to manage earnings by recognizing doubtful or even imaginary assets. However, we might trace a greater willingness over time to recognize intangible resources as assets, especially by the IASC and ASB, presumably because of pressure from financial statement users (cf. e.g., Davies and Waddington, 1999). We expect this pressure to increase as the importance of intangibles increases over time.

Our review of how the FASB, the ASB, and the IASC account for intangible resources reveals little differences among these standard-setting organizations, presumably because they are all dominated by the Anglo-American accounting tradition, focusing on the capital market as the primary users of financial statement information. In order to get a broader view on accounting, we are now examining how some smaller EU/European Economic Area (EU/EEA) countries are accounting for intangible resources in their legislation and accounting standards.

THE GAAP ON INTANGIBLE ASSETS IN THE SCANDINAVIAN COUNTRIES: A COMPARISON

The work of the world's most resourceful standard-setting organizations often represents an implicit foundation for the accounting development in smaller countries, such as the Scandinavian countries. To find out more about the extent of harmonization, we review how Denmark, Norway, and Sweden are accounting for intangible resources. Another reason for focusing on these countries is that they have recently renewed their accounting legislation, and it is interesting to see how the reinforced challenge to account for intangible resources has been taken care of. Finally, the Scandinavian countries are members of the EU and/or the EEA, with EU Fourth and Seventh Directives fully or partially implemented in their accounting legislation (see, e.g., Kinsersdal, 1998, pp. 121–140 for a detailed presentation of the EU Fourth Directive).

Denmark

In Denmark, accounting is regulated by the Financial Statement Act of 1981 (LBK No. 526 af 17/06/1996 *Arsregnskabsbekendtgørelsen*; LBK No. 788 af 29/08/1996 *Oppstillingsbekendtgørelsen*). As a member of the EU, Denmark has implemented the Fourth and Seventh Directives in its Financial Statement Act. In addition to covering specific accounting issues and some basic accounting principles, the general requirement is that

Danish financial statements should give a true and fair view (“retvisende billede”; see Section 4.2 in LBK No. 526).

The major professional body for auditors, Foreningen af Statsautoriserede Revisorer (FSR), publishes International Accounting Standards in both English and Danish with comments and recommendations for the implementation by Danish companies. Since 1988, FSR has also published separate Danish Accounting Standards. The Copenhagen Stock Exchange requires listed companies to comply with these accounting standards. For a review of Danish accounting regulation, see, for example, Elling (1994) or Hansen (1998).

Intangible assets should be capitalized in the balance sheet in the following categories: (1) development costs, (2) concessions, patents, licenses, trademarks, and similar rights, (3) goodwill, and (4) payments on accounts related to intangible assets (see LBK 788 1996, Section 2).

Accordingly, capitalization of development costs is permitted under certain conditions (see also Danish Accounting Standard No. 7, and EU Fourth Directive, Article 9 or 10). When intangible assets are capitalized, they should be amortized over a period of up to 5 years as long as it is not explained in the notes why the life is beyond 5 years (see LBK 526, Section 36; cf. EU Fourth Directive, especially Article 35ab and 37.1). Any outstanding balance should be reviewed each year and written down to the recoverable amount if necessary (Section 29; cf. Article 35c in EU Fourth Directive). Revaluation is not permitted (Section 30). According to Section 19, it is not allowed to capitalize internally generated intangible assets, except development costs. Thus, it is purchased concessions, patents, licenses, trademarks, and other rights that should be capitalized under category (2) above.

Following the implementation of the EU Seventh Directive, purchased goodwill may be written off against reserves at the time of acquisition, taken through the profit and loss account, or recognized as an intangible fixed asset on acquisition and amortized over its useful life (LBK 788 Section 17; cf. Articles 19, 30, and 31). If the useful life is estimated to be more than 5 years, the reason must be explained in the financial statement notes (cf. Section 36).

Norway

In Norway, financial reporting is regulated by the Accounting Act of 1998 (Rekneskapslova av 17. Juli 1998 No. 56), which represents a legal framework for the application of general accounting principles. The basic requirement is that financial statements should be prepared in accordance with good accounting practice (“god rekneskapskikk”), which is a dynamic concept. As a member of the EEA, Norway has partially implemented the EU Fourth and Seventh Directives. Since 1990, Norwegian Accounting Standards have been prepared and published by Norsk Rekneskapsstifting (NRS). NRS has adopted six of the accounting standards prepared by the professional body for auditors, Den norske Revisorforening (DnR, formerly NSRF and NRRF), and published four accounting standards, several preliminary Standards and Exposure Drafts on their own. The Oslo Stock Exchange requires listed companies to comply with Norwegian Accounting Standards. For a review, see, e.g., Kinserdal (1994) or Eilifsen and Johnsen (1998).

The Accounting Act will be in force from 1999 (see NOU 30:95, Odelstingsproposisjon No. 42 (1997–1998) and Odelstingsinnstilling No. 61 (1997–1998)). In this new and rather revenue/expense-oriented act, basic accounting principles (such as transactions-based revenue recognition, matching of costs with revenues, loss recognition after prudence and hedging considerations; see Section 4-1 in the Act) act explicitly as the foundation for how GAAP should be applied, with several exceptions (e.g., market-based valuation of assets traded in liquid financial markets; see Section 5-8).

According to Section 6-2, intangible assets should be classified in the balance sheet in the following categories: (1) R&D costs, (2) concessions, patents, licenses, trademarks, and similar rights and assets, (3) deferred tax asset, and (4) goodwill. Amortized amounts and possible write-downs should, according to Section 6-1, be reported in the profit and loss account. In October 1998, NRS issued a proposed standard on intangible assets.

Identified intangible assets and purchased goodwill should be recognized according to the general rules for fixed assets, and therefore be capitalized at costs and amortized systematically over their useful life (Section 5-3). If the value is expected to be permanently less than the book value, the asset should be written down to its fair value. If the fall in value reverses, so should the book value up to the value it would have been recognized at were it not to have been written down. The expected useful life of each intangible asset and their amortization method should be disclosed in the financial statement notes (Section 7-15).

According to Section 5-6, an exception to the general recognition rule for fixed assets is given to internally generated R&D costs, which might be expensed immediately (see also Norwegian Accounting Standard No. 14). Anyway, the total R&D costs, their nature, and whether the expected benefits from this R&D are expected to exceed their costs should be disclosed each year in the notes (Section 7-14). According to Section 5-7, purchased goodwill should be amortized over its useful life. But if amortized over more than 5 years, the reasons for using a life of more than 5 years should be disclosed (Section 7-14). Information about purchased goodwill should also be given for each business combination that the entity is involved in. Internally generated goodwill should not be capitalized in the balance sheet, as this would not be in accordance with transactional-based recognition (Section 4-1).

According to Section 4-2, the income effect of estimate changes should be recorded in the period of changed expectations, if income recognition cannot be deferred according to good accounting practice. This could be interpreted to mean that if the estimated life of an intangible asset is changed from, say, 0 (i.e., from immediate expensing) to 10 years, then the previously expensed costs should be capitalized and amortized over the asset's remaining life. But such an interpretation is not recommended in NRS's standard on intangible assets.

Sweden

In Sweden, accounting is regulated by the Accounting Acts of 1976, 1980, and 1995 (Bokföringslag 1976:125; Årsredovisning m.m. i vissa företag 1980:1103; Årsredovisningslag 1995:1554). In addition to covering specific accounting issues and basic accounting principle, the main requirement in the accounting legislation is that financial

statements should be prepared according to good accounting practice (“god redovisningsssed”) and give a true and fair view (“Rättvisad bild”) (see Sections 2.2 and 2.3 in the Annual Accounts Act of 1995). As a member of EU, Sweden has implemented the Fourth and the Seventh Directives.

Swedish Accounting Standards are issued by Redovisningsrådet (RR), which includes members from the government, business, and certified auditors (organized in Föreningen Auktoriserade Revisorer, FAR). RR has adopted some of the accounting standards, draft recommendations, and statements of its predecessors (FAR and Bokföringsnämnden (BFN)), and prepared and issued several accounting standards of its own. The Stockholm Stock Exchange requires listed companies to comply with these standards. For a review of the Swedish accounting regulation, see, e.g., Jönsson and Marton (1994) or Heurlin and Peterssohn (1998).

According to Section 3.3 in the Annual Accounts Act of 1995, intangible assets, if recognized, should be classified as fixed assets in the balance sheet and specified in the following categories: (1) capitalized cost of R&D and similar projects, (2) concessions, patents, licenses, trademarks, and similar rights, (3) tenancy agreements and similar rights, (4) goodwill, and (5) payments on accounts (cf. EU Fourth Directive, Article 9 or 10).

If intangible assets are capitalized, they should be amortized over a period not exceeding 5 years, unless a longer period can be determined with reasonable certainty (Section 4.4). If the latter is the case, details of why the expected life exceeds 5 years should be disclosed. If the estimated value of an intangible asset is less than the book value, and the fall in value is not temporary, it should be written down (Section 4.5). Revaluation of intangible assets is not permitted (Section 4.6).

According to Section 4.2, R&D and similar projects may be capitalized or expensed immediately in the period in which they are incurred. In accordance with Swedish Accounting Standard BFN R1, the general rule is that R&D costs are charged directly to expenses. Development costs may be capitalized provided they satisfy certain criteria (see also BFN 88:15–16 on computer software capitalization). A new accounting standard on intangible assets, replacing BFN R1, is expected during 1999. According to Swedish Accounting Standard RR 1, purchased goodwill should be amortized over its expected useful life. It should not exceed 5 years unless special circumstances would support a longer life; under no circumstances, should the expected life exceed 20 years. Internally generated goodwill should not be capitalized in the balance sheet.

Some Remarks

The reporting of intangible resources in Scandinavia follows the EU Fourth and Seventh Directives in which intangible assets should be capitalized in the balance sheet. R&D costs may be expensed when they are incurred. This option has often been used in practice, because expensing in the financial statement has been required for tax deductions.

Our review of accounting practice reveals that the Scandinavian countries have been less reluctant to recognize intangible assets in the balance sheet than standard-setting organizations in the UK, the US, and the IASC. However, the less restrictive attitude

toward capitalization is partly compensated by a shorter period of recommended amortization when recognized. In Scandinavia, purchased goodwill, for instance, should be amortized over a period not exceeding 5 years unless it is explicitly disclosed why the amortization period should be longer than 5 years. According to the ASB and the IASC, the period of goodwill amortization should not exceed 20 years, whereas the FASB sets the limit to 40 years.

A relevant question is why Continental European countries, including the Scandinavian ones, have been less reluctant to recognize intangible assets in the balance sheet than Anglo-American countries. In credit-oriented economies, such as the Central European ones, it is important to signal the value of the collateral to banks as the main sources of finance. In more equity-oriented economies, such as the Anglo-American ones, it is important to signal value to investors. Could these differences explain the identified difference in attitude toward the capitalization of intangible resources? Or is the more liberal view on capitalization a result of these countries lacking a well-developed conceptual framework that both helps them resolve these types of issues and constrain the possible choices available? In the following section, we are focusing upon whether the informational need of investors implies a restrictive attitude toward capitalization of intangible resources.

INTANGIBLE ASSETS: VALUE-RELEVANCE, RELIABILITY, AND THE CHOICE OF ACCOUNTING PRINCIPLES

The purpose of financial statements should be to provide information relevant for users in making economic decisions (see SFAC 1 *Objectives of Financial Reporting by Business Enterprises*). Thus, intangible resources should be accounted for to maximize the informational relevance of financial statements to users, especially current and prospective investors.

Financial statements have been criticized for not recognizing intangibles as assets (i.e., as future economic benefits) but merely as costs, which are expensed in the period in which they are incurred. As the importance of intangible assets is expected to be increasing in the world economy, the relevance of financial statements is expected to decline, since a larger part of the assets is missing from the balance sheet and their performance is distorted (see, e.g., Lev. 1997).

The critics of immediate expensing of intangible resources argue that such investments should be capitalized and their costs amortized to improve the matching of costs with future benefits. This, they argue, would improve the relevance and informativeness of financial statements. But the problem with most intangible assets is that they are difficult to identify and their expected future benefits are often considerably more uncertain than for tangible assets. By applying prudence and various asset recognition criteria based on a balance sheet-oriented view on accounting, standard-setting organizations and other regulators have been reluctant to recognize some intangible resources as assets. But since prudence and the conceptual framework could be taken care of within a system where intangible resources are accounted for, standard-setting organizations, such as the IASC in IAS 38, have lately been more willing to change their focus from prudence towards recognition.

Value-Relevance

Information is relevant if it has the capacity to confirm or change a decision-maker's expectations. Thus, the value-relevance of a financial statement is its ability to confirm or change investors' expectations of value.

If shares were traded among investors, the market price would summarize their expectations of value. The value-relevance of financial statements could therefore be measured by the response in the market price or volume when accounting numbers are published (i.e., through response coefficients), or by their ability to explain variations in the market price or volume (as measured by R^2 , i.e., the explained variation relative to the total variation). A third more uncommon measure of value-relevance is the total return that could be earned from pre-disclosure knowledge of financial statement information. The advantage of using security market data when measuring value-relevance is that the associations reflect actual investor actions rather than their intended actions as is the case with questionnaire or survey evidence.

The association between accounting numbers and stock market valuation has been well documented by numerous empirical studies, initiated by Ball and Brown (1968) and Beaver (1968) (see, e.g., Lev, 1989 for a review). One approach is to study the security market reaction around the time accounting numbers are released (i.e., through event studies); another is to study the long-term association between accounting and market metrics. The first type of studies is used to infer whether new information is conveyed to the market by the release of accounting reports; the other type provides evidence on the extent to which the information contained in accounting reports is related in the information reflected in security prices over longer time intervals. In his review, Lev (1989) claims that the association between earnings and market valuation has produced embarrassingly small R^2 (see also Lev and Zarowin, 1999; Lang and Warfield, 1997 for similar concerns; Patell, 1989 for a critical discussion of R^2 as a measure of value-relevance). Lev concludes that accounting policy-makers should be concerned and suggests corrective actions.

A growing number of empirical studies have also documented that the value-relevance of accounting has been decreasing over the past decades as accounting numbers, especially reported earnings, are less able to explain variations in stock prices than before (see, e.g., Rayburn, 1986; Beaver et al., 1987; Board and Walker, 1990; Easton and Harris, 1991; Ramesh, 1991; Ramesh and Thiagarajan, 1995; Hayn, 1995; Lev and Zarowin, 1997; Aboody and Lev, 1999; Lev and Zarowin, 1999). Lev and Zarowin (1999) had suggested intangibles as a culprit in the decline because investment in intangible assets has increased significantly over time, and because the current accounting practice for intangibles creates a discrepancy between the valuation implied in firms' earnings and their stock prices.

Lev and Zarowin (1997), for instance, found that the value-relevance of earnings has been decreasing over the past 20 years, whereas the intangible intensity (i.e., expensed cost related to intangibles as a percentage of sales) has been increasing in the same period. To test whether the increased intangible (or rather R&D) intensity has been causing the decline in the information content of earnings (as measured by the earnings response coefficient and the R^2), Lev and Zarowin divide their sample firms into two groups. For firms with an increasing intangible intensity, Lev and Zarowin found the greatest decline in value-relevance. For the firms with a decreasing intangible intensity,

they found the greatest increase in value-relevance. Thus, the results of Lev and Zarowin support the hypothesis that inter-temporal changes in intangibles (especially R&D) are a part of the explanation for the inter-temporal decline in the information content of reported earnings (see also Lev and Sougiannis, 1996; Chambers et al., 1998 for similar findings).

Collins et al. (1997) found also that the value-relevance of earnings has been declining over the past 40 years, whereas the value-relevance of book value has increased (see also Dichev, 1997; Ely and Waymire, 1998; Francis and Schipper, 1999). The combined evidence from the literature is that value-relevance of earnings and book value has not declined. In fact, it appears to have increased slightly. These findings challenge the view of Lev and Zarowin (1999) and others that the value-relevance of financial statements has been declining. But the findings are not necessarily inconsistent with the view that the lack of capitalization of intangible assets makes financial statements less value relevant than they might have been.

To summarize; the research reviewed above presents some, but not conclusive, evidence that the value-relevance of earnings has decreased over time, with some of that decline resulting from the lack to account for intangible assets. However, when supplemented with balance sheet and other accounting information, there is less consistent evidence of a decline in the valuation-relevance of financial reports. The decline in value-relevance could also be attributed to the increase in general market volatility (see, e.g., Francis and Schipper, 1999).

The studies, reviewed above, were based on US data. King and Langli (1998) examined the value-relevance of accounting in Germany, Norway, and the UK (see also Harris et al., 1994; Joos and Lang, 1994; Frankel and Lee, 1996; Bartov et al., 1997). R^2 is found to be lower in Norway than in the UK, and lower in Germany than in Norway. King and Langli also observed that while the value-relevance of earnings and book value increased over time in Germany, they decreased over time in Norway and the UK.

These findings might suggest that European countries with an Anglo-American accounting basis have faced the same decline in value-relevance in the last decades as appears to be the case in the US. Whereas European countries with a Continental accounting basis have faced increased value-relevance, perhaps since they are shifting slowly from a creditor-oriented, tax-driven accounting system to a more shareholder-oriented system with deferred tax accounting. This shift in orientation is informative to shareholders and yet dominating the effect caused by increased intangible assets. Later, however, countries with a credit- and tax-oriented accounting system could face a similar reduction in value-relevance as has happened in the US and the UK. In this light, Norway should, up until recently, have witnessed an increase in value-relevance, making King and Langli's (1998) results somewhat surprising. Hope (1999) found a significant increase in value-relevance in Norway after that country introduced deferred tax accounting in 1992.

Intangible Asset Accounting: A Trade-Off Between the Relevance, and Reliability of Capitalization/Expensing

If the current (and rather prudent) way of treating intangible resources in financial statements has affected the value-relevance of accounting numbers negatively as

suggested by some of the empirical studies discussed in the preceding sub-section, an obvious way of improvement would be to be less prudent when recognizing and measuring intangible assets (cf. e.g., Deng and Lev, 1998). Nevertheless, by becoming less prudent there is a risk of overdoing it, which would undermine value-relevance because measured income and equity would become too unreliable. This trade-off between the relevance and reliability of capitalization/expensing is explicitly recognized and discussed in SSAP 13 *Accounting for Research and Development*, see also SFAC 2 (Bierman and Dukes, 1975; Kothari et al., 1998). Chambers (1996) is critical to the outcome of such balancing motives.

Intangible assets have value because they, like tangible assets, are expected to produce future benefits for the entity. This means that, in principle, the same accounting treatment should be applied to both types of assets (see, e.g., Hendriksen and Van Breda, 1992). When an intangible asset is acquired externally or created internally, the matching principle requires that its costs should be capitalized and subsequent amortized over its useful economic life. If the economic value of the asset is less than the book value (impairment-test), it should be written down to the economic value. If, in a later period, the economic value increases, the book value of the intangible asset should be reversed, but not, within a historical cost accounting system, above acquisition costs with the deduction of accumulated amortization.

So far, so good; but when is an intangible asset acquired externally or created internally? Assets are defined by FASB in SFAC 6 (Section 25) as “probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events,” and according to SFAC 5 (Section 63), “an item should be recognized when it (a) meets the appropriate definition, (b) is measurable, (c) is relevant, and (d) is reliable.” Anytime an intangible resource meets these criteria, it should be recognized as an asset in the balance sheet.

It follows from the transactional-based definition of assets that if there is an arms-length transaction, which normally is the case when intangible resources are acquired externally, the resulting intangible resource should be recognized as an asset and capitalized in the balance sheet (see, e.g., Farquhar et al., 1992 for an application to brands). This means also that purchased goodwill should be capitalized and then amortized over its useful life.

Internally developed intangible resources can be created through a series of transactions with external parties, through activities or internal events, or through a combination of external and internal transactions and events. The main difference is that transactions are based on the reporting process that measures external events—the transactions; activities are based on the continuous value creating process curtailed in every business. Within the framework of the transactions-based, historical cost accounting system, only resources created by transactions should be recognized as assets. This implies that internally generated goodwill should not be recognized as an asset. Whereas R&D costs should be capitalized as long as they are the results of transactions with various internal and external suppliers, making it possible to measure these costs accurately, and as long as they are expected to produce future economic benefits (higher revenue or reduced costs).

Intangible resources have some distinctive characteristics that are relevant when evaluating whether they should be recognized as assets or not: (1) they have few or no alternative uses as many intangibles are rather firm-specific and difficult to utilize for others; (2) problems with, or even lack of, separability as many intangibles only have

value in combination with tangible assets; (3) difficulties with determining whether the asset originally recorded is being maintained or whether a new asset is being gradually substituted for it; and (4) greater uncertainty of whether their costs will bring about future economic benefits. Accounting theory recognizes the fact that these characteristics may in particular circumstances demand a different, more prudent treatment of intangible resources, especially that the recoverable value of intangibles is less reliable than for other fixed assets. See, e.g., Bierman and Dukes (1975), Nixon (1997), and Kothari et al. (1998) for the views of company accountants on these matters, expressing many of the concerns referred to here.

Furthermore, since intangible resources are difficult to verify, they could be used to manage or even manipulate reported earnings. A firm that benefits from boosting income, e.g., before it lists its stocks on a stock exchange, could be tempted to capitalize newly developed intangible assets, even though these assets fail to meet the asset recognition criteria. Financial analysts should therefore consider intangible assets as "red flags" (see, e.g., Hawkins, 1986).

The discussion above suggests that there are two ways in which prudence is affecting intangible resources and thereby the matching of intangible related costs with future benefits: (1) by not recognizing intangible resources as assets unless they satisfy certain, rather strict asset recognition criteria and thereby relying upon frequently expensing of costs that otherwise should have been capitalized, and (2) by frequent use of impairment tests with or without revaluation.

INTANGIBLE ASSET ACCOUNTING: A PROPOSITION

Generally, there are two non-exclusive ways of combining matching with prudence: (1) capitalization with amortization and impairment tests, and (2) expensing with conditional reversion.

Capitalization with Amortization and Impairment Tests

When an intangible resource is acquired or created and its future economic benefits are within "reasonable certainty," so that the recognition criteria of an asset are satisfied, its cost should be capitalized and subsequently amortized over its useful life. If the expected value of the asset falls below its book value, the book value has to be written down immediately to its expected value (impairment test). Should the expected value later increase, the book value has to be revalued, but not above cost (i.e., acquisition cost minus accumulated amortization). If the intangible asset is correlated with other assets, the assets should be considered as a portfolio and hence written down and reversed on a portfolio basis. See also Blockington (1995), for an overview of some related treatments.

An example illustrates. Suppose a pharmaceutical firm has used \$1,000 to develop a new brand. If the brand becomes a success in the market, its gross value is \$10,000; if it becomes a failure, its gross value is \$0. Assuming that the probability of success is 50 percent, its expected gross value is \$5,000 and its net expected value is \$4,000. If 50 percent is within "reasonable certainty," the firm should capitalize the brand at \$1,000,

and if its useful life is 10 years, amortize \$100 a year (assuming that linear amortization is appropriate according to expected cash flow).

Suppose that in the subsequent period, the firm observes no benefits from the brand and realizes that the value of the brand is \$0. Then the book value of \$900 should be written down to \$0. In this way, information is communicated effectively from the firm to, say, its investors. The capitalization of the development costs of \$1,000 in the first period reflects the expectations of future economic benefit, and the first year's amortization of \$100 reflects matching with revenues. The matching is imperfect as the revenues have yet to be realized. Whereas the loss of \$900 in the second period reflects the unfulfilled expectations.

This way of recognizing intangible assets is identical to that of fixed tangible assets, except that the impairment test in practice is between the carrying amount and the recoverable amount (see, e.g., IAS 36 *Impairment of Assets* for further details). Accordingly, when the future benefits of intangible assets are within "reasonable certainty" so that the ordinary criteria for asset recognition are valid, then intangibles should be accounted for as other fixed assets.

If an intangible asset is recognized and capitalized in the balance sheet, the FASB, the ASB, and the IASC have all chosen to test for impairment, with or without an option to reverse to costs if the value later increases. In this way, they are combining matching with prudence.

Expensing with Conditional Reversion

When an intangible resource is acquired or created, but its future economic benefit is beyond "reasonable certainty" so that the ordinary criteria for asset recognition are not valid, its costs should be expensed in the period in which they were incurred. The costs should be expensed even though the expected value of the intangible resource is positive (conservatism). If, in a subsequent period, the future economic benefits start to flow and thus become within "reasonable certainty," the previously expensed costs should be capitalized and amortized over its remaining life (cf. Lev and Zarowin, 1999). The capitalization should be performed using the original acquisition or production costs with the deduction of accumulated amortization from the time of expensing to the time of capitalization. The reversion of previously expensed costs is not a violation of the historical cost principle, as the reversion is limited by costs.

Capitalizing previously expensed costs creates an income that should be recognized in the period when the future benefits from the intangible assets are expected with "reasonable certainty." In this way, the ex post error made by not capitalizing the intangible asset in the balance sheet would decrease earnings in the period in which its costs are expensed, and increase earnings in a subsequent period when its future benefits are recognized with "reasonable certainty."

An example illustrates. Suppose a pharmaceutical firm has used \$1,000 to develop a new brand. If the brand proves to be a success in the market, its gross value is \$100,000; if it becomes a failure, its gross value is \$0. Assuming that the probability of success is 5 percent, its expected gross value is \$5,000 and the expected net value is \$4,000. If 5 percent is below "reasonable certainty" so that the asset recognition criteria are not met,

the firm should expense the cost of \$1,000 when incurred. If, the following year, the firm becomes certain that the brand is a success, the firm should capitalize \$900 (which equals the development cost of \$1,000 with the deduction of the previous year's amortization of \$100, assuming that the useful life of the brand is 10 years). The earnings are reduced by \$1,000 the first year, increased by \$800 the second year, and decreased by \$100 the next 8 years to match the large revenues created by the brand.

In this way, information is effectively communicated from the firm to, say, the stock market. The fall in earnings in year 1 reflects the fact that the firm is taking on a risky investment; the rise in year 2 reflects the resolution of uncertainty, and the fall in earnings in the next 8 years is matched with the revenues produced by the brand. Over the 10-year period, the higher variance in earnings would effectively reflect and, hence, signal the *ex ante* risk taken by the firm. This is consistent with, for instance, Barth and Clinch (1999) who found that revalued (i.e., impaired and reversed) intangible assets are highly value-relevant.

None of the standard-setting organizations FASB, ASB, or IASC are currently recommending entities that are expensing the costs of intangible resources, to capitalize some of the costs in a later period if the asset recognition criteria then are satisfied. As long as the criteria are not met when the costs are incurred, they are just recommending the entities to expense the costs—not to capitalize some of the costs later on. As expensing of, say, development cost could be seen as capitalization with an immediate write-off to zero, it should be consistent with capitalization combined with amortization, impairment, and restoration—the method chosen when the asset recognition criteria are satisfied. It makes little sense not to allow capitalization of previously expensed costs when re-capitalization of previously written-off assets are required or permitted (e.g., by the ASB and the IASC). The reversion should be seen as a change of estimate, and hence be recognized as an income in the period where the estimate is changed (e.g., IAS 8 states that a change in accounting estimate should be reflected prospectively, but the IASC has not fully implemented this view). According to the FASB, restoration of previous impairment should not be permitted.

Combining Capitalization and Expensing

According to our view, the first method (called capitalization with amortization and impairment) could as a practical rule be applied to externally generated or acquired intangible assets, whereas the second method (expensing with conditional reversion) could be applied to internally generated or created intangible assets, since the economic benefits from internally generated assets are less reliable (cf. Lev and Zarowin, 1999).

A way of further limiting the use of conditional reversion is to require that in order to reverse previously expensed costs, the entity should initially disclose in its notes that a possible intangible asset has been created, but the extent of uncertainty requires that it should presently be expensed and not capitalized. By doing this, the entity has an off-balance sheet portfolio of potential intangible assets. Only in the circumstances where a possible intangible asset has been disclosed in advance and has been added to the portfolio of potential assets, should the entity be able to reverse previously expensed costs if, at a later period, the asset recognition criteria are satisfied. This

would limit the possibility to smooth or otherwise manage or manipulate income, since the entity cannot find any arbitrary costs that previously have been expensed and claim that these costs now give birth to an intangible asset.

In order to combine the two methods as proposed, the key variable is the definition of reliability in terms of what is “reasonable certainty” for capitalizing an intangible asset. Two approaches are possible.

1. The entities should determine what is “reasonable certainty” and state their choice in a footnote. Users of financial statements would then know whether the entity is conservative, i.e., expensing and then capitalizing if the investments in intangible assets turn out to generate future benefits, or liberal, i.e., capitalizing and then writing the investments down if their market values turn out to be less than their costs. This would affect the earnings quality of the entities.
2. Standard-setting organizations and other accounting regulators such as national legislators should agree upon a definition of “reasonable certainty.” If they define “reasonable certainty” to be 100 percent, they are in fact requiring the entities to expense the costs of intangible assets. If they define it to be 0 percent, they are requiring the entities to always capitalize the costs of intangible assets and then amortize or write them off immediately or in later periods. Presumably, the optimal policy lies somewhere in between, e.g., by requiring that an asset should be partly or fully capitalized as long as its expected net present value is positive and that the probability that its gross value is greater than costs, is above, say, 75 percent (i.e., “reasonable certainty” is above 75%). In addition, “reasonable certainty” could be differentiated among types of intangible assets, e.g., externally generated versus internally generated, with stricter requirements for the latter.

The major argument in favor of letting the entities themselves determine what should be expensed and what should be capitalized, is that they could better adjust the reporting to underlying economic realities. However, this could also be used to mislead, for instance, investors by capitalizing extremely uncertain investments in intangible assets in an attempt to boost stock market value.

The major argument in favor of letting standard-setting organizations and other regulators regulate the accounting choices is harmonization of accounting practices by firms, which could simplify the financial statement users’ interpretation process and reduce the risk of creative accounting. The cost of harmonization is that the entities become less equipped to report information so that investors and others could judge the entities’ real return on investment.

CONCLUSIONS

After having reviewed how intangible resources are treated by some standard-setting organizations and legislators, our impression is that intangible assets are accounted for too conservatively, e.g., by requiring immediate expensing of R&D costs or making recognition of intangibles created through R&D very difficult. This might, as suggested by recent empirical studies, hamper the value-relevance of financial statements.

To bridge the supposedly increasing information gap caused by the lack of intangible asset recognition, we do not propose to start capitalizing doubtful intangible assets, but to require that previously expensed intangibles should be capitalized in a later period when the criteria for asset recognition are met (cf. Lev and Zarowin, 1999). To limit earnings management, there could also be a requirement that in order to reverse previously expensed costs, the entity must have disclosed the possibility that an intangible asset is created at the time of initial expensing. This will, in our view, give better information signals to investors and other financial statement users and thereby increase the value-relevance of financial statements.

For instance, the expensing of R&D costs in the period in which they are incurred, is a signal that the expense does not meet the outlined asset recognition criteria, e.g., because the future benefits are too uncertain to be recognized. Later, if it turns out that the R&D costs have, within "reasonable certainty," produced an asset that will generate future benefits, the costs (i.e., the initial development costs minus accumulated amortization from the start of the development project to recognition) should be capitalized and amortized over the remaining life of the asset. This gives the information, within the historical cost accounting system, that an asset has been created and its value (i.e., cost) has been recognized both as a reversed cost and as an asset. The variation in income due to the preliminary expensing and subsequent income recognition is a signal of risk.

Today, however, standard-setting organizations do not recommend that previously expensed costs related to intangible resources should be capitalized if, in a subsequent period, the criteria for an intangible asset are met. But in the future, we believe that standard-setting organizations should allow partial reversion of previously expensed costs if the criteria for capitalization are met, to increase the value-relevance of financial statements.

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The Relevance and Observance of the IASC Standards in Developing Countries and the Particular Case of Zimbabwe

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Key Words: Developing countries; Harmonization; International Accounting Standards (IASs); International Accounting Standards Committee (IASC); Compliance with; Zimbabwe

***Abstract:** An important outgrowth of the International Accounting Standards Committee's (IASC) international accounting harmonization program is the adoption of its standards by a considerable and increasing number of accounting professional bodies in developing countries. This has taken place against the backdrop of academic arguments suggesting that the IASC standards are irrelevant and/or even harmful to these countries. This contradiction and the question of the relevance of the IASC standards to developing countries are evaluated and explored further (in this article), using Zimbabwe as a case study. The article also examines de facto compliance with the IASC standards by a sample of listed Zimbabwe companies. The results of both the compliance level and the impact of the IASC standards on the reporting practices of listed Zimbabwe companies (a) appear to be significant; and (b) seem to buttress the conclusion that the IASC standards are relevant to Zimbabwe and similar capitalistic developing countries where the "shareholder/fair view" is paramount. These results suggest important implications for the IASC's standardization program.*

This study seeks to contribute to the literature on international accounting harmonization by (a) examining and evaluating further the relevance of the International Accounting Standards Committee (IASC) standards to developing countries, using Zimbabwe as a case study; (b) measuring the extent to which corporations in Zimbabwe conform to the IASC standards; and (c) measuring the impact of the IASC standards on the accounting and reporting practices of enterprises in Zimbabwe.

The increasing growth in international trade and investment has brought to the forefront problems engendered by differences in accounting reports used in many different countries. Studies have demonstrated, in a variety of ways, that (a) differences in financial accounting measurement and reporting practices do exist; and (b) these

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differences do actually create problems of misunderstandings, inefficiencies, and uncertainties to participants in the global economy (Evans and Taylor, 1982; Arpan and Radebaugh, 1985; Peavey and Webster, 1990; Choi and Levich, 1991; Purvis et al., 1991). Three major schools of thought have been proffered as responses to the problems caused by accounting diversity in different countries. These are (1) the universal (or uniform) accounting school; (2) the comparative (or multinational) accounting school; and (3) the international accounting harmonization school (Weirich et al., 1971). The international accounting harmonization school has been widely accepted as the most expedient and pragmatic.

Consistent with the international accounting harmonization school, as many as 16 governmental and non-governmental organizations have attempted to harmonize accounting measurement and reporting practices at both regional and global levels (Arpan and Radebaugh, 1985). Of these 16 organizations, the IASC has emerged as the most active and preeminent standard-setting body of International Accounting Standards (IASs). Its position has been enhanced by the fact that important regional and global organizations (namely, the European Community, the Organization for Economic Cooperation and Development, the International Federation of Accountants and the United Nations) have now decided to stop issuing regional or international standards, bulletins or directives on accounting topics, and now recognize the IASC as the organization best suited to develop IASs. The IASC also continues to receive increasing support and encouragement from the International Organization of Securities Commission (IOSCO) (Cairns, 1990; Choi and Levich, 1991). The London Stock Exchange (the international capital market with the largest number of foreign listings) now requires foreign listed firms to comply with the IASC standards (Bhushan and Lessard, 1992).

As of March 1997, the IASC had issued a total of 33 IASs. Between 1992 and 1997, 14 of these IASs were revised. In 1991, the IASC also published the "Framework for the Preparation and Presentation of Financial Statements." The membership of the IASC has increased rapidly over the years. When the IASC was founded in 1973, it had 16 members from nine countries. By January 1983, it had 88 members from 64 countries, by January 1992, there were 105 members from 78 countries, and by September 1999, there were 143 members from 104 countries. The proportion of IASC members from developing countries shot from 6 percent in 1973 to about 84 percent by September 1999. The majority of the IASC members from developing countries have adopted the IASs (Cairns, 1990; Gemon et al., 1990). The number of professional accounting bodies from developing countries joining the IASC and adopting its standards has increased despite overwhelming academic arguments suggesting that the IASs are irrelevant or even harmful to these countries (Briston, 1978; Samuels and Oliga, 1982; Perera, 1985, 1989). The description "developing countries" refers to those countries in the midstream of economic development (Wallace, 1990).

The extant literature on the relevance of the IASC standards to developing countries is, by and large, (a) general and overall (Perera, 1989; Cairns, 1990); or (b) biased (Briston, 1978; Samuels and Oliga, 1982; Perera, 1985). Although the studies by Briston (1978), Samuels and Oliga (1982), and Perera (1985) use case studies of specific developing countries to illustrate and buttress their arguments, *all* the countries used (Egypt, Indonesia, Sri Lanka, and Tanzania) nationalized foreign-owned enter-

prises (after independence) and radically changed from capitalistic to communistic economies. It is therefore asserted here that studies of *specific* and *different* (that is, capitalistic) developing countries are essential if the issue of the relevance of the IASC standards is to be further explored meaningfully and profitably. This assertion recognizes that (1) "Accounting is an applied discipline and as such is strongly influenced, in all manner of ways, by the environment in which it is embedded and by the ends it is expected to serve" (Peasnell, 1993); (2) national environments and accounting needs of developing countries differ from country to country; and (3) there are limitations and risks associated with unqualified generalizations on issues pertaining to "developing countries" because these countries are not a homogeneous group. The need to examine the relevance of the IASC standards to capitalistic developing countries becomes even more important when it is realized that many communistic developing countries and orthodox communist countries have moved (or are moving) from centrally-planned to capitalistic economies.

A number of studies have attempted to evaluate the IASC's international accounting harmonization efforts (Nair and Frank, 1981; Evans and Taylor, 1982; McKinnon and Janell, 1984; Douplik and Taylor, 1985; Douplik, 1987; Nobes, 1987, 1990; IASC, 1988; Van der Tas, 1988). A review of these studies reveals that the majority of them have evaluated the IASC's international accounting harmonization efforts at *regulatory or standard-setting level* in both developing and developed countries. The few studies (Evans and Taylor, 1982; Nobes, 1987, 1990; Van der Tas, 1988) which examined international harmonization of accounting practices at *company level* have *only* used reports of corporations in developed countries. No study appears to have measured (a) the extent to which corporations in developing countries comply with the IASC standards, or (b) the impact of the IASC standards on the accounting measurement and disclosure practices of enterprises in developing countries. These omissions are lamentable for a number of reasons. Firstly, most accounting professions in developing countries do not have national standard-setting bodies, hence, the majority of them simply adopt the IASC standards as issued. Given this backdrop, any harmonization study at *standard-setting level* in these countries is futile. The fundamental issue is the extent to which enterprises in developing countries conform to the IASC standards. Secondly, the target of the international harmonization effort is to have comparable financial reports published by enterprises in different countries and not merely having internationally harmonized accounting standards. Thirdly, the real challenge to the IASC members from developing countries and the ultimate test of their pledge of "best endeavour," does not lie in the adoption of the IASs, but in ensuring that the IASC standards adopted are observed by enterprises in their respective countries. Finally, over 80 percent of the IASC members are from developing countries and the majority of them have adopted the IASs.

In Zimbabwe, authority to develop accounting standards rests with the Institute of Chartered Accountants of Zimbabwe (ICAZ) which was founded in 1918. Its membership stood at 1,190 in early 1998. In 1974, ICAZ joined the IASC as an associate member. Since joining the IASC, the ICAZ has (a) participated in IASC's Steering Committees; (b) suggested new topics for standardization to the IASC Board; and (c) organized the examination of exposure drafts issued by IASC and communicated to IASC comments arising from the examination. On 27 July 1977, the ICAZ initiated the

formation of the Zimbabwe Accounting Practices Board (ZAPB) with the aim of spearheading the development of national accounting standards. The ZAPB has eight constituent members who represent the five accounting professional bodies, the Zimbabwe Stock Exchange (ZSE), the mining and industrial sectors. To date, the "Zimbabwe Accounting Standards" are established by adopting IASs following a "due process." All exposure drafts issued by the IASC are examined by members of the ZAPB and comments arising from such examinations are communicated to the IASC by the ICAZ. When the IASC issues a new IAS, the ICAZ and the ZAPB re-examine it to ensure that it is consistent with local laws and regulations. If the new IAS is ratified by the ZAPB, it is issued in its original form as a "Zimbabwe Accounting Standard." This was done in the case of all IASs 1 to 33 except IASs 15 and 29. All the IASs ratified and adopted by the ZAPB have not been modified. However, in order to facilitate the interpretation and use of IASs 12 and 24, guidelines were developed and issued. As of May 1996, some of the definitions, measurement methods, and disclosure requirements of the IASs adopted in Zimbabwe were incorporated into law. This was done through the publication of Statutory Instrument 62 of 1996 entitled "Companies (Financial Statements) Regulations."

ARE THE IASC STANDARDS RELEVANT TO DEVELOPING COUNTRIES?

The question of the relevance of the IASC standards to developing countries has aroused considerable interest notably among academic accountants. On the one hand, cogent arguments have been proffered to buttress the assertion that the IASC standards are relevant to developing countries (Cairns, 1990). On the other hand, academic accountants especially, have strongly questioned the relevance of the IASC standards to developing nations (Briston, 1978; Samuels and Oliga, 1982; Perera, 1985, 1989; Hove, 1986). Some of these studies discuss the relevance of the IASC standards from a general perspective (Perera, 1989; Cairns, 1990). Other studies generalize conclusions from the analysis of a group of developing countries (Hove, 1986). Yet other studies appear to generalize conclusions based on an examination of specific developing countries (Briston, 1978; Samuels and Oliga, 1982; Perera, 1985).

These studies have made important contributions to the debate on the relevance of the IASC standards to developing countries. However, there are limitations and dangers when generalized conclusions are made regarding the (ir)relevance of the IASC standards to developing countries. The limitations and dangers emanate essentially from the fact that developing countries are an amorphous and heterogeneous group. Developing countries show diversity in many respects. First, the group includes countries in different geographical locations (in Africa, Asia, Latin America, the Middle East, the Oceania, and Western Europe). Second, the group includes countries with different historical developments and economic philosophies. Included are (a) countries which were colonized (e.g. Mozambique) and former imperial countries (e.g. Portugal); and (b) communistic and capitalistic countries, with others having changed from capitalistic economies to communistic and then back to capitalistic economies (e.g. Egypt). Third, developing countries include countries at different stages of economic development. Included are the rapidly industrializing countries like Hong Kong and Singapore and the

least developed countries. Also included are countries with abundant natural resources like Kuwait and Angola and countries impecunious in natural resources such as Tanzania. Appendix A highlights the magnitude of the diversity among developing countries compared to developed countries by focusing on selected economic and social indicators. This comparison excludes the former Eastern-bloc countries. The Appendix A shows that the range of selected economic and social indicators is much wider among developing than among developed nations. This underscores the diversity among developing countries.

Some researchers have explicitly recognized the magnitude of the differences that exist between and among developing countries. For example, Scott (1968) pointed out that the generalized conclusions reached in his article “may need to be radically modified to fit the unique environment of a particular developing nation, and it is recognized that some of the conclusions may have no validity for some developing countries.” Peasnell (1993) warns of the dangers of making generalized conclusions about accounting in developing countries because national environments and accounting needs differ greatly from country to country. He points out that although countries with great diversity (as shown in Appendix A) have all been described as “developing countries,” we “run the grave risk of misunderstanding the very different problems they face. Worse, it can lead us to reach policy conclusions that are seriously damaging to some of the poorest people on earth” (1993).

Briston (1978) examined the accounting profession in Indonesia and observed that the professional qualification was Dutch in its structure, while the professional training philosophy was American. He went on to conclude that “Neither (the professional qualification nor the training philosophy), however, is in the least relevant to *the needs of Indonesia, a country with no companies acts, no capital market, a massive public sector, and an economic and cultural environment totally dissimilar to that of the Netherlands or of the United States*” (p. 113, emphasis supplied). Here, Briston brings into focus the key factors which help us to decide on the relevance (or irrelevance) of the IASC standards to Zimbabwe or any other developing country. These key factors are (a) the accounting needs of the country; (b) the relative size of the public or private sector; (c) the existence of a capital market; and (d) the underlying environment.

The Accounting Needs Argument

Zimbabwe and other developing countries have many accounting needs in both the public and the private sectors. One of them is the need for financial accounting and reporting standards, which are designed to provide investors and other users with the information they require. Zimbabwe and many other developing countries do not have the capacity to develop accounting standards and consequently do not have their own national accounting standards. Many developing countries (including Zimbabwe) have professional accounting institutes, which are still at their embryonic stage of development and suffer from (a) acute shortage of financial and manpower resources; and (b) lack of experience in developing accounting standards. To suggest, as Amenkhienan (1986) has done, that developing countries which have adopted the IASC standards

“have done so for no other defensible reason than convenience” is to dodge the real issues. Some of the defensible reasons are (1) the enormous constraints faced by accounting professions in developing countries; and (2) the relevance of the IASC standards to the financial accounting and reporting needs of many developing countries. The need for the transfer of accounting technology that is appropriate to the needs of developing countries has been widely supported (Scott, 1968; Needles, 1976; Tang and Tse, 1986; Peasnell, 1993).

In Zimbabwe and many other developing countries, the IASC standards are reviewed before they are formally adopted (see also Perera, 1985; Tang and Tse, 1986; Cairns, 1990) and those IASs considered *irrelevant* are not adopted. A case in point is Zimbabwe’s decision not to adopt IAS 29 (Financial Reporting in Hyper-inflationary Economies). This standard was considered (at the time of the review) to be “inappropriate” to Zimbabwe. The same could be said of IAS 15 (Information Reflecting the Effects of Changing Prices). Also, some developing countries (e.g. Zimbabwe and Pakistan) have incorporated the IASC standards into law. It is contended here that these countries have taken these steps primarily because the IASC standards are relevant to their financial accounting and reporting needs. Zimbabwe and other developing countries have actively participated in the development of the IASC standards by (a) suggesting new topics for standardization; (b) commenting on IASC’s exposure drafts; and (c) taking part in IASC’s Steering Committees. This also explains why these countries have shifted from the adoption of the UK or the US domestic standards to the IASC standards. They can participate in the development of the IASC standards.

When developing countries adopt the IASC standards as national standards, the *primary* objective is not to achieve international accounting harmonization, but to meet their need for appropriate accounting and reporting standards. This explains why some of the IASC standards are not adopted, while others are modified. The international accounting harmonization objective is pursued by developing countries only as far as the IASC standards do not conflict irreconcilably with domestic needs, laws, and regulations. The foreword to the “Zimbabwe Accounting Standards,” points out that the IASC standards may be amended “to meet specific Zimbabwe statutory or *other local considerations*” (undated, p. 6, emphasis supplied). Also, the ICAZ’s objection to proposals in ED32 (Comparability Project) reflects Zimbabwe’s desire to have local needs override the international accounting harmonization objective, “Globalization of capital markets appear to be the driving force behind the proposed changes and while for this reason they may well suit the purposes of the first world nations, their effect on third world countries could be catastrophic” (IASC, 1990).

It is not implied here that the international accounting harmonization objective is irrelevant to developing countries. The international accounting harmonization objective is important to developing countries because of their significant reliance on inflows of foreign capital to finance economic and industrial developments. The three channels of foreign capital flows to developing countries are (a) government-to-government aid programs; (b) lending by international institutions like The World Bank or the International Monetary Fund (IMF); and (c) foreign private investment primarily by Multinational enterprises (MNEs) which may establish subsidiaries or form joint ventures. The IASC standards play a particularly important role in obtaining funds, especially through channels (b) and (c). The World Bank and the IMF are increasingly insisting on the use of the IASC

standards by recipients of their finance. Also, channels (b) and (c) are increasingly becoming important sources of foreign capital in many developing countries. In Zimbabwe, for example, 35 percent of the total cumulative gross fixed capital formation for the plan period 1991–1995 is foreign and 81 percent of the foreign capital is through channels (b) and (c) (Zimbabwe Government, 1991). Foreign private investment is now preferred by many developing countries because of (1) the debt burden; and (2) the many benefits which accompany it such as transfer of technology, transfer of managerial skills, the opening up of new external markets, and its favorable effect on the balance of payments. This explains why Zimbabwe and many other developing countries have offered incentives to foreign investors and have also launched active promotional efforts intended to lure foreign investors.

Finally, it can be argued that about 67 percent or 22 of the first 33 IASs (nos. 1, 4, 5, 7, 8, 10, 12, 13, 16, 17, 18, 19, 21, 23, 24, 25, 27, 28, 29, 31, 32, and 33) are (at least potentially) applicable to all types of private sector enterprises in developing countries regardless of business sector, size or status (that is, whether or not incorporated or listed). It is interesting to note that all references to “company” in IAS 3 like “associated companies” or “parent company” have been dropped in both IASs 27 and 28 making them equally applicable to unincorporated enterprises. The other nine IASs apply specifically to (a) manufacturing enterprises (IASs 2, 9, and 11); (b) large enterprises (IASs 14 and 15); (c) government enterprises or parastatals (IAS 20); (d) “incorporated enterprises” (IAS 22); (e) retirement benefit plans or pension schemes (IAS 26); and (f) banks and similar financial institutions (IAS 30). Two IASs were withdrawn (IASs 3 and 6).

The “need for financial accounting and reporting standards argument” presented in this sub-section is bolstered by the “private sector” and other arguments discussed in the sub-sections which follow.

The Private Sector Argument

Several academic accountants (Briston 1978; Samuels and Oliga, 1982; Perera, 1985, 1989) have questioned the relevance of the IASC standards to developing countries. One of their arguments springs from the basic premise that “In most developing countries, the public sector is very large and dominates the economy” (Samuels and Oliga, 1982). These critics have used case studies of specific developing countries to illustrate and support their arguments. Specifically, (a) Briston (1978) uses Indonesia, Sri Lanka, and Tanzania; (b) Perera (1985) uses Sri Lanka; and (c) Samuels and Oliga (1982) use Egypt. These four countries have not been representative of developing countries. They can be regarded as having been at the other extreme end of the economic spectrum of developing countries. The most important and common feature of these four developing countries is that they *all* radically changed their economic philosophy (after attaining political independence) and moved from capitalistic to communistic economies. In *all* the four developing countries, the change from capitalistic towards communistic economies involved the nationalization of foreign assets (Amer, 1969; Briston, 1978; Wilson, 1979). The rapid and sudden development of state-owned enterprises in these countries resulted in extremely large and dominant public sectors. For example, in Egypt, the

“nationalization decrees resulted in control by the government of approximately 80 percent of the economic resources of the country” (Amer, 1969). This was comparable to (former) communist countries of East-Central Europe (Albania, Czechoslovakia, Hungary, Poland, and Yugoslavia) “in which the state controlled over 85 percent of production” (Dobosiewicz, 1992). For similar descriptions about Indonesia, Tanzania, and Sri Lanka, see Briston (1978) and Perera (1985).

The inappropriateness of the IASC standards to a communistic developing country appears to be generally accepted. There is evidence which shows that after establishing communistic economies, the governments of these countries reviewed and redefined the role of accounting under “the new order” (see Briston, 1978; Samuels and Oliga, 1982). However, there are many capitalistic developing countries, which did not change their capitalistic economies after attaining political independence. In Zimbabwe, the private sector has always dominated the economy, in spite of the “socialism” philosophy of the 1980s. At independence in 1980, the nationalist government inherited an economy in which “Most of the productive activity was carried out through the private sector” (Zimbabwe Government, 1985). The Zimbabwe government admittedly failed to change the ownership structure of the economy inherited at independence. The main reason for its failure was the lack of financial resources needed to compensate (promptly and adequately) for any property nationalized as provided for in the Lancaster House Constitution (the basis on which Zimbabwe was granted independence from Britain) (Zimbabwe Government, 1985). In 1980 and 1981, for example, the private sector in Zimbabwe accounted for 69.3 and 71.4 percent, respectively, of the country’s Gross Fixed Capital Formation (Zimbabwe Government, 1985). During the plan period 1991 to 1995, the private sector in Zimbabwe was expected to play a dominant role. Specifically, the private sector was expected to account for 62 percent of the projected cumulative Gross Fixed Capital Formation in *all* sectors of the economy, 83 percent in the productive sectors (agriculture, manufacturing, and mining), 92 percent in the construction sector and 96 percent in the distribution, hotels, and restaurants sectors (Zimbabwe Government, 1991).

It is submitted here that developing countries (like Zimbabwe and many others) in which the private sector dominates the economy (resembling the sector ownership patterns found in the UK and the US), the IASC standards (which are oriented towards the information needs of private investors) are judged to be relevant. It is true that the private sector dominates the economies of those developing countries reported by Cairns (1990) and Gernon et al. (1990) to (a) have adopted the IASC standards as national standards (Botswana, Cyrups, Malawi, Malaysia, Oman, Pakistan, and Zimbabwe); and (b) use the IASC standards as the basis for developing national standards (Egypt, Fiji, Hong Kong, India, Jamaica, Kenya, Kuwait, Lesotho, Mauritius, Nigeria, Singapore, South Africa, Sri Lanka, and Trinidad and Tobago). There is evidence which shows that both Egypt and Sri Lanka changed from communistic back to capitalistic economies (Samuels and Oliga, 1982; Perera, 1985).

It seems, indeed, that the “private sector argument” is a necessary (though not sufficient) condition for demonstrating the relevance of the IASC standards to many developing countries. The “private sector argument” is the linchpin of the “need for accounting and reporting standards argument” already discussed and the “capital market argument” presented hereunder.

The Capital Market Argument

The relevance of the IASC standards to developing countries has also been questioned on the grounds that these countries have “no capital market(s)” (Briston, 1978) or have badly organized capital and money markets. To appreciate the issue discussed here, it is essential to first delineate the salient features, which characterized the development of capital markets in the UK and the US. This is because the IASC standards (arguably) are largely derived from the UK and the US national standards (Samuels and Oliga, 1982; Hove, 1990). The UK and the US standards originated in a situation in which they played an important role in the development of capital markets, under which massive funds were accumulated from widely dispersed sources and put at the disposal of industry (Mahon, 1965). In these two countries, financial reports and capital market development are so closely related that they have become interdependent (Mahon, 1965; Perera, 1989). Until recently, there have been remarkable differences between capital markets’ developments in the UK and the US on the one hand and those in industrialized capitalist countries of Continental Europe (notably France and Germany) on the other. This was due principally to different traditions and attitudes on the extent of disclosure and sources of finance.

The IASC type standards appear to be irrelevant to communistic developing countries. This is because they are designed to serve the needs of capital markets in which the private investor and equity capital dominate. There are (were) no capital markets in orthodox communist countries. In these countries, the mobilization of funds and their investment are undertaken centrally by the state. For example, at the time when Egypt and Sri Lanka were establishing communistic economies, the stock exchanges established by the British during colonial days (in 1883 and 1904, respectively) effectively came to naught. It was only after these two countries moved back to capitalistic economies that “new stock exchange(s)” were established (see Perera, 1985 of the Appendix; Samuels and Oliga, 1982). It should be mentioned that many former communist countries and former communistic developing countries are changing to capitalism. In most of these countries, capital markets are in the process of being established and developed. Given this backdrop, it is not surprising that professional accountancy bodies from China, Indonesia, Poland, Romania, and Yugoslavia are now members of the IASC and that some of these countries are adopting and adapting the IASC standards.

There are many capitalistic developing countries (like Zimbabwe) which have established capital markets that are dominated by the private investor and equity capital. Yacout (1980) studied capital markets in Egypt and Nigeria and concluded that “both are fairly efficient in the weak form ... which refute the suggestion that small markets are inefficient” (p. 40). Admittedly, research in this area is still thin. However, the question on hand here is whether or not the IASC standards are relevant to capitalistic developing countries with “underdeveloped” capital markets. It is important to realize that in the 1980s and 1990s, governments of many capitalistic developing countries which at one time monitored and regulated capital markets very tightly (a) embarked on processes of liberalization and the relaxation of controls; and (b) deliberately adopted economic, fiscal, and other policies intended to increase the role of capital markets in financing economic development. In such developing countries, the IASC standards are considered relevant.

The discussion above shows that capital markets played an important role in the economic development of the developed countries. It has also been strongly argued that

capital markets in developing countries can play an equally important role (Mahon, 1965; Yacout, 1980). There is general agreement that useful accounting reports and appropriate accounting and auditing standards are essential for the development of capital markets (Mahon, 1965; Scott, 1968). Mahon, for example, pointedly states that "*improved standards of financial reporting and auditing are needed in many countries to develop internal capital markets*" (1965, emphasis original). It is in this context that the IASC standards are contended to be relevant to Zimbabwe and many other capitalistic developing countries seeking to develop internal capital markets.

The "capital market argument" presented in this sub-section is inseparably linked to the "private sector argument," "the need for accounting standards argument" (already discussed), and the "similar environments argument" proffered below.

The Similar Environments Argument

The relevance of the IASC standards to developing countries has also been questioned on the premise that national environments in developing countries are different from those of developed countries (Briston, 1978; Samuels and Oliga, 1982; Perera, 1985). Samuels and Oliga (1982) articulate this argument as follows:

where economic, sociopolitical, cultural, and contextual differences between countries, nations, or societies exist, the problem of appropriate accounting standards will assume a different conceptual meaning as well as contextual significance ... in the case of developing countries where such differences tend to be not only highly pronounced, but also in a highly dynamic and fluid state, the relevance of international accounting standards becomes even more questionable. This paper illustrates these arguments with a brief historical case study of one developing country (Egypt).

This argument is valid in as far as it is applied to developing countries like Egypt, Indonesia, Sri Lanka, and Tanzania, *at the time* when they dramatically and fundamentally changed their economic philosophy and moved from capitalistic to communistic economies. When these countries changed their economies from capitalistic to communistic, they created (in the process) national environments which were totally different from those found in the UK or the US (where the IASC standards, arguably, originated). Arpan and Radebaugh (1985) discuss some environmental factors that may be considered in studies on comparative accounting systems, namely economic, educational, cultural, legal, and political factors. The two considered the economic factors (which encompass the size of private sector and the existence of capital markets) to be the most influential because they not only affect accounting directly, they also have significant indirect effects on the other environmental factors (sociocultural, educational, political, and legal factors) which in turn affect accounting practices. This point is typified by current changes taking place in former communist countries of Eastern Europe spearheaded by economic changes (from centrally-planned to capitalistic economies).

There is evidence which shows that when Egypt, Indonesia, Sri Lanka, and Tanzania changed from capitalistic to communistic economies and thereby created different national environments, accounting systems were also changed to match the new environments (Amer, 1969; Briston, 1978; Samuels and Oliga, 1982). It is justifiable

to conclude that the IASC standards were largely irrelevant to these developing countries when they were establishing communistic economies. As Samuels and Oliga (1982) rightly say “different environments will lead to different accounting objectives and therefore, different standards.” Logic demands that we equally accept the antithesis of this statement, namely “similar environments will lead to similar accounting objectives and, therefore, similar standards.”

There are many developing countries (including Zimbabwe) which (a) have national environments that are similar to those in the UK or the US; and (b) did not change their national environments in any manner comparable to changes effected in Egypt, Indonesia, Sri Lanka, and Tanzania. Accepting the first point does not rule out the differences that exist between these developing countries and the two developed countries. While national environments differ among developed countries, among developing countries and between developing and developed countries, there are, nonetheless, important similarities. The figures in Appendix A clearly show that there are some developing countries with economic and social indicators which are similar to those of developed countries. Similarities between developing countries and developed countries have resulted mainly from colonialism and economic dependence.

During the many decades of colonial domination, the imperial countries imposed, willy-nilly, their economic systems, political systems, educational systems, legal systems, accounting systems, professional associations, languages, religion, customs, and cultures on their respective colonies. This resulted in the colonies having national environments which were (and in many countries, still are) strikingly similar to those of the imperial countries. In many cases, the economic, sociocultural, educational, and other links established during colonial days continue today. For example, in many developing countries, their former imperial countries are still the most important trading partners. Given this historical background, the similarities in national environments between many former colonies and their respective imperial countries, and the conclusion that the IASC standard originated from the UK and the US, the fact that (a) only former UK colonies and protectorates have either adopted the IASC standards as national standards or used them as the basis of developing national standards is largely explained; and (b) only the former French colonies have adopted the French uniform accounting system (despite arguments (e.g. Perera, 1989) that developing countries should adopt it) is readily appreciated.

It appears that the appropriateness of the IASC standards to developing countries depends on a wide variety of nation-specific environmental factors, namely, historical, economical, political, sociocultural, legal, educational, and even religious factors. The literature on comparative international accounting suggest that it is possible to group countries on the basis of their accounting principles and reporting practices (Frank 1979; Nair and Frank, 1981). Frank (1979) and Nair and Frank (1981) found that the underlying environmental variables were closely associated with groupings of countries based on the accounting principles and reporting practices. This finding substantiates the conclusion reached here that IASC standards are relevant to developing countries (like Zimbabwe) with national environments similar to those of the UK or the US. Nobes (1985) reached a similar conclusion when he said, “It is the countries influenced by the Anglo-American tradition that are most familiar with setting accounting standards and the most likely to be able to adopt them professionally.”

Some critics may argue that the difference in stage of economic development between developed and developing countries impairs the relevance of the IASC standards to enterprises in developing countries. One would counter this by saying that, first, the stage of economic development is only likely to affect the *relative* importance of a few specific standards. For example, it can be argued that IAS 9 (on Accounting for Research and Development Costs) and IAS 22 (on Accounting for Business Combinations) are generally *more* relevant to developed than developing countries. Conversely, it may also be argued that IAS 24 (on Related Party Disclosures) and IAS 29 (Financial Reporting in Hyperinflationary Economies) are, by and large, *more* relevant to developing than to developed countries. Second, most of the extant IASs are “basic” and are developed to measure financial performance and financial position of enterprises, regardless of whether the enterprise is located in a developed or developing country.

Baydoun and Willett (1995) have also questioned the suggestion that the accounting systems used in developing countries may be irrelevant to their needs because they originate in Western countries with different cultural values. They argue that the suggestion is vague in its assessment of exactly what aspects of Western accounting systems fail to meet the test of relevance. Furthermore, while acknowledging that cultural differences may lead to many specific differences in the requirements of users of accounting information, (a) “it is not clear whether the differences between the users in various countries are differences in kind or only differences in degree” (p. 67); and (b) “it is likely that users in developing and developed societies also have many information requirements in common” (p. 84). After separating the problems of accounting measurement from the problems of accounting disclosure, Baydoun and Willett conclude that it is the specific disclosure rules inherent in Western accounting systems rather than the measurement rules or “transaction cost database that are most likely to fail to satisfy the needs of users in developing countries” (1995).

The “similar environments argument” advanced in this sub-section, embraces the other three arguments already submitted, namely, “the private sector argument,” the “capital market argument,” and “the need for accounting and reporting standards argument.” These arguments are substantiated by the “conformity evidence” presented below.

THE OBSERVANCE OF THE IASC STANDARDS

The ultimate test of whether the IASC standards are relevant to developing countries is whether firms (in developing countries which are members of the IASC) do in fact observe the IASC standards. Solomons (1983) shows the relationship between “relevance and observance” by arguing that accounting standards must be acceptable (to enterprises) to be enforceable, and they are acceptable if they are relevant and reliable. Accordingly, we next examine whether there is *de facto* compliance with the IASC standards by a sample of listed Zimbabwe companies. To determine the level of compliance and the impact of the IASC standards on the accounting and reporting practices of listed Zimbabwe companies, four published annual financial reports (one each for 1975, 1980, 1985, and 1990) were collected for 40 listed companies. The 40 companies included in the sample resulted from request for annual reports made to the ZSE and to all the 62 listed companies. Only those listed companies where all four published financial reports could be obtained were

included in the sample. Of the 40 companies included in the sample, 25 are in manufacturing, five in mining, two each in banking, farming and retailing, one each in transport, civil engineering and printing, and one investing company. This represented an overall response rate of 65 percent. Unlisted public companies were excluded because of difficulties in obtaining their published annual financial reports and establishing the population size.

The decision to collect and examine four published reports for each company was to enable the assessment of the compliance levels *before* and *after* the publication of the first 22 standards issued by the IASC (except for IAS 1 issued in 1975). A disclosure/measurement check list was prepared based on the requirements of IASs 1 to 22 (*before* the changes to some of the standards introduced from 1992) as detailed in Appendix B. The disclosure requirements of IAS 18 are incorporated in IAS 5 and were therefore examined for compliance under IAS 5. The disclosure check list also excluded from the examination those provisions of IASs 1 to 22 which the Zimbabwe Companies Act also required companies to disclose. Apart from company law, no other attempt was made to control for any other extraneous factors, which may have influenced reporting practices over time (in Zimbabwe) other than the IASs.

The four published annual reports of the 40 listed companies were examined for compliance with the 46 requirements of IASs 1 to 22 as listed in Appendix B. A company was considered to comply with the IASC standards if its annual reports disclosed the requirements listed in Appendix B. Where the annual reports did not give a clear evidence of compliance with IASC standards, none was inferred. Hence, it would be wrong to conclude that, given a compliance rating on an item of 25 percent, the “non-compliance” rating is 75 percent. The reason is that the 75 percent category includes cases where an item was not measured/disclosed in the annual report either because it was inapplicable or immaterial.

The results of the examination for *de facto* compliance with, and the impact of, the IASC standards on the measurement and reporting practices of a sample of listed Zimbabwe companies are reported in Appendix B. There are two strong suggestions from the empirical analysis. First, listed Zimbabwe companies appear to comply significantly with the disclosures required by the IASs, which are not required by the Zimbabwe Companies Act. This appears to be particularly so with the requirements of IASs 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 16, 19, and 21 in 1990. Second, the IASs appear to have had a significant impact on the reporting practices of listed Zimbabwe companies, especially IASs 2, 4, 5, 6, 7, 10, 12, 14, 16, 19, and 21. This is also supported by the finding that in 1990, 48 percent of the companies in the sample disclosed cases of non-compliance with the IASs (compared to 0% in 1975) (see Appendix B). The majority of these companies disclosed non-compliance with IAS 4's requirement to depreciate buildings.

The empirical analysis showing that listed companies from Zimbabwe voluntarily and significantly comply with certain provisions of the IASs, provides indirect evidence that the IASC standards are relevant in Zimbabwe. It is also submitted here that the relevance of the IASC standards to developing countries is most likely to be boosted by (1) the growing commonality of worldwide economic conditions, in particular, the steps being taken by (former) communistic developing countries and (former) communist countries to move away from communistic to capitalistic economies; (2) the growing interdependence

of countries; and (3) the increasing importance being attached to global and regional economic groups.

The relevance argument presented in the previous section does not imply that the IASC standards (a) should be regarded as a substitute for the development of indigenous accounting standards in developing countries; (b) should be adopted blindly by developing countries; (c) are relevant (or equally relevant) to all developing countries; (d) do not require improvements to make them responsive to the special needs of developing countries; or (e) should be regarded as the panacea for all the accounting ills of developing countries. It is argued that given (1) the different (and possibly conflicting) accounting and reporting needs and priorities among developing countries; and (2) the different standard-setting priorities between developing countries and the IASC Board, the need to build indigenous standard-setting capacities in developing countries should be regarded as *sine qua non*. The adoption and adaptation of the IASC standards and the domestic standards of developed and other developing countries would then be part of a program aimed at developing indigenous accounting standards which meet the specific accounting needs of the country.

CONCLUSIONS

The principal conclusion reached in this article is that the relevance of the IASC standards in developing countries depends on the ends or needs which they are expected to serve, and the specific national environment in which the standards are to be applied. On the one hand, it was concluded that the IASC standards are largely irrelevant to communistic developing countries where the public sector dominates the economy and where capital markets do not exist. On the other hand, the IASC standards are considered to be relevant to Zimbabwe and similar capitalistic developing countries where the private sector dominates the economy, a capital market exists, and the "shareholder/fair-view presentation" is paramount (instead of the "creditor/tax/conservative presentation"). The empirical analysis showing that listed companies from Zimbabwe voluntarily and significantly comply with certain provisions of the IASs, provides indirect evidence that the IASC standards are relevant in Zimbabwe.

Finally, to date, there are still very few studies which have attempted to examine *de facto* compliance with the IASC standards using annual reports of companies in developing and developed countries. However, the scattered evidence (see Evans and Taylor, 1982; Nobes, 1990; Chamisa, 1994) appears to suggest that developed countries with accounting bodies involved in the standard-setting process have largely ignored the IASC standards, while developing countries with accounting bodies marginalized in the setting of IASs largely observe them. This is likely to intensify pressure on the IASC (than has been the case hitherto) to increase the number of developing countries represented on the IASC Board and in Steering Committees.

Acknowledgments: I would like to thank Professors John M. Samuels and M.H.B. Perera for their valuable advice and comments. The critical guidance provided by two anonymous referees is also gratefully acknowledged. However, they are all absolved from any blame for faults to be found with this article.

APPENDIX A. RANGE OF ECONOMIC AND SOCIAL INDICATORS FOR DEVELOPING AND DEVELOPED COUNTRIES

Economic and social indicators	Range	
	Developing countries	Developed countries
(1) GNP per capita 1990 (US\$)	80 to 33,000	9,550 to 32,680
(2) Average annual GNP growth rate 1965–1990 (%)	–3.3 to 7.1	1.1 to 4.1
(3) Average annual inflation rate 1980–1990 (%)	–6.9 to 432.3	1.5 to 10.5
(4) Life expectancy 1990 (years)	39 to 78	74 to 79
(5) Adult illiteracy 1990 (%)	4 to 82	under 6
(6) Agriculture as percent of GDP 1990	0 to 67	2 to 9
(7) Manufacturing as percent of GDP 1990	4 to 43	15 to 29
(8) Services as percent of GDP 1990	18 to 80	56 to 67
(9) Gross International reserves, in months of import coverage, 1990	0.1 to 17.0	1.3 to 6.4
(10) Total external debt as percent of GNP 1990	0 to 384.5	0
(11) Total debt service as percent of total exports 1990	0 to 59.4	0
(12) Average annual population growth 1980–1990 (%)	0.6 to 4.7	0 to 1.5
(13) Population per physician 1984	350 to 78,780	230 to 700
(14) Population per nursing person 1984	110 to 8,530	60 to 260
(15) Infant mortality rate (per 1,000 live births) 1990	7 to 166	5 to 10
(16) Urban population as percent of total population 1990	5 to 100	57 to 97

Note: The comparison excludes former Eastern-bloc countries because they have not been traditionally regarded as developing countries.

Source: The World Bank, *World Development Report 1992*, pp. 218–307.

APPENDIX B. COMPLIANCE RATING PER DISCLOSURE/MEASUREMENT REQUIREMENT OF IASS 1 TO 22

IASC requirements	Percent compliance rating				Percent change ^a
	1975	1980	1985	1990	
IAS 1 (75/75) ^b					
Accounting policies disclosed in one place?	88	98	100	100	+12
IAS 2 (75/76)					
Stocks valued at the lower of cost and NRV?	75	88	88	95	+20
Cost formula(s) used disclosed?	35	88	95	95	+60
Production overheads allocated to cost of manufactured goods?	50	70	80	78	+30
Stocks sub-classified in the balance sheet or notes?	10	85	88	90	+80
Average rating	43	83	88	89	+46
IAS 3 (76/77)					
Listing and description of associates and/or subsidiaries disclosed?	25	60	65	80	+55
Minority interests excluded from group income?	45	43	43	35	–2

Minority interests separated from liabilities and owners' equity?	48	45	43	38	-3
Equity method used for investments in associates?	28	50	38	40	+22
Associates' share of profit shown separately in P&L?	25	50	35	35	+25
Investments in associates shown separately as fixed assets?	38	48	38	43	+10
Average rating	35	49	44	45	+14
IAS 4 (76/77)					
Are all depreciable fixed assets depreciated?	33	58	55	53	+25
Depreciation method used (for each major class) disclosed?	70	95	93	93	+25
Depreciation rates or years (for each major class) disclosed?	20	88	90	90	+70
Average rating	41	80	79	79	+39
IAS 5 (76/77)					
Sales for the year disclosed?	33	90	95	95	+62
Nature of business activity disclosed?	20	98	98	98	+78
Average rating	27	94	97	97	+70
IAS 6 (77/78)					
Disclosure of inflation adjustment procedures or that no such procedures were adopted?	0	83	73	98	+98
IAS 7 (77/79)					
Is the Funds Flow Statement published?	65	95	95	95	+30
IAS 8 (78/79)					
Change in accounting policy disclosed?	5	15	10	30	+25
Reason for the change disclosed?	5	5	3	18	+13
Average rating	5	10	7	24	+19
IAS 9 (78/80)					
Accounting treatment of R&D costs disclosed?	10	13	15	15	+5
R&D costs amortized or expensed disclosed?	3	3	8	10	+7
Basis of amortizing deferred R&D costs disclosed?	0	3	3	3	+3
Average rating	4	6	8	9	+5
IAS 10 (78/80)					
Nature and effects of each contingency disclosed?	50	73	73	83	+33
Nature and effect of each post balance sheet event disclosed?	3	3	3	13	+10
Average rating	26	38	39	48	+22

IAS 11 (79/80)					
Method of recognizing profits on contracts disclosed?	8	13	10	13	+5
Basis of valuing contract W.I.P. disclosed?	8	10	5	15	+7
Average rating	8	11	8	14	+6
IAS 12 (79/81)					
Deferred tax provision made?	68	63	73	93	+25
Deferred tax method used disclosed?	18	28	50	55	+37
Average rating	43	46	62	74	+31
IAS 13 (79/81)					
Sub-totals of current assets and current liabilities disclosed?	95	95	95	95	0
IAS 14 (81/83)					
Is the segment report published?	5	15	28	30	+25
IAS 15 (81/83)					
Are the effects of price changes disclosed?	0	3	0	3	+3
IAS 16 (81/83)					
Fixed assets revaluation method disclosed?	5	33	70	83	+78
Fixed assets revaluation frequency disclosed?	8	18	53	78	+70
Revaluation surplus credited to Revaluation Reserve	35	30	63	80	+45
Average rating	16	27	63	80	+64
IAS 17 (82/84)					
Finance lease assets capitalized?	3	3	0	0	-3
Finance lease liabilities disclosed separately?	0	0	0	0	0
Finance lease liabilities split between current and non-current?	0	0	0	0	0
Average rating	1	1	0	0	-1
IAS 19 (83/85)					
Retirement benefit plans valuation frequency disclosed?	3	25	48	75	+72
Retirement benefit plans actuarial valuation method disclosed?	0	0	0	35	+35
Date of latest actuarial valuation of retirement benefits disclosed?	0	18	55	93	+93
Average rating	1	14	34	68	+67
IAS 21 (83/85)					
Method of translating foreign currency transactions disclosed?	8	38	48	63	+55
Method of translating final accounts of foreign subsidiaries disclosed?	3	8	10	13	+10

Treatment of exchange difference disclosed?	13	30	45	70	+57
Average rating	8	25	34	49	+41
IAS 22 (83/85)					
Method of accounting for positive goodwill disclosed?	55	65	48	48	-7
Method of accounting for negative goodwill disclosed?	5	8	15	28	+23
Average rating	30	36	31	38	+8
General					
Non-compliance reference to IASs? ^c	0	35	50	48	+48
Compliance reference to IASs? ^c	0	0	0	10	+10
Audit report reference to undisclosed non-compliance with IASs? ^c	0	0	0	0	0
Audit Report reference to compliance with IASs? ^c	0	0	0	0	0

^a The "Percent change" was obtained by comparing the 1975 compliance level with the highest compliance level achieved after the issue of each IAS. This helped to allow for the possible effect of Exposure Drafts, except for IASs 1 to 5.

^b The years shown in parenthesis after each standard refer to the year the IAS was issued and the year from which it became operative, respectively. For example, IAS 2 (75/76) means that the standard was issued in 1975 and became operative from 1976.

^c The IASC's 1977 Agreement requires (a) financial statements to disclose cases of non-compliance with IASs; and (b) audit reports to refer to non-disclosed cases of non-compliance with IASs. The 1982 revised Agreement requires (a) financial statements to disclose their compliance with IASs; and (b) auditors to satisfy themselves that financial statements comply with IASs.

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Capsule Commentaries

Developments in French Accounting and Auditing 1998, *Ordre des Experts-Comptables and Compagnie Nationale des Commissaires aux Comptes, Paris, 1999, 79 pp.*

This handy review of recent developments and achievements in French accounting and auditing is a welcome addition to the literature on international accounting. It was prepared by Peter Standish, who has become the leading interpreter of French accounting and auditing to the English-speaking world.

Some 40 percent of the publication is a comprehensive description of the nature and work of its joint sponsors, the two professional bodies that represent the French accounting and audit profession, the *Ordre des Experts-Comptables* and the *Compagnie Nationale des Commissaires aux Comptes*. Considerable space is devoted to the work of the bodies that regulate financial reporting and auditing, including the *Comité de Réglementation Comptable*, which was established as part of the 1998 reform.

The booklet makes clear that the French have called upon the national treasure of the French language as the arbiter of which international accounting standards may be used in the consolidated accounts of French companies. It is reported on page 34 that a 1998 amendment to the company law allows a listed company to “draw up its consolidated accounts in accordance with international standards translated into French.” As the IASC’s standards are already available in a French translation and it is unlikely that anyone will ever undertake to translate the encyclopedic U.S. generally accepted accounting standards into French, the issue has been neatly settled.

S.A.Z.

Applying International Accounting Standards, *David Cairns, Butterworths, London, 1999, second edition, 1045 pp.*

This is an excellent and comprehensive handbook, now on its second edition, on the history, structure, and operation of the IASC and covering all of the topical areas encompassed by the extant International Accounting Standards (IASs) and Interpretations issued by the Standing Interpretations Committee. The author, David Cairns, is the foremost authority on the subject, and he is to be commended for compiling a work that is rich in description, analysis, and criticism. It will be of great value to all who are interested in how the IASC functions and in furthering the reach of IASs.

S.A.Z.

IAS 2000: Interpretation and Application of International Accounting Standards 2000, by Barry J. Epstein and Abbas Ali Mirza, John Wiley and Sons, New York, 2000, 959 pp., US\$69.00 (paper).

This is the fourth edition, revised annually, of this valuable handbook. The first of its 26 chapters provides background and perspective, although the authors' discussion of the financial reporting climates in France and Germany require updating. It is odd that the authors assert that the US Securities and Exchange Commission (SEC) "has virtually never exercised" its statutory authority to establish GAAP for public companies. In fact, the SEC continually exercises its authority, via Financial Reporting Releases and Staff Accounting Bulletins, speeches and announcements by the chief accountant and his staff, and, in the end, by its oversight authority over the FASB. The cumulative impact of these activities should be described as more than "interpretive guidance" (p. 6).

The remaining 25 chapters are organized along subject-matter lines, and they are comprehensive and detailed. The definitions of technical terms and many illustrative examples are especially useful. Unhappily, there is little cross-referencing among the chapters.

It might have been better if IAS 1, Presentation of Financial Statements, had been accorded its own chapter, rather than apportioned over the two chapters on the balance sheet and the income statement. Apparently, in order to avoid duplication of coverage, the authors chose to discuss the IASC's controversial "fairness exception" in the balance sheet chapter, while noting it only briefly in the income statement chapter, without apprising the reader of the much fuller discussion in the other chapter.

A lengthy disclosure checklist appears at the end of the book.

S.A.Z.

The Case for International Accounting Standards in Canada, *Certified General Accountants Association of Canada, 1999, 13 pp.*

This position paper issued last November by CGA-Canada argues for the adoption of International Accounting Standards in Canada. "Many interested parties are today proposing that Canadian standards be harmonized with FASB standards, especially because of Canada's close ties with the United States." but, the article argues, "there are many compelling reasons why it would not be prudent for Canada to adopt FASB standards" (pp. 5-6). The FASB's standards, it asserts, are "the result of a 'closed process' designed to accommodate U.S. interests," and "they have been established primarily for the benefit of investors to the exclusion of other groups in society interested in corporate performance" (p. 6). Other objections to the influence in Canada of the FASB's standards are that they are "rule-oriented and prescriptive" and that they respond to the "very litigious environment" in the U.S. The article seems to be favorably disposed toward the "fairness exception" in IAS 1.

CGA-Canada has long chafed at the domination of Canadian standard setting by the Canadian Institute of Chartered Accountants, and it has a go at the CICA: “Canada is the only nation in the industrialized world where a single, private accounting organization, which excludes about half the profession, has been delegated quasi-legislative authority to set standards” (p. 12).

The article makes many interesting points relevant to the current world struggle for standard-setting supremacy. Both English and French versions appear in the booklet. CGA-Canada’s website is: www.cga-canada.org.

S.A.Z.

The FT International Accounting Standards Survey 1999, by David Cairns, *Financial Times/FT Finance*, London, 1999, xi + 277 pp., £650/US\$1,105/935 (40% discount to academics).

For anyone interested in the compliance by companies and their auditors with International Accounting Standards (IASs), this is the book. But, as can be seen above, it comes at a fairly high price.

Cairns reports on a survey of 125 companies and their auditors drawn from a population of companies whose financial statements published in 1998 or later refer to compliance with IASs. Two of the three heaviest country-users of IASs, Switzerland and Germany, are represented by 27 and 13 companies, respectively, but the third country, China, is not represented at all in the sample, apparently for reasons of language. The sample is heavily European, with non-European countries contributing only 30 companies.

Cairns graded the companies according to one of nine categories of compliance, and he found that fully 54 companies deserved a mark of “full compliance,” the highest grade. They included 47 of the 95 European companies (including 20 of the Swiss and 10 of the German) and seven of the 30 non-European companies (including only two of the five Canadian and the lone American in the sample). None of the 14 French or the 11 Italian companies received the highest grade.

Another finding is that the external auditors of as many as 44 of the 125 companies did not express an opinion on compliance with IASs, including the auditors of all five of the Canadian companies, the American company, and most of the Italian, Japanese, South African, and Swedish companies in the sample. Rightly, Cairns said this result was “worrying” (p. 182).

Cairns discusses his survey methods and the survey findings at considerable length. In addition, he provides useful sketches of the accounting requirements of 80 countries in all regions of the world, and, in one of his chapters, he elaborates upon the technical accounting issues in IAS financial statements. The book also contains much information about the background and work of the IASC.

This is an extraordinarily useful book for anyone who wishes to keep up-to-date with developments on IASs. Interested purchasers may contact Nick Tribe, Marketing Manager, Tel.: +44-171-896-2386 (nick.tribe@informa.com).

S.A.Z.

International Research in Public Sector Accounting, Reporting, and Auditing, edited by Vicente Montesinos and José Manuel Vela, Instituto Valenciano de Investigaciones Económicas, S.A. València, Spain, 1995, 308 pp.

This paperback volume contains a dozen papers presented at a workshop held in June 1994, which was hosted by the Department of Accounting of the Universitat de Valencia and sponsored by Comparative International Governmental Accounting Research (CIGAR). Three broad themes permeate the papers: (1) governmental accounting standards and practices in a country (Germany, the UK, Scotland, Italy, Poland, China, and New Zealand) (2) comparative governmental accounting standards and practices (OECD countries and three Scandinavian countries), and (3) the public sector audit and the accountability of governments (UK and Dutch experiences). All of the papers are in the English language.

It seems that most of the papers have not also been published in journals.

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S.A.Z.

Millennium Edition of the Pacific Accounting Review, edited by Steven Cahan, Pacific Accounting Review Trust, New Zealand, December 1999/January 2000, Vol. 11, No. 2, iv + 256 pp.

This special edition of the semiannual journal, *Pacific Accounting Review*, contains 23 Millennium Essays to celebrate New Zealand's "unique position as first into the future." for an outpost on New Zealand territory was "the first inhabited place in the world to see the sunrise of the new millennium" (p. i). The short essays, ranging between 3 and 15 pages each, were written by "leading academics and practitioners from around the globe, [and] while each essay is unique, there is one common theme, and that theme is *change*" (p. i). Sixteen of the essays were invited by the editor. Three research articles unrelated to the themes of the essays occupy 60 pages of the issue.

Some of the titles and authors are: "The Future of Accounting Education" (by Warren Allen, chairman of IFAC's education committee), "Needed: Better Accounting Concepts" (by Robert N. Anthony), "Research Agendas for the New Millennium: Celebrating Methodological Diversity" (by Jane Broadbent), "Thoughts on Management Accounting and Strategy" (by Michael Bromwich), "Future Disclosures" (by Philip Brown), "Management Accounting—Beyond 2000" (by Wai Fong Chua and Jane Baxter), "The Future of Financial Reporting: Removing It From the Shadows" (by Thomas R. Dyckman and Stephen A. Zeff), "Accounting Expertise as the Millennium Turns" (by Michael Gibbins), "The Past is the Future: Constructing Public Sector Accountants" (by Irvine Lapsley and Rosie Oldfield), "Financial Reporting: The Case for a New Global Model" (by Nicholas G. Moore, chairman of PricewaterhouseCoopers), and "Trust in Financial Reporting" (by Geoffrey Whittington).

There are too few vehicles for “think” papers on accounting and its role in society, and this special edition of *Pacific Accounting Review* helps fill the void. Even though the new millennium will not arrive until January 1, 2001, the pretext amply justifies this collection of interesting and provocative essays. The journal’s web site is at: www-par.massey.ac.nz.

S.A.Z.

International Accounting Service, by Timothy S. Douppnik, RIA Group/Warren, Gorham & Lamont, New York, 1999, inserts in a ring binder, approximately 1,500 pages (1-year subscription US\$495; special adoption price US\$65, without subscription, when ordered through the campus store).

This volume contains a description and explanation of IASC standards, with many examples and illustrations drawn from actual company financial statements. About half of the volume consists of the contents of the IASC’s 996-page book, *International Accounting Standards 1998*, and thus it includes all of the IASC’s standards issued by the end of 1998 and the first three interpretations.

The volume contains no comparisons with US GAAP or with any other national GAAP, and there are no references to articles or books that might usefully be consulted.

The book gives copyright credit to PricewaterhouseCoopers, for most of the description and explanation seems to have been taken from, or is heavily based upon, the firm’s 830-page handbook, *Understanding IAS* (see Capsule Commentaries, Vol. 34, No. 3, p. 457). It is not made clear whether material that goes beyond the contents of the handbook, which was published in October 1998, was supplied by the author of this volume, by the firm, or by both. The author has not written a preface, so it is not evident how the volume was compiled and also how it was designed for use in university curricula. But it obviously represents an authoritative, detailed source of IASs for any course that makes extensive use of them. The volume would also be very useful to accounting practitioners, chief accounting officers, and financial executives whose clients or companies have a significant international focus.

S.A.Z.

Discussion Paper on a Financial Reporting Strategy within Europe, prepared by the *Fédération des Experts Comptables Européens (FEE)*, Bruxelles, published October 8th, 1999, 18 pp.

The *Fédération des Experts Comptables Européens (FEE)* is the organization that represents the accounting profession in Europe. It currently groups together 38 institutes in 26 countries, including the 15 EU member states and other European countries. It tries to foster the contact between those professional bodies, to improve the exchange of information, to harmonize auditing and accounting practice, and to represent the interests of the European accounting profession worldwide. Recently, it issued a discussion paper

that expresses its position on the strategy which, in its opinion, should be followed in the accounting harmonization process within Europe for the future. The main points are the following.

- The FEE has a strong belief that IASs currently represent the best opportunity to achieve both global and European harmonization of financial reporting standards. Harmonization on the European level by new EU Directives is not regarded as sensible.
- To improve the prospect of the IASs in their harmonization function on an international as well as European level, European companies should be required to use IASs in place of national standards in the future, provided that the future structure of the IASC will be established in such a way as to ensure the development of internationally acceptable, high-quality standards.
- In the meantime, European companies should have the option to use IASs without the requirement to comply with the Fourth and Seventh (Accounting) Directives. In this respect the Directives and possibly national standards need to be modified to allow such a deviation.
- FEE calls on national standard setters to narrow the potential differences between listed and non-listed entities by amending or developing national standards to be consistent with IASs.
- Given the extent to which US GAAP is already used in Europe, FEE believes it is also necessary to allow the use of US GAAP in addition to IASs. However, US GAAP should only be allowed for a limited period of time.
- FEE proposes that a new body should be established—the European Financial Reporting Coordination and Advisory Council—which should promote the use and understanding of IASs, and advise the EU Commission and national standard setters in Europe on the implementation and enforcement of IASs.

The FEE paper is a political statement which seems to be in line with the position of the EU Commission as well as with some national standard setters in Europe. It represents a clear backing of the position of the IASC in the ongoing “battle” for the lead in international accounting standard setting.

A copy of the very interesting and provocative paper can be ordered for free from: Sylvie Romancide, FEE, Rue de la Loi 83, B-1040 Brussels, Belgium (e-mail: sylvie_romancide@fee.be).

A.H.

Book Review

European Financial Reporting, A History, edited by Peter Walton, Academic Press, London, 1995, xii + 287 pp., US\$59.95.

The growth and continuing spread of multinational corporations, as well as the globalization of capital markets, has led to a steadily increasing interest in international accounting. During the last few decades, this may well have been the fastest growing sub-area of our discipline.

While international differences with respect to various aspects of accounting have been the subject of research for over 30 years, there is much that remains unexplained. The establishment of the International Accounting Standards Committee in 1973, together with its harmonization project, has led to a resurgence of international accounting research. While the current research is primarily descriptive in nature, it represents a necessary step preliminary to more specific and informed inquiry. In recent years, attempts have been made to advance theories relating to the international harmonization of accounting standards and to explain the international accounting standard setting phenomenon.

For me, Peter Walton's book has been a most welcome source of valuable information that is not easily found elsewhere, and I think that everyone interested in the history of academic and practical accounting on an international scale would not reach a different judgment. This book also constitutes an indispensable complement to the other historical books and summaries.

The readers already familiar with accounting research mainly on the American continent and in English language areas have the opportunity, through this collection, to learn more about such research in Austria, Germany, France, Italy, Spain, Switzerland, Belgium, the Netherlands, and the Nordic countries. There is, of course, the previous book, *European Contributions to Accounting Research—The Achievements of the Last Decade*, edited by Anthony Hopwood and Hein Schreuder (Free University Press, Amsterdam, 1984). But, as the subtitle indicates, it limits itself, for the majority of contributions, to a single decade. In the book under review, however, there is much of the international historical information one is looking for; it even fills some gaps in one's knowledge about the English and other European literatures. Most of the contributions, except two, concentrate on a single country; each article offers considerable background information from which one can learn about financial reporting from the Industrial Revolution to the present day as well as of research interests and the pertinent cultural atmosphere of a country and period.

Being an anthology authored by 18 different contributors, including the editor, *European Financial Reporting—A History* is, of course, bound to be somewhat uneven.

Some authors have actively concerned themselves with their particular subject for many years, while other authors, such as Laurence Took, for example ("The history of financial reporting in Italy"), had less direct knowledge of their subject matter, or had, for the first time, to delve into it. Some may also have fulfilled their task more meticulously than others; some articles, for example, those about Denmark, France, Germany and United Kingdom, are not only more comprehensive but also cite and quote more extensively than others. But this does not change the fact that I found all those contributions a true mine of accounting issues and accounting histories.

The book focuses mainly on institutional and regulatory systems and differences among these systems. It is intended as a reference work for the study of comparative international accounting for researchers in financial accounting and reporting, as it takes into account the fact that different socio-economic and political cultures imply different purposes and different historical developments of accounting in different European countries. The work covers financial reporting from the Industrial Revolution to the present times, even if for some countries, such as Denmark, Germany, Italy, and the Netherlands, it covers historical issues about earlier times. Certainly, the comprehension of accounting practices and regulations, in any one country at any given time, involves a heritage of conditions from the past; so, to study accounting of the present, one cannot ignore a knowledge of accounting of the past.

The book has been written almost entirely by nationals of the countries under investigation; the only contribution by a non-national writer is for Italy, a circumstance that is difficult to understand.

The introductory essay was written by Peter Walton. In this essay, three main motives are mentioned: (a) many countries in the European context have borrowed regulations from other countries so that the idea of accounting harmonization is really old; (b) not all the characteristics established in continental European accounting coming from Napoleon's 1807 commercial code have survived to the end of the twentieth century, such as the relevance of the balance sheet, thanks to Eugen Schmalenbach in Germany and, the present reviewer would add, Gino Zappa in Italy, even though in Germany, in Italy, and in other European countries, the balance sheet remains the basis of tax accounting; and (c) one of the consequences of the great German inflation in the early 1920s was the German theorizing on inflation accounting by Fritz Schmidt and, I would add, by Theodore Limperg in the Netherlands.

Apart from the second essay by James Foreman-Peck on "Accounting in the industrialization of Western Europe," the other 13 essays are devoted each to one European country (Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom). Several elements distinguish themselves in individual country histories, all of which play a different role in each national accounting system, as well as factors that might explain the variety of accounting systems throughout Europe, for example: the regulatory system, the tax system, the sources of finance, the accounting and auditing profession, and so on. Moving from a frequent set of common sources of regulations, their implementation has been quite different in every country, according also to the role played by the national needs and influences: this was also the case of the adoption of the Fourth and Seventh Directives.

Several authors tell about scholars in their countries who significantly influenced the development of accounting and business economics in those countries. In Finland, Martti

Saario's expenditure–revenue theory of bookkeeping is based on the realization principle and the depreciation of fixed assets in profit calculation. This theory and its matching principle have led to making depreciation depend on the annual results and, therefore, income smoothing. In Germany, Eugen Schmalenbach developed *Betriebswirtschaftslehre* as an independent science with the “dynamic balance sheet,” pursuing the consideration of welfare economics (in Schmalenbach's work can be found also the marginality principle, that is, refraining from covering fixed costs of a product, if profits are made on other products) and Fritz Schmidt proposed the “organic balance sheet at current values.” In Italy, Zappa developed the dynamic aspect of accounting and business economics, which is still predominant. He stressed that, although the focus of accounting is the doctrine of quantitative determinations, these cannot be separated from the study of concern *organization* and concern *management*; otherwise, the outcome would have a kind of pure formalism. This was the birth of *Economia d'azienda*, “concern economics,” which referred to every kind of economic entity, not only the business enterprise. In the Netherlands, Theodore Limperg founded *Bedrijfseconomie* (similar to the German *Betriebswirtschaftslehre* and to the Italian *Economia aziendale*), a system which embedded accounting, organization, and management, that is, all the economic phenomena related to enterprises. In the Dutch view, only such a theoretical basis could guarantee proper practical applications. The theory of current exit values and income became the milestone of Limpergian *Bedrijfseconomie*. On the practical side, Philips attracted much attention by adopting current cost accounting in its balance sheet and income statement in 1951; its chief internal auditor, A. Goudekot, was an advocate of Limperg's current cost accounting and *Bedrijfseconomie*.

The essay on Sweden explains how these concepts (the flow of business, and a dynamic balance sheet with the emphasis on income determination instead of a static balance sheet stressing the worth of the business at a particular date) emanated also in a Swedish context. The same happened in Denmark¹ and in Norway, at least until the second world war, when Germany dominated the literature and the contents of the studies of economics and business administration. Also, Switzerland, in its regulatory process, in the past followed the German law as closely as possible, with legislation that refrained from interfering directly in the accounting field, while today this country is considerably influenced by developments in international accounting.

The reader will be interested in knowing the history of the French Plan Comptable Général and the introduction of the Spanish Plan General de Contabilidad, based on the French one. The essay on the United Kingdom directs attention to the circumstance that a literature on accounting had still to emerge in Britain by the beginning of the nineteenth century and that a major problem until the 1940s for the British accounting profession was that it had no accounting theory to which to appeal and no awareness of the theoretical developments in accounting in other European countries. Those who are fond of music will be pleased to know that Ludwig van Beethoven was one of the most famous shareholders in the Austrian Central Bank and that the first Norwegian educational efforts in commerce occurred in connection with an academy for the fine arts (song, music, drawing, and even bookkeeping) started by the orchestra Harmonien in Bergen.

As the present reviewer is Italian, let me make some remarks about the essay on Italy, written by a non-national. Apart some minor flaws, such as the birth date of Gino Zappa, which is 1879, the essay overemphasizes the relationships between Italian accounting and

Gino Zappa on one side and Fascism and Mussolini on the other. More precisely, the Italian accounting reform in 1942 and the development of Zappa school of thought, whose “manifesto” was his inaugural lecture for the academic year 1926–1927 at the University of Venice,² constitute moments quite independent of the prevailing political ideology of that time. Instead, Gino Zappa, upheld by great spirituality and by an ever-increasing love for society, was a profound innovator in his studies of accounting, who, with a scientific approach and rigorous method, unified areas at one time considered almost autonomous, conceiving the theory of *Economia Aziendale*. Great was the influence of Zappa’s work not only in the academic circles, but also in accounting regulation; for example, in 1974, law no. 216, “Miniriforma delle S.p.A.,” adopted the form and the structure of income statement as proposed by Zappa in his Income Theory. Furthermore, as far as I know, Carlo Masini, one of Zappa’s pupils, did not “concede that he had hoped in vain” about the developments of Zappa’s *Economia Aziendale* in professional circles, at least in the work cited on p. 163.

The purpose of the book, to present the early formative influences of the development of financial reporting regulations for limited liability companies in a number of Western European countries, is surely achieved, even if, for certain countries, such as Italy, it would be necessary to trace the accounting history for centuries before the Industrial Revolution. The insights provided might be used primarily for scientific, educational, and practical purposes, by scholars, students, and policy-makers, but they can also offer a potential basis for further research. The book shows that European accounting, because of its diversity, is a fascinating subject, enabling great research opportunities. The editor has done a remarkable job in terms of assuring a cohesiveness of the collection and of making the material in the chapters flow smoothly, no easy task when one is dealing with people from 11 countries who do not speak English as their native language.

Reviewed by Giuseppe Galassi
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NOTES

1. Special mention should be made of Merete Christiansen, the author of the essay on Denmark, whose untimely death in June 1996 at the early age of 43 was a loss to the whole academic accounting community throughout Europe.
2. ZAPPA G., *Tendenze nuove negli studi di ragioneria* (New Trends in Accounting Studies), Tipografia Emiliana, Venezia, 1926.

European Accounting Guide, edited by David Alexander and Simon Archer, Harcourt Brace & Company, San Diego/London, 1998, third edition, xiv + 1,683 pp., US\$139.00.

European Accounting Guide, edited by David Alexander of the University of Hull and Simon Archer of the University of Surrey, is a sum of 25 individual country guides to accounting theory and practice within countries of the European Union and a selection of

countries in the former Eastern bloc, and an insight into what is emerging from the former Soviet states.

First Impressions: Scope and Coverage

The first observation of this third edition is that it is, at 3 inches, thicker than its predecessor. The primary reason for the overall increase in size is an expansion in the coverage of Eastern Europe. Following the breakup of the USSR, there has been a proliferation in the number of countries claiming sovereignty and in the diversity of legal and accounting developments in each country. Coverage, therefore, includes the Czech Republic, Hungary, and Poland as countries knocking on the door of the European Union; the Baltic States, comprising Estonia, Latvia, and Lithuania, as former Soviet states that have moved closer to the European Union model; the Russian Federation, which is impossible to ignore; and Belarus, as a token example of a former Soviet state with much still to do.

First Impressions: The Authors and Editorial Style

Our own experience proves that it is impossible for authors based in one country to have a working knowledge of accounting rules and, of more relevance, the practice in others. We therefore endorse the approach taken in *European Accounting Guide*, by which authors based in individual countries write from current experience and a central editorial team attempts to bring uniformity to the style and coverage. For authorship, the editors have turned to contacts mainly in universities and similar institutions, with a minority coming from larger firms of accountants. Taken together with the editors' own background, the inevitable consequence is that the style used tends toward words in continuous text rather than graphical ideas.

The "Country Highlights" at the beginning of each chapter are most useful. However, greater use of tables, charts, and graphical aids would make the book more attractive and accessible to practicing accountants and non-accountants. Although the book is described as a companion volume to the Miller *GAAP Guide* to US accounting requirements, its format has less variety; the US guide certainly provides a source of helpful presentational ideas that would benefit the European guide. A tabular comparison of key features against some common benchmark would also add considerable value, for example, valuation and measurement principles against International Accounting Standards (IASs). Such comparisons are available within larger firms of accountants, and they can be prepared as a comparison of codified requirements.

Each chapter concludes with a complete set of financial statements, with English translation where necessary, based on local requirements but without commentary. They represent, it is assumed, a typical set of accounts to assist users, rather than a model to be used by preparers. Again, the latter would be available within larger firms of accountants as model accounts and disclosure checklists but would represent, for each country, a separate publication, which is beyond the scope of a single volume.

Detailed Content: Overview

The overview, written by the editors, provides a review of the complex world of European accounting. It reminds readers of the variation in legal frameworks and the controlling power of national institutions, which both drive and limit change in a country's theory and practice, and of the two current forces which are driving widespread change. The first of these is the European Union's process of legal harmonization, with the twin objectives of providing a level playing field for enterprises competing within the single market, and the promotion of an efficient, integrated capital market for the Union. The second force for change is the drive toward a global accounting standard through the standards issued by the International Accounting Standards Committee (IASC). Cultural influences, including the importance of law, the flexibility within national frameworks, sources of finance, and the impact of tax law, are dealt with succinctly. The developing role of the IASC is discussed, but the informational content contained in tables seems not to go any further than 1995. Since that time, there have been significant changes in IASs that are not included, but the point to the discussion is not the current status of IASs. Rather, it is the uncertainty of future rule-setting within Europe, and this is achieved.

Detailed Content: Country Highlights

As already mentioned, one excellent feature is the Country Highlights page at the beginning of each chapter. The richly distilled information contained in these factual snapshots is surprisingly difficult for readers outside the country in question to pull together, as the information comes from a wide range of sources: hence, their value both for information and comparison purposes. Headings include common legal forms of companies, sources of financial reporting requirements, corporate tax rates, auditing requirements, and organization of the accounting and auditing profession. This form of presentation is to be encouraged.

Detailed Content: Countries

The detailed text on individual countries constitutes the vast majority of the book's content. As indicated above, the information is largely continuous text, but this is reasonably well divided and structured to make possible its use as a reference work. As the individual chapters are written by national accounting experts, there is some variation both in the description within the sections covered and in the style of writing, but the editors have ensured that each chapter presents a standardized feel. Each covers, as a minimum, four standard sections:

- Background,
- The Form and Content of Published Financial Statements,
- Accounting Principles and Practices, and
- Expected Future Developments.

Background explores the issues reviewed in the editors' overview chapter. This includes the role and development of company law and accounting standards, the accounting and auditing professions, sources and impact of company finance, the relationship and influence of tax law, and a discussion of some key drivers in shaping change.

The Form and Content of Published Financial Statements provides a description of the national requirements for the preparation of accounts. Some authors go further, for example, to explain the requirements for audit and publication of accounts, and some provide a useful cross reference to key features of the published accounts example at the end of the chapter. These examples provide the full text of financial statements and notes typically for a financial year of 1996 or 1997, and include English translation where necessary.

Accounting Principles and Practices presents the most substantial section in most chapters, providing a detailed discussion of specific accounting issues that affect valuation and measurement. For most countries, the discussion ranges over 20–30 pages and provides a fair insight into national practice and issues, dealing with major balance sheet headings and income and expense items. Some provide more detailed coverage (the UK with 51 pages), and some disappointingly less (the Baltic States with just two pages). A use of standard comparative tables in these sections would be useful.

As a generality, the final section in each chapter, covering future developments, is brief, and provides only a broad indication of the overall direction of development. There is no insight into specific accounting topics or current work programs.

A detailed review of the chapter that is closest to our own work, that is, the United Kingdom, reveals a number of irritating typographical errors; for example, page 1157 refers to section 277 of the Companies Act 1985 instead of section 227, and page 1159 refers to specimen financial statements for 1993 instead of 1997.

Final Thoughts

In our experience, the need for information on accounting theory and practice in other countries is increasing. Some years ago, as the European Single Market took shape, there were a number of books published that provided guidance, and the first edition of *European Accounting Guide* was one such book. However, *European Accounting Guide* stands out from the crowd in two key respects: in a single volume it provides comprehensive coverage of key European countries, and it has been kept up to date. It has few, if any, peers. Consequently, it is the book that sits on our desks (rather than tucked away in the library), and it is the book to which we refer inquirers who are in search of a high-level view of accounting in another European country. It will not provide in-depth answers as a substitute for advice from a local practitioner, but it will help formulate what questions need to be asked.

Reviewed by Andy Simmonds and
Georgette Bailey
Deloitte & Touche
London, England

Accounting and Stock Markets: A Study of Swedish Accounting for International Investors and Analysts, by Jan Marton, BAS (School of Economics and Commercial Law at Göteborg University: bas@mgmt.gu.se), Göteborg, Sweden, 1998, 277 pp.

This book is Marton's doctoral dissertation at Göteborg University. The dissertation is empirical and broadly concerned with two main research issues: how Swedish accounting information is used by analysts and whether international differences in accounting affect Swedish companies and the analysts who follow them. Accounting researchers interested in international financial reporting and harmonization are the main audience for this book. The dissertation won the 1999 Outstanding Dissertation Award given by the American Accounting Association's International Accounting Section.

Historically, Swedish accounting was designed to enhance national macroeconomic goals, and it shared many of the features of accounting in continental Europe. However, it is now moving toward the fair presentation/full disclosure model of accounting associated with Anglo-American countries and the International Accounting Standards Committee. Swedish multinationals are world-class companies known for their innovative disclosures. Thus, their accounting and reporting practices are interesting to study.

The book consists of an introduction, 10 chapters, and a list of references. The Introduction and Chapter 1 provide an overview and the motivation for the research. Chapter 2 discusses prior research and develops the dissertation's theoretical framework, while Chapter 3 justifies the research approaches used. The Introduction and first three chapters constitute one-third of the book. As with most dissertations, much of this is background material, designed as much to demonstrate the researcher's knowledge of the subject as to enlighten the reader. Anyone familiar with international financial reporting can safely skim this part of the book. Chapter 4 describes the data sources, while Chapter 5 contains the details of data-gathering and descriptive statistics of the data. The empirical analyses are in Chapters 6, 7, 8, and 9. Chapter 10 concludes the book with a summary and a discussion of implications and potential future research.

The book explores a variety of issues, using three complementary approaches. (1) *Interviews*. Fifteen non-Swedish financial analysts who follow Swedish companies were interviewed. The analysts are from the US, UK, and Germany. Additionally, eight representatives from five of the largest Swedish companies were interviewed. (The companies are Astra, Electrolux, Ericsson, SKF, and Volvo.) These representatives work in the financial reporting or investor relations departments of their respective companies. (2) *Reports*. Ten analysts' reports covering the five companies noted above were examined. The annual reports of these same five companies were also examined. (3) *Value relevance*. Share prices/returns of "A-listed" companies on the Stockholm Stock Exchange (approximately 100 to 150 per year) covering 1983 to 1995 were used to assess the value relevance of Swedish accounting information.

Given the many issues addressed in this research study, it is not possible to list them all. However, the following appear to be some of the most important findings.

- International diversity in accounting affects both Swedish corporate reporting and analysts' assessments of Swedish companies. Diversity is seen as having a greater

impact on users than on companies. Nevertheless, the problems associated with accounting diversity have been largely solved in practice.

- Harmonization is viewed as desirable by both companies and analysts.
- The value relevance of Swedish accounting information increased as it harmonized toward the fair presentation model.
- Analysts stress different parts of Swedish annual reports, depending on the analyst's nationality.
- Analysts express a desire for US GAAP/IAS reconciliations not so much because they actually use the reconciled amounts but because they do not trust Swedish accounting as much as US GAAP/IAS. The reconciliation is viewed as an "insurance policy" against the potential for poor quality in the Swedish accounting system. Still, analysts' reports show that adjustments are made based on the reconciliation information.
- Accounting costs are only a small part of the overall costs of a foreign listing, and they play a minor role in deciding where to list. Potential legal costs of a US listing are seen as significantly more important than the accounting costs.

The results based on Marton's three-pronged research approach mostly reinforce one another, thus supporting his overall conclusions. As a result, I view it as a strength of the study, even if he seems to strain to develop a unifying theory (in Chapter 3) to justify this approach. This strategy emphasizing breadth also sacrifices some depth. Only 15 financial analysts were interviewed and only five Swedish multinationals were represented in the interviews of company representatives. The small sample sizes in both cases limit generalizability. The findings described above should be read with this in mind. The same is true of the part of the study that focuses on reports. Here, only 10 analysts' reports and annual reports of five companies were examined. Since I anticipate that Marton will carve up his dissertation for journal publications, these parts will need to be expanded. Only the value relevance portion of the study has a large enough sample size to qualify as a stand-alone piece of research. It uses the standard methodology of the literature and is generally well done. However, in discussing these results, Marton notes potential confounding events and raises other issues that complicate his interpretation. I would have liked to see these points tied down better.

The criticisms expressed in the previous paragraph are tempered by the realization that the three approaches were not meant to be individual studies, but complementary parts of a whole package. The study is well done overall. I recommend the book for accounting researchers (especially doctoral students) interested in international financial reporting and harmonization.

Reviewed by Gary K. Meek
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Stillwater, Oklahoma, USA

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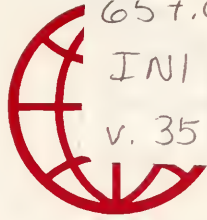
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Disclosure Level and Compliance with IASs: A Comparison of Companies With and Without U.S. Listings and Filings

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Key Words: International accounting standards; Compliance with IASs; IASC; Voluntary disclosure

Abstract: This research investigates the extent to which the disclosure requirements of the IASC are complied with or exceeded for companies claiming to use International Accounting Standards (IASs). Additionally, the research seeks to identify significant differences between those companies with U.S. listings, U.S. filings, and those with no U.S. listings or filings with regard to (1) compliance with IASC-required disclosures, and (2) level of disclosure (including both mandatory and voluntary items). The findings reveal the overall level of disclosure is greater for companies with U.S. listings. Additionally, greater disclosure is associated with an accounting policies footnote that specifically states that the financial statements are prepared in accordance with IASs and an audit opinion that states that International Standards of Auditing (ISAs) were followed when conducting the audit. Further, the findings indicate the extent of compliance with IASs is greater for companies with U.S. listings or filings. A higher level of compliance is associated with an audit opinion that states the financial statements are in accordance with IASs and that ISAs were followed when conducting the audit.

The research highlights the significance of the enforcement issue for the International Accounting Standard Committee (IASC) as it seeks an International Organization of Securities Commissions (IOSCO) endorsement. The findings indicate enforcement of IASs may be less of an issue for companies with listings and filings in the U.S. However, for companies without U.S. listings and filings, compliance is indeed of great concern.

Currently, the International Organization of Securities Commissions (IOSCO) and its member bodies are reviewing the International Accounting Standard Committee's (IASC) application for endorsement of International Accounting Standards (IASs). This critical decision will determine whether IASs may be used for cross-border offerings of securities

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in all the world's major capital markets, including the U.S. To this end, the SEC Chief Accountant has encouraged research to assist the Commission in its assessment of the IASC's Core Standards and related topics. This research addresses a key question posed by Chief Accountant Turner (SEC, 1999):

What are typical footnote disclosures by companies currently using IASC filings (a) in non-U.S. countries, (b) in U.S. filings using reconciliation, and (c) similar U.S. GAAP filings?

For a sample of companies claiming to use IASs, the current research investigates the extent to which the disclosure requirements of the IASC are complied with or exceeded. Additionally, the research seeks to identify any significant differences between those companies with U.S. listing, U.S. filings, and those with no U.S. listings or filings with regard to (1) compliance with IASC-required disclosures, and (2) level of disclosure (including both mandatory and voluntary items). To the extent that such differences are not significant, particularly with regard to compliance with IASs, the argument for accepting IASs for cross-border listings will be supported. On the other hand, evidence to the contrary is likely to strengthen the argument against an IOSCO endorsement of IASs for cross-border listings.

IOSCO'S Review of IASs

As part of IOSCO's commitment to facilitate cross-border offerings and listings by multinationals, the Commission's Technical Committee actively participated in the IASC Core Standards Project (IASC, 1999). Following the 1999 publication of the interim standard on financial instruments, which resulted in the IASC substantially completing all key parts of the core standards, the IOSCO Technical Committee began an assessment of the core standards, focusing on whether the core standards are of sufficiently high quality to warrant permitting foreign issuers to utilize IASs to access a country's capital markets as an alternative to domestic standards. Upon completion of its analysis, the IOSCO Working Group will make a recommendation to the IOSCO Technical Committee. The Technical Committee will then decide whether to recommend that members of IOSCO permit foreign issuers to use IASs in lieu of national standards for cross-border offering and listing purposes.

With regard to IOSCO's evaluation of IASs, the SEC (1996) has indicated that there are three primary elements to acceptance of IASs. The standards must:

- (a) Include a core set of standards that constitute a comprehensive, generally accepted basis of accounting
- (b) Be of high quality and result in comparability, transparency, and full disclosure; and
- (c) Be rigorously interpreted and applied.

This research addresses the issues of full disclosure (item b) and rigorous application of IASs (item c).

LITERATURE REVIEW AND RESEARCH ISSUES

Several studies have addressed the impact of various corporate characteristics on annual report disclosures. These characteristics include size, listing status, leverage, profitability, industry, type of auditor, size of the equity market, degree of economic development, type of economy, activity on the equity market, dispersion of stock ownership, and culture.

Studies based on capital markets in developed countries include Singhvi and Desai (1971), Buzby (1975), Belkaoui and Kahl (1978), Firth (1979), McNally et al. (1982), Cooke (1989a,b, 1991, 1992, 1993), Wallace and Naser (1995), Wallace et al. (1994), Inchausti (1997), and Dumontier and Raffournier (1998). Overall, these studies indicate that size and listing status are significantly associated with the level of disclosure.¹ Cooke (1989b) concluded that while size, as measured by total assets, sales, and number of shareholders, is an important variable, it does not matter which of the three measures of size is selected. Additionally, prior research consistently suggests that leverage (gearing) is not significantly associated with level of disclosure.

Findings regarding the relationship between level of disclosure and other corporate variables have been mixed. Singhvi and Desai (1971), Belkaoui and Kahl (1978), Wallace and Naser (1995), and Wallace et al. (1994) provide evidence of an association between profitability (rate of return) and level of disclosure. However, their findings are not supported by the work of Cerf (1961), McNally et al. (1982), Inchausti (1997), and Dumontier and Raffournier (1998). While Cooke (1991, 1992) reports that manufacturing companies report more information than other types of corporations, Inchausti's (1997) findings do not support an association between industry and level of disclosure. Research by Singhvi and Desai (1971), Inchausti (1997), and Dumontier and Raffournier (1998) suggest an association between audit firm and level of disclosure; alternatively, Firth (1979) and McNally et al. (1982) provide no evidence of this association.

Adhikari and Tondkar (1992) report significant variations in the overall quality and level of detail disclosure that are required as part of the listing and filing requirements of stock exchanges around the world. Among a total of 35 stock exchanges, the NYSE was clearly the leader in terms of disclosure requirements, with London not far behind. The findings revealed a significant association between size of the equity market and disclosure requirements. However, no significant associations were identified for the degree of economic development, type of economy, activity on the equity market, and dispersion of stock ownership.

Accounting standards, such as IASs, set forth the minimum disclosure guidelines, which companies are obligated to follow. However, the IASC and International Federation of Accountants (IFAC) are concerned that some companies claiming to comply with IASs may not in fact be complying with all of the requirements of IASs. In this regard, the President of the IFAC has criticized auditors for asserting that financial statements comply with IASs when the accounting policies and other notes show otherwise (Cairns, 1997). Research by Cairns (1999) and Street et al. (1999) supports the assertions of the IASC and IFAC by providing evidence that the degree of compliance by companies claiming to comply with IASs is very mixed and somewhat selective. The findings of these studies reinforce the significance of the acceptance and observance issue for the IASC. The

current research extends these previous studies by examining the factors that may be associated with noncompliance.

In addition to the information companies are obligated to disclose (although as previously noted some may not fully comply), in many instances, companies voluntarily disclose information *beyond* that required by accounting standards and listing authorities. Hence, this research also addresses the extent of voluntary disclosure provided by companies claiming to follow IASs and seeks to identify the factors associated with voluntary disclosures.

Based on this discussion and prior literature, four primary research questions are considered in this article:

Research Question #1: For companies that claim to comply with IASs, does the overall level of disclosure differ significantly for companies with (1) U.S. listings, (2) U.S. filings, and (3) without U.S. listings or filings?

Research Question #2: For companies that claim to comply with IASs, does the degree of compliance with IASC-required disclosures differ significantly for companies with (1) U.S. listings, (2) U.S. filings, and (3) without U.S. listings or filings?

Research Question #3: What are the factors associated with the overall level of disclosure provided by companies that claim to comply with IASs?

Research Question #4: What are the factors associated with the degree of compliance with IASC-required disclosures for companies that claim to comply with IASs?

HYPOTHESES AND INDEPENDENT VARIABLES

The following hypotheses, stated in alternative form, were developed to test the four research questions.

Hypotheses Associated with Research Questions 1 and 2

As noted previously, the SEC has requested research to determine whether disclosure levels vary for those companies utilizing IAS filings (a) in non-U.S. countries, (b) in U.S. filings using reconciliation, and (c) similar U.S. GAAP filings. In line with this inquiry, prior research suggests that disclosure levels are significantly different for companies listed on major exchanges than for other companies.

- H_{a1}:** The level of disclosure is significantly different for (1) companies with U.S. listings, (2) U.S. filings, and (3) without U.S. listings or filings.
- H_{a2}:** Compliance with mandatory IASC disclosures differs significantly for (1) companies with U.S. listings, (2) U.S. filings, and (3) without U.S. listings or filings.

Hypotheses Associated with Research Questions 3 and 4

Prior research addressing the association between disclosure levels and corporate characteristics has focussed primarily on companies domiciled in one country that use domestic GAAP. For example, Cooke (1989b), Cooke (1991, 1992), and Buzby (1975) examined Swedish, Japanese, or U.S. companies, respectively. The current research examines a sample of companies representing many countries that claim to use IASC GAAP. Additionally, the current research extends studies by Cairns (1999) and Street et al. (1999) relating to noncompliance with IASs by examining factors that may be associated with the degree of compliance with IASs.

Prior research has consistently identified company size and listing status as positively significantly associated with level of disclosure. Cooke (1989b) concluded that while size, as measured by total assets, sales, and number of shareholders, is an important variable, it does not matter which of the three measures of size is selected. In this study, the variable ASSETS is chosen to measure size, and is defined as total assets in U.S. dollars.

To explore the questions posed by the SEC Chief Accountant, the variable listing status (LISTING) is defined, as follows:²

- U.S. listings: NYSE or NASDAQ listings (file form 20-F)
- Companies with U.S. filings: 12g3-2(b) exempt, 144A, and OTC filings
- Companies without U.S. listings or filings

The following hypotheses test the associations described above utilizing a sample of global companies that claim to use IASs.

H_a3a: Company size is significantly positively related to the overall level of disclosure (including both voluntary and mandatory disclosure).

H_a4a: Company size is significantly positively related to the degree of compliance with IASC-required disclosures.

H_a3b: Listing status is significantly positively related to the overall level of disclosure (including both voluntary and mandatory disclosure).

H_a4b: Listing status is significantly positively related to the extent of compliance with IASC-required disclosures.

Prior research regarding the association between profitability and level of disclosure is mixed. For example, research by Singhvi and Desai (1971), Belkaoui and Kahl (1978), Wallace and Naser (1995), and Wallace et al. (1994) indicates a significant association. Alternatively, Cerf (1961), McNally et al. (1982), Inchausti (1997), and Dumontier and Raffournier (1998) provide no evidence of an association. Due to the mixed findings from prior research, no prediction of direction of association is made in the current study. Hence, a two-tailed test is conducted. In this research, the variable profitability (PROFIT) is measured as the ratio of net income before tax to total shareholder's equity.

H_{a3c}: Profitability is significantly associated with level of disclosure.

H_{a4c}: Profitability is significantly associated with the extent of compliance with IASC-required disclosures.

Prior research yields mixed results regarding the association between industry and level of disclosure. The current research further explores the relationship between industry and level of disclosure. The variable INDUSTRY is coded as manufacturing or non-manufacturing.

H_{a3d}: Type of industry is significantly associated with level of disclosure.

H_{a4d}: Type of industry is significantly associated with the extent of compliance with IASC-required disclosures.

The current research explores the association between compliance and/or disclosure level and the manner in which companies refer to IASs in their accounting policies footnote. In line with Cairns' (1999) discussion of approaches to the use of IASs and domestic GAAP, the variable POLICY categorizes companies as follows:

- Uses IASs as the primary reporting standards (i.e., makes no reference to compliance with domestic GAAP and no exceptions are noted),
- Makes reference to IAS, but not as the primary reporting standards and/or exceptions to IAS are noted (i.e., claims financial statements prepared in accordance with national GAAP and IAS; claims financial statements in accordance with IAS with exceptions as noted; claims financial statements prepared according to national GAAP and that they also comply with IAS in all material aspects or are consistent with IAS).

H_{a3e}: The manner in which companies refer to the use of IAS in the accounting policies footnote is significantly associated with level of disclosure.

H_{a4e}: The manner in which companies refer to the use of IAS in the accounting policies footnote is significantly associated with the extent of compliance with IASC-required disclosures.

Prior research provides some evidence that the level of disclosure may be associated with the type of auditor. However, this variable is not considered in the current study because, with the exception of six companies, the sample companies are audited by one of the Big 5+2. However, the current research does explore the association between compliance and/or disclosure level, and the manner in which the audit opinion addresses (1) the type of accounting standards used by the companies and (2) the auditing standards adhered to. The variable OPACCT categorizes companies as follows:

- Audit report states financial statements in compliance with IASs.
- Audit report makes reference to IASs with noted exceptions or the audit report makes no reference to IASs.

H_{a3f}: The type of accounting standards used by the company, as stated in the audit report, is significantly associated with level of disclosure.

H_{a4f}: The type of accounting standards used by the company, as stated in the audit report, is significantly associated with the extent of compliance with IASC-required disclosures.

The variable OPAUDIT categorizes companies as follows:

- Audit report states International Standards of Auditing (ISAs) were followed
- Audit report makes no reference to ISAs.

H_{a3g}: The audit standards adhered to, as stated in the audit report, is significantly associated with the level of disclosure.

H_{a4g}: The audit standards adhered to, as stated in the audit report, is significantly associated with the extent of compliance with IASC-required disclosures.

METHODOLOGY

Sample Selection

Companies claiming to comply with IASs that have U.S. listings or filings were identified by comparing *The ADR Investor* (issued by the Bank of New York, 2000) list of companies selling U.S. ADRs to the IASC's (2000) *Companies Referring To Their Use of IAS*. *The ADR Investor* specifies listings as NYSE or NASDAQ and filings as 144A or OTC. Additionally, 12g3-2(b) companies were identified by comparing the SEC's (2000) list of 12g3-2b companies with the IASC's *Companies Referring To Their Use of IAS*. For all IAS companies identified with U.S. listings or filings, 1998 annual reports were obtained. Inclusion in the sample was contingent on the accounting policies note indicating that the financial statements were in accordance with IASs or consistent with IASs and/or the audit opinion indicating the financial statements were prepared in accordance with IASs. Companies were excluded from the sample if they operated in the finance industry, the natural resource industry, or a regulated industry.

A group of IAS companies that does not have listings or filings in the U.S. was selected from the remaining companies on the IASC's *Companies Referring To Their Use of IAS*. Selection was based on matching to the companies with U.S. listings or filings based on country and to the extent possible industry.³ For all companies included in the group without U.S. listings or filings, the accounting policies note and/or audit opinion referred to the use of IAS as described above. A list of sample companies is provided in Table 1.

Table 1. Sample Companies

<i>Company</i>	<i>Country</i>
Panel A: U.S. listed companies (20-F) that claim to comply with IASs, $n = 11$	
Aramax	Jordan
Beijing Yanhua Petrochemical	China
Gucci Group NV	Netherlands
Hoechst	Germany
Jilin Chemical	China
New Holland	Netherlands
Nokia	Finland
Scania	Sweden
Shanghai Petrochemical	China
Sulzer Medica	Switzerland
Usinor Sacilor-18	France
Panel B: U.S. filing (12g3-2(b) exempt) companies that claim to comply with IASs ($n = 12$)	
ABB AG	Switzerland
Boehler-Uddeholm	Austria
Dairy Farm Int'l	Hong Kong
Holderbank Financiere Glarus AG	Switzerland
Jardine Matheson Holdings	Hong Kong
Lafarge SA	France
Mandarin Oriental	Hong Kong
Nestle	Switzerland
Novartis	Switzerland
Puma	Germany
Technip	France
Vtech Holdings 16	Hong Kong
Panel C: U.S. filing (OTC/144A) companies that claim to comply with IASs, $n = 18$	
Adidas-Salomon	Germany
AECI Ltd.	South Africa
Bayer AG	Germany
Borsod	Hungary
Canal +	France
Esselte AB	Sweden
Fotex	Hungary
Henkel	Germany
Kemira	Finland
Lagardere SCA	France
Merck KGAA	Germany
C.P. Pokphand Co.	Hong Kong
Renault SA	France
Richemont	Switzerland
Roche Holding AG	Switzerland
Toray Industries	Japan
Torkett Summer	Germany
Yizheng Chemical	China

(continued on next page)

Table 1. (Continued)

<i>Company</i>	<i>Country</i>
Panel D: Non-U.S. listing or filing companies that claim to comply with IASs, $n = 41$	
Algroup	Switzerland
Anhui Conch Cement	China
Ares Serono Group	Switzerland
Articon	Germany
BB Med Tech	Switzerland
Beijing Orient Electronics	China
Bongrain	France
Calida	Switzerland
Cementia Holding	Switzerland
China Motor Telecom	China
Christian Dalloz	France
Danisco	Denmark
Danubius	Hungary
Dyckerhoff	Germany
Essilor	France
Gintian	China
Heidelberger Druckmaschinen	Germany
Heidelberger Zement	Germany
Jardine International Motor Holding	Hong Kong
Lectra	France
MB Software	Germany
Metra	Finland
Moevenpick Holding	Switzerland
Moulinex SA	France
Oriflame	Belgium
Perstorp AB	Sweden
Phoenix Mecano	Switzerland
Pliva	Croatia
Saint Gobain	France
Schering AG	Germany
Shanghai Dajiang	China
Sherzhen Textile	China
Shijiazhuang Baoshi	China
Sihl	Switzerland
Technotrans	Germany
Tiszai Vegyi Kombinat	Hungary
Trelleborg	Sweden
Voest-Alpine Stahl	Austria
Weiju Fuel Injection	China
Zimbabwe Sun Limited	Africa
Zwack Unicum	Hungary

In order to test H_{a1} and H_{a2} , analysis of variance (ANOVA) was used. This procedure tests overall group differences between U.S. listed companies, companies with U.S. filings, and companies with no U.S. listings or filings with respect to (1) overall level of disclosure and (2) compliance with IASs. The results of each ANOVA were then used to determine model specifications for testing of the remaining hypotheses related to company

characteristics. Stepwise regression was first used to determine which factors are associated with the overall level of disclosure, with follow-up ordinary least squares (OLS) regression based on the results of the stepwise regression. The regression equation for the overall level of disclosure is specified as:

$$\text{INDEX}_j = \beta_0 + \beta_1 \text{ASSETS} + \beta_2 \text{PROFIT} + D_1 \text{OPAUDIT} + D_2 \text{OPACCT} + D_3 \text{POLICY} \\ + D_4 \text{INDUSTRY} + D_5 \text{LISTING} + e_j$$

Where: INDEX=*j*th observation of disclosure index by company;

β_0 =constant;

β_1 =size as measured by total assets in U.S. dollars;

β_2 =profit, as measured by rate of return (Net income before tax/total stockholders' equity);

D_1 =dummy variable

1 if audit opinion indicates company follows international standards of audit.

0 if otherwise;

D_2 =dummy variable

1 if audit opinion indicates company's financial statements are prepared in accordance with international accounting standards (IASs),

0 if otherwise;

D_3 =dummy variable

1 if accounting policy footnote indicates IASs are the basis for the financial statements,

0 if otherwise;

D_4 =dummy variable

1 if company is a manufacturing company,

0 otherwise;

D_5 =dummy variable⁴

1 if company is a 20-F company,

0 if otherwise;

e_j =stochastic error term;

β =parameter.

For the compliance tests, the same regression equation was estimated, with the following change for LISTING:⁴

D_5 =dummy variable (1 if company is a U.S.-listed or U.S. filing company, 0 if otherwise).

Dependent Variable

A checklist for IASC-required disclosures was developed for IASs 1 through 38.⁵ For IASs that have been revised, but were not yet mandatory for fiscal year 1998, the

disclosure list included the original disclosures and the additional disclosures included in the recent revision of the IAS. To tap voluntary disclosures, items were added to capture disclosures as follows:

- Required by U.S. GAAP but not by IASC GAAP,
- Cited in previous literature as items frequently provided by companies seeking the benefits associated with full disclosure.

The disclosure checklist focused on items disclosed in the financial statements and footnotes. Items disclosed elsewhere in the annual report were not considered. The only exception was the items referred to in IAS 1 that may be disclosed in the financial statements, footnotes, or elsewhere (i.e., dividend per share and number of employees).

Based on a review of the company's complete annual report, each disclosure item was coded as disclosed, not disclosed, or not applicable, following Cooke (1989b):

$$\text{Disclosed (TD)} = \sum_{i=1}^m d_i$$

Where $d = 1$ if the item d_i is disclosed;
 0 if the item d_i is not disclosed, and
 $m \leq n$ (see below).

A review of the complete annual report minimized the possibility that companies would be penalized for disclosures that were not applicable or immaterial. Failure to adopt such an approach would have resulted in larger, more diversified companies being more likely to disclose more information (See Buzby, 1975; Cooke, 1989b, 1991, 1992). The overall disclosure index (INDEX) for each company was calculated by dividing the total number of mandatory and voluntary disclosures provided by the number of applicable disclosures. Adjustments were made to the data set so that disclosures noted in more than one IAS were not double-counted (i.e., research and development charged to expense is required by both IAS 9 and IAS 38).

$$\text{Total Applicable (M)} = \sum_{i=1}^n d_i$$

Where $d =$ expected item of disclosure;
 $n =$ the number of items which the company is expected to disclose.

The disclosure index for compliance (INDEX) for each company was measured by the number of mandatory disclosures provided divided by the number of applicable mandatory disclosures.

$$\text{INDEX} = \frac{\text{TD}}{M}$$

Table 2. Analysis of Variance on Overall Level of Disclosure and Compliance

Source	df	SS	MS	F	Prob>F
Panel A: Overall level of disclosure, test of H_{11}					
Group	2	1.08033403	0.54016702	5.60	0.0038
Error	2,037	196.61548414	0.09652208		
Total	2,039	197.69581817			
Panel B: Compliance, test of H_{12}					
Group	2	2.30275136	1.15137568	12.97	0.0001
Error	1,792	159.03610736	0.08874783		
Total	1,794	161.33885871			

With respect to mandatory disclosures, for those IASs that had been revised but were not yet effective for fiscal year 1998, the number of applicable mandatory disclosures was based on the original version of the IAS unless the company specifically indicated early adoption of the standard. For early adoptors of recently revised or new IASs, the expanded disclosure requirements were treated as mandatory.^{6,7}

RESULTS

Level of Disclosure— H_{11}

ANOVA allows for an examination of differences between (1) the U.S. listings group (20-F), (2) the U.S. filings group, and (3) the group with no U.S. listings or filings.⁸ The null of no significant difference in group means is rejected ($F = 5.60$, $p < 0.004$, See Panel A, Table 2).

Follow-up multiple comparisons using Duncan's Multiple Range Test of differences in cell means indicates that the overall level of disclosure is not significantly different for companies with U.S. filings and those companies without U.S. listings or filings. However, at $\alpha = 0.05$, the overall level of disclosure for the U.S. filings group and the group without U.S. listings or filings combined (74.9%) is less than the level of overall disclosure for the U.S. listing (20-F) group (81.3%) (See Table 3).

The results of the ANOVA indicate how to best group the data in the stepwise regression. Hence, in the stepwise regression examining factors associated with overall level of disclosure, listing status is coded as U.S. listed (20-F) versus not U.S. listed (U.S. filings and no U.S. listings or filings).

Compliance— H_{12}

ANOVA was used to examine any differences in compliance between (1) the U.S. listings group (20-F), (2) the U.S. filings group, and (3) the group without U.S. listings or filings.⁹ The null of no significant difference is rejected at $p < 0.0001$ ($F = 12.97$) (See Panel B, Table 2). Follow-up multiple comparisons using Duncan's Multiple Range Test of differences in cell means indicates compliance with IASC mandatory disclosures is not

Table 3. Mean Disclosure Index by Group

<i>Group</i>	<i>Mean disclosure index</i>
Panel A: Overall level of disclosure	
U.S. listings	0.813
No U.S. listings (includes U.S. filings and No U.S. listings of filings)	0.749
Panel B: Compliance	
U.S. listings and U.S. filings	0.843
No U.S. listings or filings	0.774

significantly different for 20-F companies and companies with U.S. filings. However, at $\alpha = 0.05$, compliance for the U.S. listings and filings groups combined (84.3%) is significantly greater than compliance for the group with no U.S. listings or filings (77.4%) (See Table 3). Thus, in the stepwise regression that examines factors associated with the degree of compliance with IASs, listing status is coded as U.S. listings or filings versus no U.S. listings or filings.

Level of Disclosure— H_{a3}

Stepwise regression (See Table 4) was utilized to determine the factors associated with overall level of disclosure. Examination of Pearson correlation coefficients suggests no problems associated with multicollinearity.⁹ Additionally, variance inflation factors (VIFs) were run to measure “how much the variances of the estimated regression coefficients are inflated as compared to when the independent variables are not linearly related” (Neter et al., 1989). The larger the VIF, the greater the difference between the coefficient estimated in the regression equation and the true coefficient. A VIF greater than 10 indicates a serious multicollinearity problem (Neter et al., 1989). The largest VIF noted was for OPAUDIT at 1.516. Thus, there appears to be no serious problems with multicollinearity in the data. Based on a significance level of 0.15, stepwise regression selected the variables POLICY, LISTING, and OPAUDIT (See Panel A, Table 4). These three variables were then input into an OLS regression model. The OLS regression confirms that the best model includes the variables LISTING (H_{a3b}), POLICY (H_{a3e}), and OPAUDIT (H_{a3g}) ($F=14.492$, $p<0.0001$, See Panel B, Table 4). The model explains approximately 34 percent of the variance attributable to the independent variables. Panel C of Table 4 shows the parameter estimates and t -statistics for the OLS model. Thus, the null hypothesis for H_{a3b} , H_{a3e} , and H_{a3g} is rejected.

The results of the regression do not support a size (H_{a3a}), profitability (H_{a3c}), industry (H_{a3d}), or audit opinion stating that IASs were followed (H_{a3f}) effect. Thus, the null hypotheses for H_{a3a} , H_{a3c} , H_{a3d} , and H_{a3f} cannot be rejected.

Compliance— H_{a4}

Stepwise regression (see Table 5) was utilized to determine the factors associated with compliance. Pearson correlation coefficients suggest no problems associated with multi-

Table 4. Regression Models Estimated Factors Associated with Overall Level of Disclosure (Tests of H_{a3})

<i>Panel A: Stepwise regression on level of disclosure</i>					
<i>Step</i>	<i>Variable entered</i>	<i>Removed</i>	<i>Model R²</i>	<i>F</i>	<i>Prob>F</i>
1	POLICY		0.2682	28.5873	0.0001
2	OPACCT		0.3149	5.2505	0.0247
3	LISTING		0.3358	2.3875	0.1265
4	OPAUDIT		0.3768	4.9359	0.0293
5		OPACCT	0.3639	1.5538	0.2165

<i>Panel B: Analysis of variance on stepwise model</i>					
<i>Source</i>	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Prob>F</i>
Model	3	0.31197	0.10399	14.492	0.0001
Error	76	0.54536	0.00718		
Total	79	0.85733			
Adjusted					
$R^2 = 0.3388$					

<i>Panel C: OLS regression model</i>					
<i>Variable</i>	<i>df</i>	<i>Parameter estimate</i>	<i>Standard error</i>	<i>T for HO: Parameter = 0</i>	<i>Prob>T</i>
INTERCEPT	1	0.657838	0.01777449	37.010	0.0001
LISTING	1	0.075764	0.02957955	2.561	0.0124
OPAUDIT	1	0.070530	0.02380615	2.963	0.0041
POLICY	1	0.072056	0.02350550	3.066	0.0030

Model: $INDEX_j = \beta_0 + \beta_1 ASSETS + \beta_2 PROFIT + D_1 OPAUDIT + D_2 OPACCT + D_3 POLICY + D_4 INDUSTRY + D_5 LISTING + e_j$

collinearity.¹⁰ VIFs were examined as a formal test of multicollinearity. The highest VIF was noted to be OPACCT, with a VIF of 2.27. Again, since the VIFs are not 10 or above, we conclude that there is no significant problem with multicollinearity.

Based on a significance level of 0.15, stepwise regression selected the variables OPACCT, LISTING, OPAUDIT, and POLICY (See Panel A, Table 5).

A second OLS regression model was run with the variables OPACCT, LISTING, and OPAUDIT. POLICY was excluded in the reduced model as it was only marginally significant in the stepwise regression model ($p < 0.0704$). Based on the OLS regressions, the best model includes the variables OPACCT (H_{a4f}), LISTING (H_{a4b}), and OPAUDIT (H_{a4g}) ($F = 19.461$, $p < 0.0001$, See Panel B, Table 5). This model explains approximately 41 percent of the variance attributable to the independent variables. Panel C of Table 5 shows the parameter estimates and t -statistics for the OLS model. Thus, the null hypothesis of no effect for H_{a4f} , H_{a4b} , and H_{a4g} is rejected. No evidence is provided for a size (H_{a4a}), profitability (H_{a4c}), industry (H_{a4d}), or policy (H_{a4e}) effect. Thus, the null hypothesis for H_{a4a} , H_{a4c} , H_{a4d} , and H_{a4e} cannot be rejected. A summary of the findings for H_{a3a} – H_{a3g} and H_{a4a} – H_{a4g} is reported in Table 6.

Table 5. Regression Models Estimated Factors Associated with Compliance with IASs (Tests of H_{a4})*Panel A: Stepwise regression on compliance*

Step	Variable entered	Removed	Model R^2	F	Prob>F
1	OPACCT		0.2955	32.7193	0.0001
2	LISTING		0.3783	10.2462	0.0020
3	OPAUDIT		0.4345	7.5533	0.0075
4	POLICY		0.4588	3.3702	0.0704

Panel B: Analysis of variance on stepwise reduced model (excludes POLICY variable)

Source	df	SS	MS	F	Prob>F
Model	3	0.51833	0.17278	19.461	0.0001
Error	76	0.67472	0.00888		
Total	79	1.19304			
Adjusted					
$R^2 = 0.4121$					

Panel C: OLS regression model on reduced model

Variable	df	Parameter estimate	Standard error	T for H_0 : Parameter = 0	Prob>T
INTERCEPT	1	0.663141	0.02223488	29.824	0.0001
LISTING	1	0.078411	0.02128964	3.683	0.0004
OPAUDIT	1	0.073110	0.02660163	2.748	0.0075
OPACCT	1	0.098599	0.02709670	3.639	0.0005

Model: $INDEX_i = \beta_0 + \beta_1 ASSETS + \beta_2 PROFIT + D_1 OPAUDIT + D_2 OPACCT + D_3 POLICY + D_4 INDUSTRY + D_5 LISTING + e_i$.

DISCUSSION OF FINDINGS

For a sample of companies referring to the use of IASs, this research addresses four primary research questions. In response to an inquiry by the SEC Chief Accountant, research questions #1 and #2 explore the extent to which U.S. listing or filing status is associated with the overall level of disclosure provided and the extent of compliance with IASC-required disclosures. Research questions #3 and #4 address the factors associated with the overall level of disclosure provided by companies and the extent of compliance with IASC-required disclosures.

An analysis of research questions #1 and #2 provides a response to an inquiry by the SEC Chief Accountant. The findings reveal that the overall level of disclosure provided by companies that file Form 20-F (81%), in association with a listing on the NYSE or NASDAQ, significantly exceeds the disclosures provided by companies with U.S. filings or with no U.S. listings or filings (75%). This finding is in line with previous research that consistently suggests an association between listing status and the overall level of disclosure.

A series of protected *t*-tests identifies any significant differences in the overall levels of disclosure for each IAS.¹¹ These indicate that 20-F companies provide significantly more disclosure (See Panel A, Table 7) with respect to IAS 9 (Research and Development Cost).

Table 6. Summary of Findings for Factors Related to Overall Level of Disclosure and Compliance

<i>Variable name</i>	<i>Definition</i>	<i>Hypothesis</i>	<i>Finding</i>
Panel A: Level of disclosure			
ASSETS	Total assets in U.S. dollars	H _a 3a	Not supported
LISTING	1 if U.S. filing 0 otherwise	H _a 3b	Supported
PROFIT	<i>NI before tax/Total SE</i>	H _a 3c	Not supported
INDUSTRY	1 if manufacturing 0 otherwise	H _a 3d	Not supported
POLICY	1 if accounting policy footnote indicates IASs are the basis for the financials 0 otherwise	H _a 3e	Supported
OPACCT	1 if audit opinion indicates company's financials are prepared in accordance with IASs 0 otherwise	H _a 3f	Not supported
OPAUDIT	1 if audit opinion indicates company follows international standards of audit 0 otherwise	H _a 3g	Supported
Panel B: Compliance			
ASSETS	Total assets in U.S. dollars	H _a 4a	Not supported
LISTING	1 if U.S. listing or U.S. filing 0 otherwise	H _a 4b	Supported
PROFIT	<i>NI before tax/Total SE</i>	H _a 4c	Not supported
INDUSTRY	1 if Manufacturing 0 otherwise	H _a 4d	Not supported
POLICY	1 if accounting policy footnote indicates IASs are the basis for the financials 0 otherwise	H _a 4e	Not supported
OPACCT	1 if audit opinion indicates company's financials are prepared in accordance with IASs 0 otherwise	H _a 4f	Supported
OPAUDIT	1 if audit opinion indicates company follows international standards of audit 0 otherwise	H _a 4g	Supported

IAS 12 (Income Taxes), IAS 19 (Employee Benefits), IAS 33 (Earnings Per Share), and IAS 37 (Provisions, Contingent Liabilities, and Contingent Assets).

For IAS 19, the disclosure checklist includes items required by the version effective for 1998 financial statements, items where disclosure is encouraged but not required, and the additional disclosures required by the 1998 revision of the IAS. 20-F companies supplied 80 percent of the employee benefit disclosures while the other companies provided only 54 percent. This difference is linked to 20-F companies exhibiting higher levels of compliance with IAS 19 (discussed in more detail under research question #2), and voluntarily supplying some of the additional disclosures that will be required by the 1998 revision (effective for periods beginning on or after January 1, 1999). For example, USINOR early-adopted IAS 19, thereby considerably increasing the company's overall level of disclosure in association with IAS 19.

Table 7. Mean Disclosure Index by Standard

<i>IAS number</i>	<i>Subject of Standard</i>	<i>F</i>	<i>Pr>F</i>
Panel A: Overall level of disclosure			
1	Accounting policies	0.22	0.6402
2	Inventories	0.29	0.5931
7	Cash flow statement	0.19	0.6620
8	Net profit/loss, errors, and changes in policy	1.61	0.2044
9	Research and development	4.44	0.0353*
10	Subsequent events	2.33	0.1275
12	Income taxes	6.69	0.0098**
13	Presentation of current assets and current liab	0.52	0.4697
14(a)	Segment reporting (geographic)	0.23	0.6343
14(b)	Segment reporting (line of business)	0.05	0.8152
16	Property, plant, and equipment	2.09	0.1489
17	Leases	0.27	0.6010
18	Revenue	1.15	0.2828
19	Employee benefits	9.21	0.0024**
20	Government grants and government assistance	1.41	0.2351
21	Foreign exchange rates	0.64	0.4235
22	Business combinations	0.16	0.6916
23	Borrowing costs	0.52	0.4704
24	Related party disclosures	0.01	0.9047
25	Accounting for investments	1.26	0.2611
27	Consolidated financial and inv. in subsidiaries	2.38	0.1234
28	Investments in associates	0.35	0.5514
29	Hyperinflationary economies	4.79	0.0287*
31	Interests in joint ventures	2.65	0.1038
32	Financial instruments: Disclosure and presentation	0.55	0.4572
33	Earnings per share	8.37	0.0038**
34	Interim financial reporting	0.53	0.4678
35	Discontinuing operations	0.01	0.9301
36	Impairment of assets	0.69	0.4065
37	Provisions, contingent liabilities and assets	7.67	0.0056**
38	Intangible assets	0.14	0.7103
Panel B: Compliance			
1	Accounting policies	0.6825	0.4089
2	Inventories	0.8758	0.3495
7	Cash flow statement	0.7528	0.3857
8	Net profit/loss, errors, and changes in policy	5.5966	0.0181*
9	Research and development	0.5669	0.4516
10	Subsequent events	1.1897	0.2755
12	Income taxes	11.3374	0.0008***
13	Presentation of current assets and current liab	2.2738	0.1318
14(a)	Segment reporting (geographic)	1.0641	0.3024
14(b)	Segment reporting (line of business)	1.8921	0.1691
16	Property, plant, and equipment	2.2685	0.1322
17	Leases	12.2944	0.0005***
18	Revenue	0.8792	0.3486
19	Employee benefits	7.2755	0.0071**
20	Government grants and government assistance	0.0855	0.7700
21	Foreign exchange rates	0.1116	0.7384

(continued on next page)

Table 7. (Continued)

IAS number	Subject of Standard	F	Pr>F
Panel B: Compliance			
22	Business combinations	0.0001	0.9940
23	Borrowing costs	4.0513	0.0443*
24	Related party disclosures	0.0000	1.0000
25	Accounting for investments	2.2136	0.1370
27	Consolidated financials and Inv. in subsidiaries	0.8494	0.3569
28	Investments in associates	0.3590	0.5491
29	Hyperinflationary economies	0.0000	1.0000
31	Interests in joint ventures	1.0928	0.2960
32	Financial instruments: Disclosure and presentation	3.1332	0.0769
33	Earnings per share	5.1078	0.0239*
35	Discontinuing operations	3.1583	0.0757
36	Impairment of assets	0.9870	0.3206
37	Provisions, contingent liabilities and assets	0.7167	0.3973
38	Intangible assets	0.4797	0.4887

* $p < 0.05$.** $p < 0.01$.*** $p < 0.001$.

Some of the significant differences in the overall level of disclosure are solely associated with higher levels of noncompliance for companies without U.S. listings. The disclosure checklist included only IASC-required disclosures for IASs 12 and 33. While 20-F companies exhibit relatively high levels of compliance with IAS 12 (96%), the level of compliance is only 74 percent for the other companies. IAS 12 Revised became mandatory for 1998 financial statements and was not well-received by several sample companies, particularly those without U.S. listings. For example, in the accounting policies notes, Bongrain (French), China Motion Telecom (Chinese), Lafarge (French), and Lectra (French), acknowledged noncompliance with IAS 12. None of these companies have NYSE or NASDAQ listings. Additionally, for companies utilizing the liability method required by IAS 12 Revised, several companies with U.S. filings or without U.S. listings or filings omitted disclosures, such as:

- The expiration date of deductible temporary differences,
- The amount of deferred tax income/expense in respect of each type of temporary difference.

Our analysis reveals that 20-F companies provided 89 percent of the disclosures required by IAS 9, but other companies provided only 70 percent of the IASC-required disclosures. For IAS 33, 20-F companies provided 94 percent of the disclosures while other companies provided only 70 percent. Examples of disclosures omitted more frequently by companies that do not file Form 20-F include:

- IAS 9: amount of R&D charged as expense; for those capitalizing some development cost, the useful lives of assets used in R&D activities or the amortization rates used;

- IAS 33: amounts used in the numerators and denominators for basic and diluted EPS; a few did not disclose EPS.

IAS 37 becomes effective for periods beginning on or after July 1, 1999. Therefore, the companies were not required to provide these disclosures in their 1998 financial statements, but the 20-F companies voluntarily provided 82 percent of the disclosures. For example, USINOR early-adopted the standard and provided all the required disclosures. The other companies without a U.S. listing voluntarily provided only 59 percent of the disclosures. IAS 37 will require disclosures such as a reconciliation of the beginning and ending balance for each class of provision and an indication of the uncertainties about the amount and timing of cash flow associated with provisions.

The findings associated with research question #2 address noncompliance with IASs, which is an area of great concern to the IASC, IFAC, and securities market regulators such as the SEC. In line with Cairns (1999) and Street et al. (1999), the findings indicate that compliance with IASs is very mixed and somewhat selective.

The findings reveal that compliance with IASC-required disclosures for companies with U.S. listings or filings (84%) significantly exceeds the extent of compliance exhibited by companies without U.S. listings or filings (76%). A series of protected *t*-tests identifies significant differences in the compliance measures for each IAS.¹¹ The *t*-tests indicate significant differences associated with (See Panel B, Table 7):

- IAS 8 (net profit or loss for the period; 84% vs. 65%),
- IAS 12 (income taxes; 87% vs. 66%),
- IAS 17 (leases; 82% vs. 59%),
- IAS 19 (employee benefits; 77% vs. 60%),
- IAS 23 (borrowing costs; 60% vs. 46%), and
- IAS 33 (earnings per share; 80% vs. 66%).

While the extent of noncompliance with IASs 8, 17, 19, and 23 is more pronounced for companies without U.S. listings or filings, it is problematic for the entire sample and is accordingly discussed below.

As noted in the discussion of research question #1, some companies acknowledged noncompliance with IAS 12 Revised. Three of the four (Bongrain, Lectra, and China Motion Telecom) have no U.S. listings or filings. Additionally, for companies utilizing the liability method required by IAS 12 Revised, companies without U.S. listings or filings more frequently omitted disclosures such as those noted above.

As noted in the discussion of research question #1, some companies without U.S. listings or filings did not disclose the amount used in the numerator to calculate basic and diluted EPS or the weighted average number of shares used as the denominator in calculating basic and diluted EPS. Additionally, some companies without U.S. listings or filings simply did not disclose EPS.

A review of the average level of compliance with IASs for the entire sample indicates several standards where compliance is less than 75 percent. These include:

- IAS 8 (net profit or loss for the period; 75%),
- IAS 14 in regard to geographic disclosures (segment reporting; 60%),

- IAS 17 (leases: 71%).
- IAS 19 (employee benefits: 69%).
- IAS 23 (borrowing costs: 53%),
- IAS 29 (financial reporting in hyperinflationary economies; 56%),
- IAS 31 (joint ventures: 57%).

While the degree of compliance with IAS 29 gives reason for concern, it is important to note that the standard was not applicable for the majority of sample companies. Of the nine companies for which IAS 29 is applicable, only one (a 20-F company) provided all the required IAS disclosures.

With respect to IAS 8, several companies, particularly those without U.S. listings or filings, failed to provide the disclosures required for a change in accounting policy that should have been provided in association with the adoption of IAS 12 Revised. For example, several did not provide the amount of the adjustment related to each period presented.

With respect to IAS 14, noncompliance was particularly evident with regard to geographic disclosures. For example, several companies provided only sales data by geographic region as required by the European Union Directives although information contained elsewhere in the annual report strongly suggested additional disclosures such as operating profit and assets by geographic region were warranted.

Among the companies that disclosed material amounts of assets subject to finance leases, several failed to provide other IAS 17-required disclosures such as commitments for minimum leases payments. In association with operating leases, some companies reported rental expense for the period and indicated continuing commitments for several years; however, several of these companies did not disclose the amounts of these future commitments as required by IAS 17. Further, several companies claimed to early-adopt the standard, but failed to provide relevant new disclosures.

A troubling number of companies with defined benefit pension plans failed to provide all the disclosures required by IAS 19. Compliance was particularly low in regard to disclosure of the fair value of the plan assets, the actuarial present value of the promised benefits, and a description of the principle actuarial assumptions used in determining the cost of retirement benefits.

With the exception of some Chinese companies, most companies utilizing the IAS 23 allowed alternative did not disclose the capitalization rate used to determine the amount of borrowing costs eligible for capitalization. Some utilizing the allowed alternative also failed to disclose the amount of borrowing costs capitalized for the period. A few companies with significant amounts reported under construction in progress failed to even disclose the accounting policy for borrowing costs.

For several companies with material interests in joint ventures, compliance with IAS 31-required disclosures is limited or nonexistent. Most, but not all, provided a list of the significant joint ventures. However, many of the companies failed to disclose the aggregate amounts of current assets, current liabilities, long-term assets, income, and expenses related to these joint ventures.

The findings associated with research question #3 indicate the overall level of disclosure is significantly associated with:

- Listing status.

- The type of auditing standards adhered to as stated in the audit opinion, and
- The manner in which the accounting policies footnote makes reference to the use of IASs.

Specifically, the overall level of disclosure provided by companies with U.S. listings (20-F companies) exceeds the overall level of disclosure provided by companies with U.S. filings and companies with no U.S. listings or filings. Additionally, more disclosure is associated with an accounting policies footnote stating that IASs are the primary reporting standards used by the company and where no exceptions to the use of IASs are noted. Alternatively, lower disclosure is associated with an accounting policies footnote that refers to IASs in another manner. For example, the company may note compliance with domestic GAAP and IAS, note exceptions to compliance with IASs, or claim the financial statements are based on domestic GAAP but that they also comply with IAS in all material aspects or are consistent with IAS. More disclosure is also associated with an audit opinion that makes a specific reference to the utilization of ISAs issued by IFAC. Alternatively, lower disclosure is associated with an audit opinion that makes reference to the use of domestic auditing standards, professional standards, generally accepted auditing standards, or principles of proper annual account audit.

These findings are consistent with prior research that indicates a significant association between listing status and overall level of disclosure. While prior studies also indicate that variables including size and profitability may be associated with overall level of disclosure, our results suggest a different scenario for companies that refer to the use of IASs. In addition to listing status, our findings indicate that the accounting policies footnote and the audit opinion provide a better indication of the overall level of disclosure.

Extending prior research by Cairns (1999) and Street et al. (1999), the findings associated with research question #4 indicate the degree of compliance with IASs is significantly associated with:

- Listing status,
- The manner in which the audit opinion addresses the type of accounting standards used by the company, and
- The manner in which the audit opinion addresses the auditing standards adhered to.

Specifically, compliance with IASs for companies that file Form 20-F to achieve a NYSE or NASDAQ listing or with U.S. filings exceeds compliance for those companies with no U.S. listings or filings. Greater compliance is also associated with an audit opinion that specifically states that the financials are prepared in accordance with IAS. Alternatively, lower compliance is associated with an audit opinion that either makes reference to IASs with noted exceptions or makes no reference to IASs. Greater compliance is also associated with an audit opinion that makes a specific reference to the utilization of ISAs as issued by IFAC. Alternatively, lower compliance is associated with an audit opinion that makes reference to the use of domestic auditing standards, professional standards, generally accepted auditing standards, or principles of proper annual account audit.

CONCLUSION

For companies that make reference to the use of IASs, this research reveals that the overall level of disclosure is greater for companies with U.S. listings. Additionally, greater disclosure is associated with an accounting policies footnote that specifically states the financial statements are prepared in accordance with IASs and an audit opinion that states that ISAs were followed when conducting the audit.

The findings also indicate that the extent of compliance with IASs is greater for companies with U.S. listings or filings. Additionally, a higher level of compliance is associated with an audit opinion, which states that the financial statements are in accordance with IASs and that ISAs were followed when conducting the audit. These findings highlight the significance of the enforcement issue for the IASC as it seeks an IOSCO endorsement. Our findings indicate enforcement of IASs may be less of an issue for companies with listings and filings in the U.S. However, for companies without U.S. listings and filings, compliance is indeed of great concern. In light of this problem, the IFAC has criticized auditors for asserting that financial statements comply with IASs when the accounting policies and other notes show otherwise.

For companies making reference to IASs, the findings suggest that auditors have not addressed this issue directly. Instead of insisting that companies remove any reference to IASs unless the statements are indeed in full compliance with IASs, auditors indirectly signal the extent of compliance via wording in the audit opinion. The findings suggest that the financial statement user should question compliance with IASs unless the audit opinion specifically says the statements are prepared in accordance with IASs and the audit was conducted in accordance with ISAs. However, this situation needs to change.

Recently, the Big 5+2 international accounting firms joined forces to address accounting and auditing issues associated with globalization of business and capital markets, chaos in financial reporting, and the Asian Financial Crisis (Blanchet, 2000). A report by the United Nations Conference on Trade and Development noted that an analysis of the causes of the financial crisis that affected East Asia raises serious questions about transparency, *disclosure*, and the role of accounting and reporting in producing reliable and relevant information. The UN report clearly stated that *inadequate disclosure* was a contributing factor to the depth and breadth of the crisis. Additionally, the UN report stated that the local member firms of the Big 5 were involved in auditing most of the large corporations and banks in the East Asian countries. Many of the East Asian companies that received a clean bill of health from their auditors proved to be "not a going concern" within a few months from the completion of the audit.

According to Muis (Vice President and Controller of the World Bank), the World Bank has asked the Big 5 to make sure they do not confuse the world by associating their international good name with financial statements prepared and/or audited far below international standards. The World Bank argues it is in the long-term interest of the Big 5 in terms of quality brand naming, and at the same time, useful for the clarity of the less initiated financial statement users that these problems be addressed.

In response to concerns expressed by not only the UN and World Bank, but also the SEC, the Big 5+2 have agreed to address the issues of noncompliance and limited disclosure of accounting information. Indeed, the findings of this research reveal that the

problem is widespread and not limited to Asia. The Big 5+2 plan is revolutionary as it encompasses all countries, all companies, and all auditors (Blanchet, 2000). The plan focuses on strengthening the accounting profession's international organizations and further developing international accounting standards and international standards of auditing. The goal is to prepare all financial information following a single worldwide framework, with common measurement and fair and *comprehensive disclosure*, which provides a transparent representation of the economics of transactions, and is consistently applied. To achieve this goal, the Big 5+2 will continue to work towards the development of high quality IASs, promote the IASC as the international accounting standards setter, and work to raise auditing standards and practices in all countries to common high standards with ISA as the benchmark.

If successfully implemented, the Big 5+2 plan should greatly assist in addressing several of the problems highlighted by the current research. Our findings suggest that raising the quality of auditing standards internationally is of the utmost importance. As all the sample companies made reference to IASs, and most were audited by Big 5+2 firms, it is reasonable for users to assume that at a minimum, the financial statements provide all IASC-required disclosures. However, the findings reveal numerous troubling instances of noncompliance particularly for companies with no U.S. listings or filings. The findings also indicate that voluntary disclosures tend to be limited unless the company has a U.S. listing.

With the issuance of 1999 financial statements, companies should no longer refer to the use of IAS unless they comply with each and every IAS (via a recent revision of IAS 1). The Big 5 + 2 must insist on compliance with IAS 1 Revised and refuse to sign clean audit opinions unless the financials statements are indeed in total compliance with all IASs and provide all IASC-required disclosures. The Big 5+2 have suggested this can be achieved by having companies that utilize standards that are "similar" to IASs provide legends in the accounting footnotes. A legend verbally describes significant differences with IAS. A legend would replace companies stating in the accounting policies footnote that the financial statements are "in compliance with IAS with noted exceptions" or "are consistent with IASs in all material aspects."

Given the rapid growth in cross-border listings and U.S. holdings of foreign securities, it is crucial that the Big 5+2 raise audit quality to a commonly high standard throughout the world and promote the enforcement of IASs. An IOSCO endorsement of IASs could further stimulate cross-border listings in the world's major capital markets. Additionally, acceptance of one set of high quality global accounting standards would greatly enhance the understandability of financial statements for analysts and other users. However, an IOSCO endorsement of IASs is unlikely to occur in the foreseeable future if the limited disclosure and noncompliance with IASC-required disclosures revealed by this research continue to be the norm. Enforcement and acceptance of IASs on a global basis is likely contingent on the successful and timely implementation of the Big 5+2 vision.

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NOTES

1. In line with Cerf (1961), Buzby (1975) reported that the extent of disclosure was not significantly associated with listing status. Buzby defined listed companies as those with common stock traded on the NYSE or AMEX. Unlisted companies included those with stock traded in the U.S. OTC market.
2. While the findings of Adhikari and Tondkar (1992) suggest that a London listing may be associated with greater levels of disclosure, our analysis indicates that the levels of disclosure and compliance with IASs for London-listed companies are not in line with those provided by companies with U.S. listings or filings. Thus, companies with London listings (that do not also have a U.S. listing or filing) are included in the group with no U.S. listings or filings, but no further analysis is reported for these companies.
3. For four companies it was not possible to match on country. In these instances, the match was selected from a country with a similar culture.
4. It was not known until the ANOVA results were obtained from testing H_{a1} and H_{a2} how to identify the grouping for the LISTING variable for the regression equation.
5. IAS 11 (Construction Contracts), IAS 15 (Information Reflecting Effects of Changing Prices), IAS 26 (Accounting and Reporting by Retirement Benefit Plans), and IAS 30 (Disclosures in the Financial Statements of Banks and Similar Financial Institutions) were excluded as these standards are not applicable for the sample companies. IAS 3 (Superseded by IAS 27 and 28), IAS 5 (Superseded by IAS 1), and IAS 6 were excluded in that they have been superseded by newer IASs.
6. These included IAS 1 (Presentation of Financial Statements), IAS 14 (Segment Reporting), IAS 17 (Leases), IAS 19 (Retirement Benefits), and IAS 22 (Business Combinations).
7. These included IAS 35 (Discontinued Operations), IAS 36 (Impairment of Long-Lived Assets), IAS 37 (Provisions, Contingent Liabilities, and Contingent Assets), IAS 38 (Intangible Assets).
8. SAS's PROC GLM procedure was used due to the unbalanced design.
9. A major (in excess of 0.90) correlation coefficient is generally indicative of a multicollinearity problem. The highest correlation coefficient was 0.70, between POLICY and OPACCT.
10. The highest correlation coefficient was again 0.70 between POLICY and OPACCT.
11. SAS's PROC MULTTEST using HOLM's step-down method was used to adjust for multiplicity in testing.

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Corporate Ownership and Governance in Russia

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Key Words: Russia; Corporate ownership; Managers' behavior

***Abstract:** This article investigates the impact of privatization on managers' behavior, considering both the unique features of the Russian reality and general theoretical issues in property rights and economic behavior. Our analysis was primarily concentrated on corporate ownership structure as the derivative of managers' primary interest in corporate control, on the approaches they employ in order to satisfy their primary interests, and on sources on managers' power. Attention then was directed to the relationship between the ownership structure and governance potentials of different groups of investors.*

The results of the study conclude that (1) the initial attempt to separate ownership and control in order to increase managers' incentives to be concerned about accounting numbers has not been successful; (2) currently, managers have a negative attitude toward any actions, which could alter their powerful position and the distinctive socio-economic environment in Russia provides enough incentives to ensure that the managers' behavior remains consistent with their desire to keep control of the corporate leadership; (3) corporate behavior during the transition period will not necessarily vary with changes in the structure of corporate ownership toward giving a greater power to outsiders, due to the very specific relationship between inside and outside owners.

The current economic transformation of the former Soviet economy is qualitatively different from other historical or current examples of major changes in the structure of economic institutions. The initial conditions, the scope and desired speed of the undertaking, and the initial passiveness of the general population distinguish this process from economic change elsewhere.

The Russian privatization program, so far, has been considered as the focal point of the transition to the market. It has challenged the former organization of property rights and has been viewed as the government's most effective tool for implementing radical economic reform.

Unfortunately, the privatization program did not fully account for its actual effects for microeconomic characteristics and parameters due to the desire to make it fast and irreversible.¹ Following the logic of a command economy, it was assumed that a well-

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developed deterministic approach (where full credit was given to the market as the sole economic regulator) would bring immediate positive changes in the economy. This approach was not successful because the starting point was quite distinguishable from the situation in which a market can regulate the state without any purposive intervention. Moreover, the underdeveloped market forces have been growing mature based on a system inherited from the Soviet era, which relies on a vertically integrated organization of production. This system does not suit the market. Despite the formal economic changes, the market today is still far from being fully developed. It depends on numerous objective factors related to the traditional branch structure of the Russian economy, commodity availability, lack of competition, geography of the state, heavy dependence on the raw material extraction industry, and the distinctive socio-economic situation in Russia.

Privatization aimed the major economic changes in the Russian economy such as the evolution of the ownership, the decentralization of the governance functions, and the formation of a new control mechanism. It has changed the power claim relations by converting state-owned and -managed enterprises into joint stock companies. In this context, we were able to identify several problems related to changes in ownership and governance. First, the control system is essentially new and managers face greater freedom in decision-making. The problem here is due to the fact that the new managers' functions are largely filled by individuals trained to work in the realities of the command economy, a situation that often precludes the enterprises' active adaptation to the market environment. Therefore, the issue of the managers' attitudes toward privatization and ownership redistribution, as well as their influence on the firm's behavior, became immediately important.

Second, the changes in the firms' ownership, in combination with an insufficient framework of corporate law, had facilitated entrenchment by the management of the former state enterprises and had enabled them to reinforce their position in the corporation. Under such circumstances, managers became the key players of the transition process. Yet, because the initial design of privatization did not account for this situation, today we can witness the collision of interests between the managers, who are trying to survive and remain on the top of the situation and the government, which is displaying the desire to speed up the transformation process. Therefore, an analysis of the managers' influence on the ownership structure and corporate governance of Russian enterprises after privatization is providing a crucial piece of knowledge, which can never be considered as complete. The managers' behavior is investigated in terms of its influence on the formation of the enterprises' main objectives and strategies.

In at least two ways, this study distinguishes itself from many other studies on privatization, corporate ownership, and governance in successor states. (Abalkin, 1993; Vasiliev, 1994; Aslund, 1995; Bergstrom, 1995; Sachs, 1995; Blasi, 1996; Kokh, 1998). First, this study does not consider the presence of outsiders in an ownership structure as the effective device, which can change managers' behavior. It does not follow the common wisdom among scholars that the reason for the poor performance of the Russian enterprises is the failure of outside owners to gain a foothold in privatized Russian firms. This article is more an attempt to proclaim that corporate behavior will not necessarily vary with changes in the structure of corporate ownership in transition economies, due to the specific socio-economic environment and peculiar characteristics of the relationship between inside and outside owners. The rationality of Russian managers' behavior will be

examined in light of the “agency problem,” which is the result of conflicting interests among the various parties such as managers, employees, capital contributors, suppliers and buyers (adjacent firms), and government officials that influence corporate behavior. Second, to explore managers’ behavior, we took an historical perspective and used theories developed in the United States 50 and more years ago. The main reason for this strategy is our belief in the regularity of socio-economic processes, even though they take place in different countries and distant in time. In the late 1920s, the American economy experienced the development of new business institutions such as multi-unit enterprises administered by sets of salaried managers. Economists at the time witnessed the ways in which managers wrested control from other groups of stockholders and used resources in contradiction with the stockholders’ interests. The similarities in both past American and current Russian experiences support the legitimacy of this approach.

The article consists of seven sections. The Privatization section and The Overview of Managers’ Power section provide the reader with the background for the issues addressed. They include a brief overview of the privatization process and the phenomenon of managers’ power in Russia in some detail. The Sample Selection and Data section characterizes the sample. The Aggregated Factors Affecting the Ownership Structure section describes the economy, industry, and region related factors that affect the ownership structure. The Managers’ Influence on Firms’ Behavior section explores the influence of the managers’ behavior on the formation of the firms’ strategies. In particular, it analyzes both the managers’ attitude toward control and ownership redistribution and the ways in which managers affect the firms’ behavior by adopting various modes of action. The Peculiarities of Outsiders Ownership section deals with the peculiarities of outside ownership by discussing beneficial interest owners and state ownership. The final section provides conclusions on the addressed issues.

PRIVATIZATION

The Russian economy in its present state is an imperfect and inefficient market. It is imperfect because of the high degree of monopolization and inefficient because of the lack of development of the infrastructure (banks, investment funds, etc.), the underdeveloped entrepreneurial culture, the impossibility of information flow, and a very approximate reaction of market agents to the changing conditions of commercial activity.

The socio-economic system has an enormous amount of inertia. The economy is still a conglomerate of state capitalism, deformed socialism, extra-economic compulsion, and very specific private property relations, which have grown out of black market relations and the privatization process. Moreover, it is not a mixed economy, but something very specific, because all named components are present in almost every economic entity. Therefore, the rational economic agent and the atmosphere for rational decision-making have quite different characteristics from what Western scholars are accustomed to.

In such a setting, the reform of property rights in Russia became an important element in the transition from an administrative to a market economy. Privatization aimed to “rationalize” the use of resources² and the size of the enterprise (huge conglomerates were to be broken into several entities), thereby maximizing the overall productive capacity of the economy.

Unfortunately, in the process of formulating a privatization policy, the social reference points were not included in the initial aims and the various interests of different social groups were not defined. There was no pilot study done on the managers' attitudes toward privatization prior to its formulation, the draft of Privatization Law was not properly discussed publicly.³ Thus, the government in the process of formulating privatization policy did very little to define the social interest groups that would serve as the socio-political base. Many problems later on stemmed from the fact that the government did not fully account for the interests of two very powerful social forces: the management of state enterprises and the new entrepreneurs.

At first, the process of privatization was supposed to separate management from ownership to expose managers to the discipline of markets. Presidential Decree "On Organization Measures to Transform State Enterprises and Voluntary Associations of State Enterprises into Joint Stock Companies" from July 1, 1992 initially prohibited privatization in the form of closed joint stock companies and was supposed to force enterprises to accept outside ownership. Later on, changes in the law allowed the privatization in the form of closed joint stock companies (Appendix A). Those changes caused a high level of inside ownership in Russian companies, which further hindered the outside owners' already poor control abilities (Zaostrovsev, 1994; Delpla and Wyplosz, 1995).

The Russian privatization program was based on voucher distribution, and the "labor collectives" (managers and workers) became the main owners of the enterprises for which they had been working (Chubais and Vishnevskaya, 1994; Aslund, 1995; Sachs, 1995; Kokh, 1998:). The whole process therefore turned into the privatization of insiders and the managers retain the power over the enterprise. So, it is very important to understand that the level of the managers' ownership does not really reflect an accurate picture of their control capabilities, because managers have rigid control over the workers' ownership and can also heavily influence certain groups of outsiders. The managers' privilege to exercise the power inherited from past economic relationships seems important enough to be analyzed in detail.

THE OVERVIEW OF MANAGERS' POWER

Even though the ideology of management is undergoing significant changes in Russia, managers can still keep their power and control their firms. What is the justification for the managers' superiority and the workers' obedience in Russia? Currently, managers can keep their power, to a large extent, simply by virtue of their positions. Their power is legitimized by the workers and the key role executives are supposed to play is to inculcate in them the main purpose of an organization—surviving. So far, employees have been predominantly cooperative in Russian firms. They have a common goal: to get through the transition with the least loss possible.⁴ This goal results from the hardship of the economic environment and cannot be achieved without cooperative endeavors. But even though the goal of surviving is common for all participants of a firm, different groups of owners have divergent interests and priorities. Thus, there are different forces within an organization, which are generated by different groups acting in concert to achieve a common goal (Cyert and March, 1992). The best people to lead the process are managers, due to their specific position within the firm in relation to the intellectual and institutional powers. Managers

set the firms' objectives, using propaganda and indoctrination to make their aims understandable and acceptable to all employees. Ultimately, by influencing the workers'–stockholders' power, managers attempt through the solid goal of surviving to create the illusion of a community.

Thus, the problem of human relations in an authoritarian setting of hierarchical organization becomes immediately important. Russian managers, for the most part, do not include workers within their purview, and workers are considered simply another source of production (Berle and Means, 1953) for several reasons. First, workers do not oppose the managers' power. Second, workers do not force themselves on the management's consciousness by developing unions. Third, there is no scarcity of labor. Fourth, the unstable economic environment gives managers the ability to justify the "privilege of voluntary action and association for themselves, while imposing upon all subordinates the duty of obedience" (Bendrix, 1956; Barzel, 1989). Therefore, the socio-economic condition so far seems favorable for managers to keep their power over the workers' will, and managers remain in a powerful position relative to corporate control.⁵

On a micro-level, Russian enterprises exhibit a peculiar social alliance. Because of Soviet inheritance, Russian enterprises have a specific "director–employees" relationship. It is mostly authoritarian (as opposed to the democratic), production-centered, and concerned with bureaucratic rules. Yet, top management always wants to appear as the protector and benefactor of employees. Although the new economic rules destroyed the old maxims, the traditional managers' behavior, attributable to the Soviet era, remains prevalent. For example, even though there is no lack of available labor on the market, nor restrictions on recruiting or layoffs, preservation of the labor force remains the key priority among the managers' activities. With the significant decrease in industry output (about 50%), Russia since 1992 has not experienced mass unemployment. It is commonly known that managers have found some very specific ways to avoid layoffs such as part-time work, long delays with the paychecks, payroll payments made in units of output, etc.

The explanation for these phenomena may lie in Knight's (1965) analysis of the distribution of risk among cooperative parties within the firm. He sees the process of redistributing risk between owners–managers and employees as the main rationale of a firm's existence. The profit and loss consequences of fluctuations in business outcomes are absorbed by the owners–managers, who contract to pay relatively stable wages to employees. Employees are thus at least partially insulated from those fluctuations, and the greater proportion of risk is reallocated to the party that is more willing to bear it. In return, the owners–managers require employees to allow their activities within the firm to be supervised. To accept this supervision, employees require relatively fixed contracts, which are in a sense insurance that attenuates risk. Therefore, the whole logic should be interpreted as reduction in risk cost through risk reallocation rather than risk redistribution.

For the Russian situation, Knight's rationalization makes sense because the employees view the paternalistic role of the management as a way to reduce risk rather than merely redistributing it. Reduction of risk is obviously in the interest of owners–managers, given that they have taken on a large share of the risk inherent in business transactions (Demsetz, 1995).

The study suggests that the most evident paternalistic approaches to the organization of production can be observed in places where managers have failed to find new strategies to survive and still rely on old methods. The working collectives in these settings usually

remain under the heavy influence of managers, and represent the long-term basis for the managers' control over the economic entities. Thus, the inheritance of the managers' functions is preserved. Those functions include mediating and defending of the enterprises' interests and establishing connections with bureaucratic administration.⁶ In this sense, the managers' control is taken as that which ensures stability and smooth business relations. Thus, the body of managers formed in the past remains the crucial participant in the ownership distribution and control process. The managers are elite employees with their own set of interests and unique capabilities, which enable them to find the solutions to peculiar problems.

Another reason that they are able to keep their power is that workers in Russia are trained to accept "wage slavery" (Perrow, 1986). Most of them never attempt to go into business and become self-employed. The idea of working for somebody else without any discretion regarding the job is still dominant. Therefore, already existing perceptions made possible the existence of managers' superiority.

While the managers' ability to control is contingent on their relatively powerful position, the precondition for the concentration of the ownership resides in the peculiar economic situation. Russian firms operate in a market characterized by a high level of political and economic instability. So, as the theory suggests (Demsetz and Lehn, 1985), managerial performance in Russia can be monitored only at a very high cost. The unpredictable and unstable environment requires timely managerial decisions concerning redeployment of corporate assets and personnel. In addition, it is necessary to run a company using extraordinary approaches (informal relationships, barter, etc.), which gives additional privileges to managers and contributes to an information asymmetry between managers and stockholders. Thus, a firm's control potential is directly associated with the noisiness of the environment in which it operates and this environment gives rise to a more concentrated ownership structure. Russian voucher privatization facilitated this process further. The concentration of the ownership by insiders, accompanied by the managers' powerful position, leads to the managers' near complete control over the enterprises. Managers, by themselves, are aware of the importance of this control,⁷ and they intend to figure out all possible ways to maintain the status quo.

Basically, they use three approaches to gain and keep corporate control: (1) they use their charismatic leadership and current paternalistic power in order to strengthen their position; (2) they redeem stock from the workers (31% of the sampled managers have already redeemed stocks from the workers, and 38% of them are planning to do the same in a short run future); and (3) they represent workers-stockholders in decision-making processes. It is especially important for managers when the portion of outside ownership is large enough so that they cannot fully exercise their power. In this case, they use the workers'-stockholders' voting power in order to outweigh the voting capabilities of outsiders.

Along with these tactics, managers have designed a peculiar way to preserve their control over the enterprises. They prevent the undesirable redistribution of the ownership by creating internal trust funds. According to the internal rule (usually launched by the board of directors), workers-stockholders are supposed to put their stocks in the trust fund, with no rights to redeem or withhold stocks from it. Commonly, those funds give their voting proxies to the managers. The managers' right to control and keep their authority is unquestioned by workers in most cases.

SAMPLE SELECTION AND DATA⁸

The study was done on the basis of questionnaires distributed in 1996 to the CEOs of Russian firms and uses ownership structure data available on the sample firms. The questionnaires were designed and administered by native Russian speakers and then both the responses and questionnaires were translated into English for the purpose of this research. Data were collected in four geographical areas (oblast) of the Russian Federation: Moscow (M), St. Petersburg (SP), Nizhnii Novgorod (NN), and Ural (U) regions. The choice of the geographical areas was predetermined by three different factors. First, substantial blocks of within-region observations were sought due to the claim that the activities of regional administrations, coupled with increased transport costs, serve to break up the national market into a series of regional markets with regional differentiation in costs, performance, behavior, etc. (Hanson, 1997; Kirkow, 1997; Mau and Stupin, 1997). Second, predominantly industrial, as opposed to agricultural areas, were chosen. And third, regions containing various industries rather than one predominant industry were chosen. The desire to study multi-industrial regions was based on the assumption that the process of firms' adaptation to market conditions varies across industries. The population from which the sample was drawn is based on a list of all privatized firms provided by the Oblast (Region) Property Funds. In each region, the list for the Mass Privatization Program (MPP) was obtained with full information as to the names of firms, their managers, their addresses, and partial information as to firms' sectors and number of employees.

To be included in the sample, firms had to meet the following selection criteria: (1) they must belong to manufacturing or extraction industries;⁹ (2) they had to be either companies privatized under the State Privatization Program or Privatized Leasehold Companies (PLC), newly created companies cannot be included; (3) firms with fewer than 500 workers were excluded from the sample; (4) they had to be finished with the privatization process at least 6 months prior to the survey. The latter requirement is due to the fact that data collected close to the time of privatization point is likely to contain little sign of change in firm behavior due to privatization. The 6-month period should be long enough for managers to choose their specific mode of adaptive behavior. Ownership structure and the variant of privatization data (1995–1996) were drawn from the privatization papers available on the enterprises. These criteria initially yielded 350 enterprises in total and the number of enterprises for each geographical area was approximately the same. The final sample consists of 312 firms, due to response rate of 89 percent from 12 different industries (Table 1).

The final sample includes open-type joint stock companies (variant 1, –20.5% of the sample), closed-type joint stock companies (variant 2, –54.2% of the sample), family or solely owned enterprises (variant 3, –4.2% of the sample), long-term lease (10.3% of the sample) direct purchase¹⁰ (3.8% of the sample), and special cases¹¹ (7.0% of the sample) (Table 2).

The sample includes different size companies with the number of workers, which varies from 500 workers (41% of the sample), to 500–1,000 workers (25%), to 1,000–3,000 workers (24%), to more than 3,000 workers (10% of the sample, respectively). The choice to investigate different size firms was predetermined by substantial variation in ownership structure in terms of size. The large open joint stock companies appear to be more attractive and accessible for outside investors. Thus, insiders in the largest firms have the

Table 1. The Sample Structure by Industries (%)

<i>Industries</i>	<i>No. of firms</i>	<i>%</i>
Fuel (F)	8	2.6
Consumer goods (CG)	50	16.9
Timber (T)	13	4.2
Machinery and metal production (MP)	115	36.0
Chemical (Ch)	21	6.7
Food processing (FP)	48	15.4
Publishing (P)	2	0.6
Construction materials (CM)	17	5.4
Communication systems (CS)	1	0.3
Building construction (BC)	22	7.1
Metallurgical (M)	8	2.6
Electric power (EP)	7	2.2
Total	312	100

Table 2. The Sample Structure by the Legal Form and the Size of the Firm

<i>Variant of privatization</i>	<i>%</i>	<i>Size (# of employees (mean))</i>
Variant 1	20.5	3,051
Variant 2	54.2	1,374
Variant 3	4.2	546
Long-term lease	10.3	786
Direct purchase	3.8	646
Special cases	7.0	1,356
Total	100.0	

smallest portion of equity, which presumably led to the weaker managers' control. Therefore, the differences in managers' behavior can intuitively be dependent on the size of the firm.

Limitations

There are two problems related to the sample. One disadvantage of the data set for describing ownership structure is that it is presumably dynamic. For instance, as the state privatizes its remaining holdings and as employees begin to sell their shares, the ownership structure is likely to change. Other sources indicate, however, that few such sales have taken place. Employees have not been very active selling their shares to outsiders. The results reported by Blasi et al. (1997) suggest that inside ownership might actually be rising slightly in 1997 compared to the previous year.

State ownership in most companies has changed little in the recent past. The so-called "investment actions" have been very slow and the "loans-for-shares" program focuses on the mining industry, which is not included in the sample (Blasi and Shleifer, 1996; Kokh, 1998), suggest that the median for inside ownership sale across all the firms was 0 percent, with the mean for managers' and workers' ownership sale at 4 and 1 percent for the trust

funds. This implies that ownership structure has not changed at all in more than half of companies, and that changes are somewhat minimal in the other firms.

Therefore, the analysis of the ownership structure in 1996 can provide a relatively accurate picture of the current condition. It also seems very useful to analyze the 1996 situation as the result of mass privatization and as the starting point for future changes related to the new Law on Joint Stock Companies. In addition to the ownership structure problem, this study (as well as all other existing studies we are aware of) lacks information about the composition of voting and non-voting stocks. The data available so far show that state holdings are predominantly non-voting shares and that a large percentage of the stake owned by workers is also non-voting stock. Therefore, it is quite complicated to capture outsiders' influence on companies' behavior, and all we can use so far is the level of outside ownership, assuming that this variable correlates with outside effect on firms' governance.

Finally, this survey does not use any accounting numbers from financial statements for several reasons: (1) Many accountants in Russia still use old Soviet accounting standards, which were not designed for a market economy. Thus, financial results computed according to the old standards cannot be compared to those based on new approaches. (2) High levels of barter off-book transactions render current financial statements, even under new (international) accounting standards, quite incomplete.¹² (3) Endemic non-payment of debts and taxes further complicate the analysis of current financial statements. All three reasons tend to make Russian financial statements unreliable and useless for analysis purposes. Hence, the only clearly, intervally scaled and verifiable data being used in this article is the size of the firm (# of workers) and the ownership structure (percentage of total ownership). All other measures derive from management perceptions or estimates as reported in the survey.

Before starting the analysis of the ownership structure in Russia, some distinctive characteristics related to the country's economic and cultural features should be examined foremost. First, Russia represents an expansive economic domain, with traditionally branch structure of its economy. Thus, it is feasible that different regions and industries exhibit distinctive characteristics of their ownership structure. Second, informal relationships in Russia have always been an important part of any institutional structure. Therefore, privatization presumably did not escape the influence of this eccentricity, which will be reflected in specific composition of the outside ownership. And third, with the state being a major owner in the recent past, it is important to examine its role in shaping firms' behavior.

THE AGGREGATED FACTORS AFFECTING THE OWNERSHIP STRUCTURE

Economic Factors Affecting the Dynamic of the Property Relations

The very peculiar economic environment in Russia heavily influences the success of property rights reform. The evolution of the governance system took place in the specific environment of the transition period, which can be characterized as the one with high inflation; unstable relationships among business partners, and the absence of the coordination of their activities; a very dynamic legislative environment in political and

Table 3. The Regions' Differences in Ownership Structure (% , means)

<i>Ownership</i>	<i>Moscow</i>	<i>St. Petersburg</i>	<i>Ural</i>	<i>Nizhny Nvgrd</i>
Inside owners (IO) including:	60.8	52.3	51.1	65.4
Workers (W)	47.8	36.5	38.3	48.2
Trust fund (TF)	0.5	3.7	1.1	5.3
Managers (M)	12.5	12.1	11.7	11.9
Outside owners (OO) including:	39.2	47.7	48.9	34.6
Individual owners (IO)	5.9	10.3	10.1	6.5
State (S)	10.5	7.3	12.3	6.9
Investment funds (IF)	1.6	6.4	6.2	5.4
Adjacent firms (AF)	1.0	3.4	5.1	2.8
Banks (B)	1.6	4.2	0.1	1.4
Holdings (H)	4.5	2.2	3.5	3.5
Foreign investors (FI)	1.3	3.3	1.0	0.2
Others (O)	12.8	10.6	10.6	7.9
Total	100	100	100	100

business spheres, and a high degree of freedom in the business sphere; an information asymmetry accompanied by an overall lack of information due to the underdeveloped system of communication.

Under such conditions, the process of formatting the new corporate governance structure is a challenge for most economic entities. Managers of newly privatized firms face all the problems, which accompany the evolution of property rights such as the creation of new supply and demand relationships, the search for new markets, the lack of funding from the state budget, and the development of new economic strategy. The degree of success during the transition period thus very heavily depends on managers, i.e., on the degree of their control over the enterprises, their ability to analyze all consequences of their decisions, and their ability to develop a suitable long-term strategy.

The Regional and Industrial Peculiarities of the Ownership Structure

The main peculiarities of the Russian industry are its branch structure and vast size. Analysis of the ownership structure in the regional dimension shows that different regions have distinctive characteristics (Table 3).

The Moscow and the Nizhny Novgorod regions have relatively similar ownership structure with high level of inside ownership (60.8% in M and 65.4% in NN), and an insignificant presence of outsiders among the stockholders. The industries of the Ural region have a very specific composition. Most of the military related, mineral extractive, and metallurgical enterprises historically were located in this area. All of these industries play a strategically important part in the Russian economy. The state remains the main owner of such enterprises, and workers'-stockholders' ownership is relatively low there. In the metallurgical industry, adjacent firms (suppliers and buyers) play a significant role in the production process and therefore make up the important group of owners in those firms. They own a significant portion of stocks at the expense of other outsiders (8% is the adjacent firms' ownership in metallurgical

Table 4. Industrial Differences in Ownership Structure (% , means)

	<i>Ch</i>	<i>F</i>	<i>MP</i>	<i>M</i>	<i>EP</i>	<i>CG</i>	<i>T</i>	<i>FP</i>	<i>CM</i>	<i>BC</i>
IO:	56.4	34.0	49.1	62.3	65.8	68.5	78.2	53.2	59.5	70.4
W	40.7	21.9	35.0	53.0	59.3	46.4	67.4	41.2	48.4	55.1
TF	4.5	0.4	2.6	0.0	0.0	4.6	1.3	2.6	0.0	4.5
M	14.4	11.7	11.5	9.3	6.5	17.5	9.5	9.4	11.1	10.8
OO:	43.6	66.0	50.9	37.7	34.2	31.5	21.8	46.8	40.5	29.6
In. O	8.3	10.4	9.9	9.9	8.0	7.3	4.4	5.9	11.5	6.0
S	15.9	24.0	10.7	5.5	24.5	4.9	6.1	12.2	10.0	2.5
IF	5.9	9.1	6.6	2.5	0.1	3.8	4.8	4.6	3.6	1.4
AF	1.3	0.0	2.8	8.0	0.0	2.6	1.3	4.9	3.1	5.4
B	1.9	0.0	2.4	2.3	0.0	1.0	0.0	2.8	4.1	0.0
H	6.0	1.9	4.4	5.6	0.0	1.6	1.1	4.1	2.5	3.4
F1	0.0	2.1	2.0	0.0	1.6	0.5	0.1	3.5	2.1	0.0
O	4.3	18.5	12.1	3.9	0.0	9.8	4.0	8.8	3.6	10.9
Total	100	100	100	100	100	100	100	100	100	100

industry vs. 0% in power and fuel industries, 1.3% in timber industry, 2.8% in machine building industry, 1.3% in chemical industry, etc.).

The St. Petersburg region has highly qualified professionals and well-developed economic connections with Scandinavian countries. The ownership structure of the St. Petersburg region contains a large amount of foreign investors, banks, and individual investors, which are on average, 15 percent higher than for other areas, and the portion of workers–stockholders is relatively lower than in the Moscow and Nizhny Novgorod regions (Table 4).

An analysis of the industrial peculiarities of the ownership structure show that the timber (forestry) industry has the highest level of inside ownership (78.2%, within which 67.4% and 9.5% of the equity is owned by workers and managers, respectively). Banks, on the other hand, have zero ownership there, and both phenomena are due to the fact that the timber industry has a strong internal and external market share. Therefore, financial resources (including convertible currency) are not an issue for those firms, and insiders can own and control their entities without having any need to share those functions. Other industries also show a high level of inside ownership, especially if they adopted the second variant of privatization, which contains considerable privilege for the insiders. The Russian economy historically has had a highly monopolized production sphere, which helps insiders to keep their power by owning not just a firm but a market share and ownership of rights associated with it (Alchian and Demsetz, 1972), and there is no short-term means to change this situation. For instance, in the construction–building industry, the level of inside ownership has reached 70.4 percent, where 55.1, 10.8, and 4.5 percent of equity belong respectively to workers, managers, and internal trust fund; in electric-power and consumer goods industries, those figures are 65.8, 59.3, 6.5, 0, 68.5, 46.4, 17.5, and 4.6 percent, respectively (Table 5).

The most significant variations in ownership structure are represented by the differently sized enterprises with a distinct legal form. The large open joint stock companies appear to be the most attractive and accessible for outside investors. The workers and managers there have the smallest portion of the equity (23.6% and 7%, respectively). The very large

Table 5. Differences in Firms' Ownership Structure Due to Their Size and Legal Form (% , means)

	<i>Number of employees</i>				<i>Type of the firm</i>	
	<i><500</i>	<i>500>1,000</i>	<i>1,000–3,000</i>	<i>>3,000</i>	<i>Open type</i>	<i>Closed type</i>
IO:	62.8	61.5	56.5	34.5	54.3	85.2
W	43.5	48.0	45.1	23.6	36.8	68.0
TF	4.3	0.3	2.0	3.9	2.8	3.3
M	15.0	13.2	9.4	7.0	14.7	13.9
OO:	37.2	38.5	43.5	65.5	45.7	14.8
In. O	6.9	6.9	9.4	11.9	8.9	4.4
S	9.4	5.7	9.3	18.0	10.9	1.4
IF	4.5	5.2	4.6	6.2	5.1	3.9
AF	2.0	4.3	2.6	4.5	3.5	0.3
B	1.2	1.6	2.3	2.6	2.0	0.6
H	3.2	4.1	3.4	3.0	2.0	0.5
FI	2.1	1.4	0.4	2.6	1.7	0.5
O	7.9	9.3	11.5	16.7	11.6	3.2
Total	100	100	100	100	100	100

firms (more than 3,000 employees) show the highest state ownership level (18%), due to the large portion of strategically important enterprises among them. The managers' rigid control over the enterprises is usually weaker in open joint stock companies, and there are more opportunities for outsiders to invest in these companies.

MANAGERS' INFLUENCE ON FIRMS' BEHAVIOR

The Modes of Business Adaptation to a New Economic Environment

A major result of the transition to the new property relations was the transfer of all decision-making and control functions from the state to the firm level. During the transition period, managers were given unprecedented freedom to act and make their own decisions, and also to obtain the major part of former state ownership in a highly uncertain economic environment. This situation is the logical result of the transition from the pre-reform economic period, when the state was no longer capable of carrying out its routine functions. But the opportunities for the managers to make their own decisions did not come without other consequences, such as the high costs of adaptation to a new economic system, which forced the managers to compromise. They attempted to find a way to adopt the new economic system while still using traditional methods. In our study, CEOs have identified their emphasis on developing short-term tactics.¹³ They concentrated predominantly on everyday survival policy, pursuing short-term goals such as current monthly income.

The methods of adapting and surviving in a new economic environment are heavily dependent on managers' priorities and the availability of financial resources. After the state cut its subsidies to the enterprises, the lack of financial resources became the most important problem for the firms. In the questionnaire, we have asked CEOs (1) to identify all approaches they have been using to find financial resources after

Table 6. Managers' Assessment of Different Financial Resources

	<i>Not important</i> (%)		<i>Indifferent</i> (%)			<i>Very important</i> (%)		<i>Total no.</i>
	1	2	3	4	5	6	7	
Sale of equipment, buildings, inventories	56.8	10.3	11.3	5.8	5.8	1.3	8.7	310
Lease	40.0	20.3	12.3	7.7	7.1	3.5	9.1	310
Income from "old" production	35.3	9.3	10.7	7.8	8.4	5.2	23.3	309
Income from "new" production	33.3	12.1	12.3	8.4	9.7	6.1	18.1	309
Banks' credits	48.4	8.4	7.2	9.1	9.7	6.2	11.0	308
Debts	41.4	7.9	6.9	9.2	8.6	8.2	17.8	304

privatization; (2) to assess the importance of different financial sources for their firms during the same period, using the scale from 1 to 7 (1 means "not important," 7 means "very important") (Table 6).

The results of this part of the study identified income from the production of an "old" and "new" output as the most used source of financial resources. The fact that more than one-third of the CEOs assessed the income from "new production" as a non-important financial source (vs. 18.1% responders who estimated it as a very important financial source) is proof that Russian firms are not aggressive in new markets. This phenomenon, along with the fact that firms do not use bank credits very actively (48.4% of CEOs have scaled credit as non-important financial source vs. 11% of responders who estimated it as a very important source), suggests the firms' weak interest in implementing new technologies and new products. At the same time, all firms actively used the sale of equipment, buildings and inventories (diminishing the value of the firm),¹⁴ lease, and accrued liabilities (tax debt, accumulated accounts payables,¹⁵ and overdue payroll payments) as financial sources.

Our other finding relates to the managers' concern about current income. Theory suggests that the short-term horizon approach is common for managers (Watts and Zimmerman, 1990). But Russian CEOs' emphasis on current monthly income cannot be explained by the availability of contractual constraints (which incorporate accounting-based restrictions on managers' actions, e.g., debt covenants, corporate charters, and bylaws), because they are underdeveloped in Russia. Thus, corporate management is not required to adjust reported accounting numbers to relieve these (potential) constraints. Moreover, neither managers nor standard makers expressed much concern about the information content of accounting numbers, which might be due to both the absence of motivations to encourage value maximizing actions and the underdeveloped system of information in Russia.

We think that the most logical explanation for the managers' concern about current income is very high uncertainty (economic instability, inflation, dynamic law, etc.) and scarcity of financial resources. In addition, as our study shows, managers are simply confused by the highly unstable and uncertain economic environment, and they cannot determine their current priorities. Thus, the analysis of the data suggests that Russian

Table 7. Managers' Attitudes Toward the Outsiders' Participation in Firms' Governance

Activity	Not important (%)		Indifferent (%)			Very important (%)		Did not answer (%)
	1	2	3	4	5	6	7	
Budgeting	37.1	4.5	2.5	5.8	1.9	5.8	6.4	36.0
Seeking new internal markets	39.1	4.2	5.4	3.8	4.8	2.2	3.8	36.7
Seeking new foreign markets	43.2	5.1	4.2	3.2	1.9	1.3	3.8	37.3
Research and development	39.1	4.5	5.4	3.8	2.8	2.6	4.5	37.3
Support in technological development	42.0	6.7	3.8	3.5	3.2	0.9	2.6	37.3
Auditing and control	21.4	5.4	6.7	5.1	6.4	5.1	12.2	37.7
Structural changes in organization	36.8	4.2	4.8	5.1	3.2	2.8	5.8	37.3
Participation in boards of directors	44.9	4.8	2.9	2.2	2.8	2.2	2.2	38.0

managers have developed a predominantly short run survival approach as opposed to developing any long-term strategy.

Managers' Attitude Toward Control and Ownership Redistribution

Because managers are a professional group with a distinctive set of interests, their priorities are more set than those of the workers-stockholders, which are not yet distinct. This study has identified that managers have well-articulated claims, such as the control over the firm, and a very skeptical attitude toward the workers'-stockholders' involvement in the decision making process. In our study, 21 percent of CEOs think that the delegation of the voting rights to the managers and their full discretion to exert corporate control are the best solutions for the corporate governance problems; 19 percent of the respondents think that only the strategic and the most important issues should be discussed in the stockholders meetings, while the rest of the decisions should be made by management in an executive manner (Table 7).

Along with the skeptical attitude toward the workers'-stockholders' involvement in the decision-making process, managers also display predominantly negative attitudes toward outsiders. The CEOs place a very low value on the outside owners' participation in the firms' governance. Just 6.4 and 12.2 percent of the responders admitted outsiders' extremely important role in the budgeting and the control, respectively, and most of them expressed skepticism about the outsiders' participation in the board of directors (44.9%) and their support of technological development (42%), marketing (43.2%), and R&D

Table 8. Managers' Attitude Toward the Different Groups of Owners

	<i>Negative (%)</i>	<i>Positive (%)</i>	<i>Refused to answer (%)</i>	<i>Total (%)</i>
Workers	17.3	62.5	20.2	100
Banks	50.3	29.1	20.6	100
Investment funds	48.4	30.4	21.2	100
Adjacent firms	38.1	40.1	21.8	100
Foreign investors	36.6	46.7	16.7	100

Table 9. Managers' Assessment on the Possibility of Ownership Accumulation by Outsiders (%)

<i>Reasons</i>	<i>Not possible</i>	<i>Possible</i>	<i>Did not answer</i>
The situation is under managers control	50.6	29.8	19.6
The firm is unattractive	17.3	32.3	50.4
Insiders are major owners	35.2	16.3	48.5
State is the major owner	8.3	40.7	51.0
Managers can make the firm unattractive	10.9	51.0	38.1

(39.1%). CEOs have identified the concentration of the ownership by outsiders as the most undesirable outcome from the redistribution of property (Table 8).

Most unwelcome among outsiders are banks (50.3%) and investment funds (48.4%). Managers consider suppliers and buyers (40.1% of responders) and foreign investors (46.7% of responders) as the "least dangerous" group of outside investors because (1) they cannot gain real power over the firm,¹⁶ and (2) certain groups of outside investors (adjacent firms) display predominantly collaborative attitude, which will be discussed later in this article.

Because managers are so concerned about property redistribution, they have conducted various steps toward precluding it. Yet, one-third of CEOs feel secure enough not to take certain steps because: (1) the control package belongs to the state (40.7%), (2) managers' powerful position gives them the ability "to employ some peculiar factors, which will make the firm unattractive to the outside investors." (51%); (3) they have control over the entity and do not plan to give it up (16.3%) (Table 9).

Therefore, managers are willing to use any available opportunity to gain and keep control over the enterprises. In their responses, CEOs have identified several situations in which their major interest would be satisfied: (1) the control package of shares belongs to the state; (2) the control package is held by insiders; (3) the control package is held by outsiders if and only if outsiders are (a) trusted stockholders, who the managers have a long-term business relationship with, or (b) they will not claim control and monitoring functions.

Thus, first Russian managers will do whatever it takes to control their enterprises, which reflects the immature entrepreneurial behavior. We think it can be explained by the tremendous inertia in the socio-economic mentality of Russian agents due to the lack of market education and experience, an underdeveloped infrastructure (banks, investment funds, communication system, etc.), and the very peculiar state of the

Russian economy. Second, the outside ownership per se will not necessarily change the corporate behavior (as due to the diminishing managers' control), because some groups of outsiders show very collaborative attitude and no inclination to compress managers' monitoring ambitions.

THE PECULIARITIES OF OUTSIDERS OWNERSHIP

"Non-Accidental" Outsiders

Beneficial interest owners consist of two parties. The first party includes individual ("non-accidental") stockholders such as relatives, friends, managers, and directors of firms somehow (formally or informally) related to the given enterprise. The second group includes corporate investors (suppliers and buyers). Both groups usually have a long-term business (or other) relationship with the firms' managers. Because they have known each other for a long period of time, "non-accidental" investors support the managers' decisions and this informal relationship creates the potential for the managers to keep control over the firm during the transition period. There are at least two indirect evidences of this relationship. First, we observed the association between the changes in managers' ownership and outside ownership. For instance, when the ownership of "non-accidental" individual stockholders increased from 5 up to 12 percent in various firms of the construction materials industry, the managers' ownership diminished from 15 to 7 percent. Second, the individual outsiders are the only group (besides the state), with an ownership higher than 10 percent in such efficient and hard-to-access industries such as fuel, building-construction materials, etc. It was almost impossible to make such efficient investments without any support from powerful insiders.

Adjacent firms do not account for high corporate ownership (2.8% on average, with the highest level in metallurgy, 8%), but they have high governance potential due to the adjacent firms' strong presence in the board of directors. The overall existence of very close relationships, both formal and informal, between the suppliers and buyers is due to the very inflexible system of business relations that existed during the Soviet era. Firms still cannot find the solution for the high monopolization and strong non-rational vertical integration of the economy, which leads to the inflation of non-payments and non-stable situations in the economy.

Adjacent firms are the parties most interested in the stabilization of money and business relations. Being generally interested in effective business coordination, enterprises nevertheless did not show a big concern for the consolidation of the ownership by intertwining the equities of adjacent firms (the "keiretsu" system in Japan) (Aoki, 1988). Managers in their responses expressed a very skeptical attitude toward the consolidation and acquisition of other firms. They consider consolidation as a threat to their control over the firms, even though they understand the importance of consolidation and mergers in the long run. On an everyday basis, managers have to deal with the problems of mutual credits, bartering, non-payments, etc. It might seem that firms would be very interested in strengthening their position on the market by changing their partners, technologies, and different price policies in the future. Intuitively, it is hardly attainable in the current information vacuum and system of business relations inherited from the past.

Thus, adjacent firms as the “non-accidental” individual investors are the very specific categories of outside stockholders because according to our survey, they represent one of the most acceptable by managers groups’ of outsiders. Therefore, it is plausible to predict that if the level of outside ownership will grow due to the enlarging the stake of “non-accidental” investors, the change in corporate behavior becomes questionable. The governing power of managers can intuitively be languished by introducing the dispersed ownership rather than just increasing the level of outside ownership.

The State as an Outside Owner

The state being *de jure* the most significant outside owner, *de facto* plays a trivial role in the control and monitoring of the enterprises’ activities. The passiveness of the state is due to several circumstances: the state has not yet developed a consistent strategy on how to improve the organization of production or how to influence the managers’ destructive behavior by enforcing contracts. Moreover, the state does not have a special body to achieve those goals.

Following the law, the state holds the majority of the stocks in strategically important industries such as fuel, electric power, military related ones, etc. (Appendix B). Overall, 7.1 percent of the sample have state ownership, which exceeds 40 percent, and 9.6 percent of the sample has a state ownership, which exceeds 30 percent. The state also controls many enterprises by holding the “veto” right, the so-called “golden stock.” This right means that if the decision made by the managers or the board of directors is somehow contradictory to the state’s interests, such a decision can be canceled by the state. However, this right has not been exercised yet.

It is difficult now to predict the future state strategy. In the meantime, the managers do not feel a strong state presence on firm’s administrative body because the state does not exercise its power. So, the managers do not express any negative attitudes toward the state since it is only a nominal major owner of a significant portion of Russian enterprises.

CONCLUSIONS AND FUTURE RESEARCH

In this study, we investigated the managers’ attitudes toward changes in corporate ownership and governance in Russia during the transition period, when the economic and legislative environment is unstable and the market is underdeveloped.

Our analysis was primarily concentrated on corporate ownership structure as the derivative of the managers’ primary interest in corporate control, on the approaches the managers employ in order to satisfy their primary interests, and on the sources of the managers’ power. Attention was then directed to the relationship between the ownership structure and governance potentials of different groups of investors. The study incorporates the analyses of managers’ responses regarding their primary incentives and interests related to addressed topics. The major results are summarized below:

1. Currently, the distinctive socio-economic environment in Russia provides enough incentives to ensure that the managers’ behavior remains consistent with their desire to keep control of the corporate leadership. In this context, the managers’

priorities include control and survival issues, conditional on the transition period. The transfer of control from state to managers has not been accompanied by an increase in output or greater efficiency. The consequences of this transfer will probably become more prominent as market forces grow mature.

2. The initial attempt to separate ownership and control in order to increase managers' incentives to be concerned about accounting numbers has not been successful. The noisy economic environment, distinctive design of the privatization law, and the managers' additional efforts to control the firms they are governing, have led to a high level of inside ownership among the Russian firms. Currently, managers have negative attitudes toward any actions, which could be considered a threat to their powerful position (disperse ownership, consolidation, merger, etc.).
3. While the reshaping of authority structures and changes in managers' decision-making rights illustrate profound organizational change, possible strategic change appears limited to relatively minor alterations in production and marketing activities. The main factor limiting consistent strategic changes is the inadequate control structure of Russian firms, which stems from the inherent contradictions between ownership rights and managerial power. With respect to the current poor economic situation, the absence of clear and stable accounting rules, which would help new owners to construct and monitor a clear strategic agenda, and strong managerial interest in preserving the status quo, indicate that the rapid recovery of Russian industry appears doubtful. Nevertheless, this situation cannot continue forever. This study shows that managers in Russia remain economically rational, because they have very good economic reasons to behave the way they do, i.e., their rationality is bounded by the peculiarities of transition period. Therefore, in the long run, their needs for new investments and their desire not just to survive, but also to prosper, will lead to more visible manifestations of profit maximization.
4. The analysis of the outside owners' attributes suggest that meantime, certain groups of stockholders display very collaborative attitude. They compose the party of so-called "trusted stockholders," and managers did not mind them to be involved in the governing process. Therefore, changes in governing system toward giving the greater power to the outsiders cannot emphasize only the issue of the failure of outside owners to gain a foothold in privatized Russian firms, and thus, explore the potentials to shift the ownership structure toward the expanding the outside ownership. Intuitively, it should rather underline the possibilities to introduce the dispersed ownership, because it can diminish the control and monitoring managers' abilities.

Evidence of the managers' attitudes toward dispersed ownership and control, the firms' strategy, and the managers' incentives are limited. While we document, based on our questionnaire, certain types of managers' behavior such as their concern about current income, control over the firm, short-term surviving policy, etc., much about those topics is still unknown. Therefore, we see the opportunity for an empirical test of the relations between managerial ownership and corporate performance measures as one extension of this research. This test would require additional financial data gathering. Another extension is to explore the hypotheses on managers' incentives in the selection and application of different models of business adaptation to a new economic environment.

Finally, the third possible future study is the investigation of the corporate governance's effect (e.g., takeovers, buyouts, and board of directors) on the ownership structure and managers' incentives in corporate performance.

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APPENDIX A

In 1992, the Privatization Law and subsequent amending acts specified the stages of privatization procedures for all state enterprises subject to mandatory privatization. Initially, the Privatization Law had foreseen a rather traditional program of sale for state-owned enterprises, involving their valuation according to the discounted future cash flow method, their transformation into joint stock companies, and the sale of shares "on the securities market" over an extended period of time. The procedures specified by the Privatization Law were later modified by the Interim Regulations for Privatization Commissions, issued as Supplement 7 to the Acceleration Decree, Decree 721, and the Commercialization Statute. This presidential enactment altered the initially chosen ad hoc mode of initiation for the privatization process and replaced it with obligatory transformation procedures within a rigid timetable (to be complete by November 1, 1992), accompanied by the preparation of full-fledged privatization plans. Workers collectives of each enterprise had to create privatization commissions (usually composed of five persons) by October 1, 1992. Only if the workers collective failed to do so, was a commission then established by the appropriate property committee in conformity with the Interim Regulations of the Acceleration Decree. Guidelines for the Valuation of Properties Targeted for Privatization, issued as Supplement 2 to the Acceleration Decree, specified the book-value method of valuation without adjustment for inflation as obligatory.¹⁷ Because the Privatization Law entitled employees of new joint stock companies to a 30-percent discount on their purchase of shares and installment purchases by employees (with up to 3-year terms and minimum 20% downpayment), the change in favor of book-value pricing, and the decision not to adjust for inflation greatly increased the value of any preferential discounts for insiders. Indeed, given the rate of inflation in Russia (2,610% in 1992, 900% in 1993, 300% in 1994, etc.¹⁸), it became quite possible that all sales at nominal prices, even without preferential terms, would amount to giveaways. But the preferential terms themselves were also changed significantly in favor of insiders by June 1992, when the State Program was enacted. Both direct subsidies granted to insiders and their ability to acquire large (often controlling) stakes in privatization changed the way privatization ensued. Finally, the voucher program announced in August 1992 gave each citizen a direct Rb. 10,000 subsidy, which insiders could use to buy the shares of their enterprises at extremely depressed prices.

Three options (variants) of privatization were proposed. Variant 1 was essentially taken directly from the Basic Provision. Under this variant, employees (workers and managers) were given 25 percent of equity without payment in the form of preferred non-voting stocks.¹⁹ In addition, workers were entitled to buy for cash or vouchers another 10 percent of voting stocks (full voting rights) in closed subscription. These shares were sold at a 30-

percent discount from January 1992 book value and could be paid in installments over more than 3 years. Five percent of shares were sold to the top managers (CEO, his deputy, head engineer, head accountant) on a regular basis for the nominal (book value) price, 10 percent were given to employees' shareholder funds. The rest of the equity shares were sold to outsiders through voucher auctions and tenders. This variant of privatization mostly created open-type joint stock companies with a significant level of outside ownership.

Under Variant 2, workers and managers could buy up to 51 percent of voting shares at 1.7 times the book value of the enterprise on July 1, 1992. These sales could be made for vouchers and/or cash and did not involve any preferential terms. Five percent of voting stock was given to the employees' shareholders fund, 29 percent was sold through voucher auctions, and 15 percent was sold through tender. When enterprise managers and workers bought shares, they were primarily motivated by the desire to own at least a controlling block of shares, maximizing their interests to the extent possible. Generally, they sought to use majority control to ensure that profits go to employees and to prevent layoffs that might be imposed by outsider proprietors. This variant of privatization mostly created closed-type joint stock companies with significant levels of inside ownership.

Privatization option three mostly applied to medium-size enterprises with more than 200 employees, and provided special privileges for a small group of insiders. In order to elect variant 2 or variant 3, the workers collective had to vote for it with at least a two-thirds majority. In all other cases, the "default" meant variant 1.

According to privatization rules, enterprise governance should be removed from workers' councils and managers and given to a supervisory board (or board of directors) controlled by the owners of the enterprise.

APPENDIX B

The Russian privatization program identified a number of enterprises (about 30%) not subject to mandatory privatization. First, enterprises involved with mineral resources, military facilities, nuclear reactors, rail and water transport will not be privatized and remain under control of the former branch industries. Second, various enterprises belonging to "strategic" industries (defense, mineral and precious stone extraction, etc.) can be privatized at the discretion of the government or GKI. In these enterprises, the government typically retains a considerable shareholding (from one-third to one-half), or keeps the "golden share" through which authorities can veto any changes in the charter capital or the strategy of the enterprise.

NOTES

1. The privatization program was developed in 1992 over a 6-month period by A. Chubais and his team and did very little to condition social expectations concerning economic reform, and did not adequately define relevant social interests. The major obstacles most commonly identified at the time in economic papers were "Russian bureaucrats" who were still capable to kill the privatization, conservative members of the government, who were constantly trying to preserve the existed framework of control over the firms, and the corruption, which was a

recurring theme in any discussion of privatization (Dabrowski, 1993; Boisko et al., 1994; Chubais and Vishnevskaya, 1994; Aslund, 1995).

2. Theory suggests (Alchian and Demsetz, 1972) that it is not ownership of economic resources per se that is of particular interest, but rather, the ownership of rights associated with resources. Thus, the basic organization of property rights influences not only the value of economic resources, but the behavior of individuals dealing with them.
3. Some authors (McFaul and Peremutter, 1995; Frydman et al., 1996) suggest that the policy on privatization was compromised because the government was trying to placate the managers by giving them certain advantages (privatization of insiders) in this process. In either case, the feasibility of the agency conflict was not properly accounted for, and it led to numerous subsequent problems related to the corporate governance and efficiency.
4. To ensure the surviving of the firm with lowest possible laid off of its employees.
5. Related descriptive statistics is given in Table 9 and will be discussed later in this article.
6. Managers employ the power of the state (the political process) to increase their own power and wealth and coalesce for that purposes (Watts and Zimmerman, 1986). One way by which a coalition of individuals is made better off is by legislation that redistributes wealth (Zmijewski and Hagerman, 1981).
7. Similar behavioral pattern was indicated by Starodubrovskaya (1995).
8. This study was conducted on data as of 1996 for two reasons: first, after being on its peak during 1992–1995, privatization in 1996, according to the statistical data, did slow down and already showed results to be analyzed (Russian Economy: Trends and Perspectives, Privatization, 1996, Russia-on-Line); second, the new Law on Joint Stock Companies came into effect in 1996 (it was actually adopted in 1995) and have changed the governing rules in an effort to give greater authority to outsiders. The consummation of the new Law is not clear yet, but the 1996 situation provides the unique opportunity to analyze the first results of privatization and the starting point for new changes.
9. The service and retail firms were excluded from the survey because economic (accounting) rules are different for them. For example, they follow the different approach to finance R&D, or create reserve funds differently.
10. Direct purchase applied to the enterprises bought by one person or a small group of people through the auction.
11. Special case applied to the enterprise with mixed ownership structure. For example, the main firm adopted first variant of privatization but the subsidiary one adopted the second variant of privatization.
12. Some sources estimate the level of barter transactions is as high as more than half of all transactions (Vasiliev, 1994, Wall Street Journal, Aug. 20, 1998, p. A9), others suggest that barter in Russian industry is as high as 70 percent of all transactions, and predict that it will increase in the future (Auktsionek, 1998; Business Eastern Europe, June 1998).
13. As the theory suggests, the short-term horizon is also attributed to managers in market economy (Fama, 1980).
14. At this point, Russian experience contradicts with the theoretical predictions (Fama and Jensen, 1983; Demsetz and Lehn, 1985), which imply that the corporate ownership structure is consistent with value maximization. For the time being, the underdeveloped Russian market does not provide enough incentives for managers to pursue value-maximizing behavior. In addition, problems lying beyond the firms' organization such as the poor state of the country's wealth and the extremely unequal wealth distribution among the population, have led to the stockholders' powerlessness to constrain managers.
15. The inflation of non-payments initiated the specific mode of behavior referred to the short run survival policy.

16. Similar pattern in Russian managers' behavior was registered by Blasi (1996).
17. Originally, the Privatization Law envisaged a valuation procedure more closely reflecting the market value of the assets. The change in method, which was retroactively permitted by the June 1, 1992 amendments to the Privatization Law was due to the difficulty of market valuation and adjustment for inflation in Russia.
18. *Obzor Economici Rossii* (1994, p. 51), an annual statistical yearbook, provides various statistics descriptive of the Russian economy.
19. Although the State Program does not specify the rights enjoyed by preferred shares, additional information is contained in the model joint stock companies statutes appended to the Commercialization Statute. According to this document, the preferred shares distributed to workers (denominated as "class A") will receive fixed dividends equal to 10 percent of the company's net profit for the preceding financial year. If, however during the given year, the dividends paid out to common share-owners exceed (on per share basis) those paid to preferred stocks owners, the latter will be increased to the same amount.

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The Determination of a Group for Accounting Purposes in the UK, Poland, and the Czech Republic in a Supranational Context

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Abstract: A detailed cross-national and supranational comparison of the *de jure* requirements for the determination of a group for accounting purposes in the United Kingdom (UK), Poland, and the Czech Republic establishes differences at both levels. The analysis identifies cross-national differences that cannot be fully explained by non-equivalencies between relevant International Accounting Standards (IAS) and the European Commission (EC) 7th Directive on consolidated accounts. These differences are non-trivial and more numerous than the research literature suggests and provide evidence of the prolonged nature of the accounting reforms in economies in transition. In the absence of a theoretical framework for determining the content and sequence of accounting reform in transition, accounting change defaults to an iterative process of learning by doing.

The article compares *de jure* requirements for the determination of a group for accounting purposes cross-nationally among the United Kingdom (UK), Poland, and the Czech Republic and supranationally with reference to International Accounting Standards (IAS) and the European Commission (EC) 7th Directive.¹ The cross-national comparison provides evidence of diversity in group accounting requirements. The supranational comparison indicates that not all the differences revealed by the cross-national comparison can be explained by differences between the supranational requirements, especially for Poland and the Czech Republic. Differences remain that are country-specific and attributable to the prolonged and different transition routes from a command to a market economy.

A focus on *de jure* requirements is relevant to accounting regulators. Poland and the Czech Republic are negotiating accession to the European Union (EU) and compliance

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with EC Directives is a priority. Both countries wish to encourage foreign direct investment and compliance with IAS will lift a barrier to cross-border investment. National regulators will need to perform a detailed supranational comparison when designing *ab initio* or reforming existing consolidation requirements. They may turn to the example of a well-developed market economy and current EU member (e.g., the UK) for guidance and may monitor developments in other transition economies; hence, the cross-national comparison. The study of the consolidation issue is both timely and relevant because Poland plans a reform of its accounting legislation in 2000 (Misinska, 1998) and the Czech Republic plans an earlier reform (Schroll, 1995).

De jure requirements set the parameters for *de facto* practice and a thorough knowledge of the former is indispensable for multinational companies (preparers) and multinational firms of auditors. National consolidation regulations will affect foreign direct investment in terms of amount, financing, and the form it takes (e.g., branch, subsidiary, associate, joint venture). Multinational companies and their auditors may consider familiar consolidation requirements as less of a barrier to entry into a particular national market. They may also use "accounting arbitrage" to exploit differences to their advantage (Johnson, 1999).

The focus on a narrow area of consolidation is justified by its complexity and by the fact that it is the obvious starting point for both regulators and preparers: the group must first be defined before measurement and disclosure requirements may be applied. Only a detailed comparison of the relevant requirements for the determination of a group is sufficient: regulators must pay attention to the detail of the legislation and the substantial expenditure on technical accounting departments by multinational audit firms testifies to the importance of an attention to detail.

Poland and the Czech Republic have been neglected in comparative international accounting research. More attention has been paid to these countries subsequent to 1989 but the focus has been on accounting in a national context excluding consolidation. Moreover, compliance of national requirements with supranational rules (a surrogate measure for the progress of accounting transition) has been merely asserted or studied at a general level.²

The article proceeds as follows. The next section reviews the literature and distinguishes previous work in the area. This is followed by the outline of the research method and the data used in the comparison. This is followed by the political and economic backgrounds to the consolidation regulations in Poland and the Czech Republic. The next sections deal with the actual comparisons in terms of: objectives and contents of consolidated accounts; requirements for the determination of a group; exemptions from the consolidation requirement; bases for exclusion from consolidation. The final sections discuss the results and present the conclusions.

LITERATURE REVIEW

The international accounting literature on Poland in transition initially focused on issues of reform (Jaruga, 1991; Lisiecka-Zajac, 1991) and on accounting in the privatization process (UNESCO, 1992; Organization for Economic Co-operation and Development (OECD), 1993). Subsequently, accounting developments were placed both in an historical context

and in relation to macroeconomic transition policies (Jaruga, 1993a,b, 1996; Dixon and Jaruga, 1994; Krzywda et al., 1994, 1995, 1996). More descriptive studies concentrated on *de jure* accounting change in general (Jaruga, 1995; Parker and Nobes, 1998) or addressed specific issues such as accounting for goodwill (Kamela-Sowinska, 1995), the relationship between accounting and taxation (Jaruga et al., 1996), stock exchange regulation (Sochacka and Malo, 1996), and charts of accounts (Jaruga and Szychta, 1997). The studies focused on *de jure* change and with few exceptions (Krzywda et al., 1994; Kamela-Sowinska, 1995; Jaruga et al., 1996) contained no comparative analysis.

The literature on the Czech Republic evolved similarly. A focus on reform and privatization (Langr, 1991; Craner, 1993; OECD, 1993) was superseded by contextual studies (Schroll, 1995; Seal et al., 1995, 1996; Zelenka et al., 1996). The descriptive literature (Dolezal, 1995) was supplemented by studies on particular areas: the relationship between accounting and taxation (Holeckova, 1996); Czech perceptions of the “true and fair view” (Sucher et al., 1996); disclosure determinants of Czech listed company annual reports (Patton and Zelenka, 1997). As with Poland, the focus was on *de jure* accounting and the studies were not comparative.

The cited studies did not compare in detail national accounting regulations with supranational rules published by the International Accounting Standards Committee (IASC) or the EC. The specialist studies did not focus on consolidation. This study rectifies these omissions.

Overviews of accounting change in Central and Eastern Europe have been published as introductions to country studies (Alexander and Archer, 1995; Garrod and McLeay, 1996) or as summaries of policy issues in accounting reform (OECD Secretariat, 1991; OECD, 1993). Due to the lack of specialist academics (Meek and Saudagaran, 1990), comparative analyses of accounting in transition are rare (Bailey, 1995; Jaruga, 1996; Richard, 1998) despite early recognition of the importance of the issue (Shama and McMahan, 1990; Gray and Roberts, 1991).

Although in general no studies analyze *de jure* accounting rules in Poland and the Czech Republic in a supranational context, there are two exceptions. Jermakowicz and Rinke (1996) compared accounting requirements in the Czech Republic, Hungary, and Poland with IAS and EC Directives. However, the high level of aggregation in their comparative table (Jermakowicz and Rinke, 1996) failed to capture essential details. In the item “consolidated accounts” in Table 1 (Jermakowicz and Rinke, 1996) with reference to the Czech Republic, the authors correctly state that “Consolidated accounts are required for 20 percent ownership interest” but fail to distinguish between ownership and voting rights, a distinction crucial in terms of the supranational comparison because both the EC 7th Directive and the relevant IAS specify voting rights but the Czech requirements do not, referring only to majority share ownership.³ This analysis does not support the conclusion reached by Jermakowicz and Rinke (1996) that “(a)lthough the standard-setting bodies of these countries were confronted with choosing from sometimes conflicting accounting standards, they appear to have taken views consistent with those of the IASC and EU.” This study of consolidation requirements identifies country-specific differences not consistent with either set of supranational rules.

The second exception is Adams and McMillan (1997) who compared Polish requirements with those of the EC and the IASC but on a general level that failed to capture essential details. A comparative table under the heading “Consolidation” (Adams and

Table 1. Objectives and Contents of Consolidated Accounts

Reference	UK	Reference	Poland	Reference	Czech Republic	Item
FRS 2, paragraph 1	<p><i>Objectives</i></p> <p>The objective of this FRS is to require parent undertakings to provide financial information about the economic activities of their groups by preparing consolidated financial statements. These statements are intended to present financial information about a parent undertaking and its subsidiary undertakings as a single economic entity to show the economic resources controlled by the group, the obligations of the group and the results the group achieves with its resources.</p>	AA 1994, Article 55(1)	A capital group, consisting of the holding entity and the entities subsidiary to or associated with it, prepares, on the basis of the financial statements of the entities that comprise the group, consolidated financial statements presented in such a way that the group forms a single entity.	CM 1993, App. 1, Article 1, paragraphs 1 (1), 1(2)	By consolidated financial statements are meant the financial statements of a group of entities (an economic grouping of accounting entities) that unify the asset and liability (debt) positions and the attained economic results of the holding entity with its participating interest in the rest of the entities that it controls or over that it has significant influence.	1
					The consolidated financial statements serve to inform the shareholders and partners of the accounting entity that controls or that exercises a significant influence over the commercial activities of other accounting entities. They do not serve for tax purposes or for the appropriation of economic results.	

<i>Contents</i>				
CA 1985, S227(2)	Group accounts shall be consolidated accounts comprising:	AA 1994, Article 55(1)	Consolidated financial statements consist of: a consolidated balance sheet, a consolidated profit and loss account, a consolidated statement of cash flows, the notes in the accounts and a report on the activities of the capital group for the financial year.	2
	a. a consolidated balance sheet dealing with the state of affairs of the parent company and its subsidiary undertakings, and		a. a balance sheet,	
	b. a consolidated profit and loss account dealing with the profit or loss of the parent company and its subsidiary undertakings.		b. a profit and loss account,	
FRS 1, paragraph 5	FRS 1 (cash flow statements) applies to all financial statements intended to give a true and fair view of the financial position and profit or loss (or income and expenditure) (...).		c. notes on the accounts.	

(continued on next page)

Table 1. (continued)

Reference	UK	Reference	Poland	Reference	Czech Republic	Item
CA 1985, S227(4)	A company's group accounts shall comply with the provisions of Schedule 4A as to the form and content of the consolidated balance sheet and consolidated profit and loss account, and additional information to be provided by way of notes to the accounts. The directors of a company shall for each financial year prepare a report					
CA 1985, S234(1)	a. containing a fair review of the development of the business of the company and its subsidiary undertakings during the financial year and their position at the end of it, (...).					
CA 1985, S227(3)	<i>Conceptual basis</i> The accounts shall give a true and fair view of the state of affairs as at the end of the financial year, and the profit or loss for the financial year, of the undertakings included in the consolidation as a whole, so far as concerns members of the company.	CD 1995, Article 1(2)	The consolidated financial statements should ensure the correct and faithful presentation of the asset and financial situation and the financial result of the capital group.	AA 1991, Article 7(1)	Accounting units shall keep their accounting records in a complete manner, with proper support and correctly, so that they fairly present the accounting events that are the object of accounting.	

During the process of consolidation it is necessary to respect the current accounting principles established by the act on accounting and the accounting system and accounting procedures for entrepreneurs.

CM 1993,
App. 1, Article
IV, paragraph 1

Where they were acquired for the short term with a view to resale, they are shown in the consolidated balance sheet as short-term financial assets.

CM 1993,
App. 1, Article
VI, paragraph 2(7)

Where they were acquired for the purpose of a long term holding, these shareholdings are shown in the consolidated balance sheet as a decrease of equity under the item "Reserves (derived from profit)" and disclosed in the notes on the accounts.

(continued on next page)

Cross shareholdings

Except as mentioned in this section, a body corporate cannot be a member of a company that is its holding company and any allotment or transfer of shares in a company to its subsidiary is void.

CA 1985, S23(1)

CD 1995,
Article 12(5)

Own shares of the holding entity held by another entity included in the consolidation are disclosed in the consolidated balance sheet as own shares.

CM 1993,
App. 1, Article
VI, paragraph 2(7)

Where they were acquired for the short term with a view to resale, they are shown in the consolidated balance sheet as short-term financial assets.

Where they were acquired for the purpose of a long term holding, these shareholdings are shown in the consolidated balance sheet as a decrease of equity under the item "Reserves (derived from profit)" and disclosed in the notes on the accounts.

(continued on next page)

Table 1. (continued)

Reference	IAS	Reference	7th Directive	Item
IAS 27, paragraph 9	<p><i>Objectives</i></p> <p>Users of the financial statements of a parent are usually concerned with, and need to be informed about, the financial position, results of operations, and changes in financial position of the group as a whole. This need is served by consolidated financial statements, which present financial information about the group as that of a single enterprise without regard for the legal boundaries of the separate legal entities.</p>	Preamble	(...); whereas many companies are members of bodies of undertakings; whereas consolidated accounts must be drawn up so that financial information concerning such bodies of undertakings may be conveyed to members and third parties; (...).	1
Preface, paragraph 5	<p><i>Contents</i></p> <p>The term "financial statements" (...) covers balance sheets, income statements or profit and loss accounts, statements of changes in financial position, notes and other statements and explanatory material that are identified as being part of the financial statements.</p>	Article 16.	Whereas consolidated accounts must give a true and fair view of the assets and liabilities, the financial position and the profit and loss of all the undertakings consolidated taken as a whole; whereas, therefore, consolidation should in principle include all of those undertakings; whereas such consolidation requires the full incorporation of the assets and liabilities and of the income and expenditure of those undertakings and the separate disclosure of the interests of persons out with such bodies; (...).	2

(2) The consolidated annual report must include at least a fair review of the development of business and the position of the undertakings included in the consolidation taken as a whole.

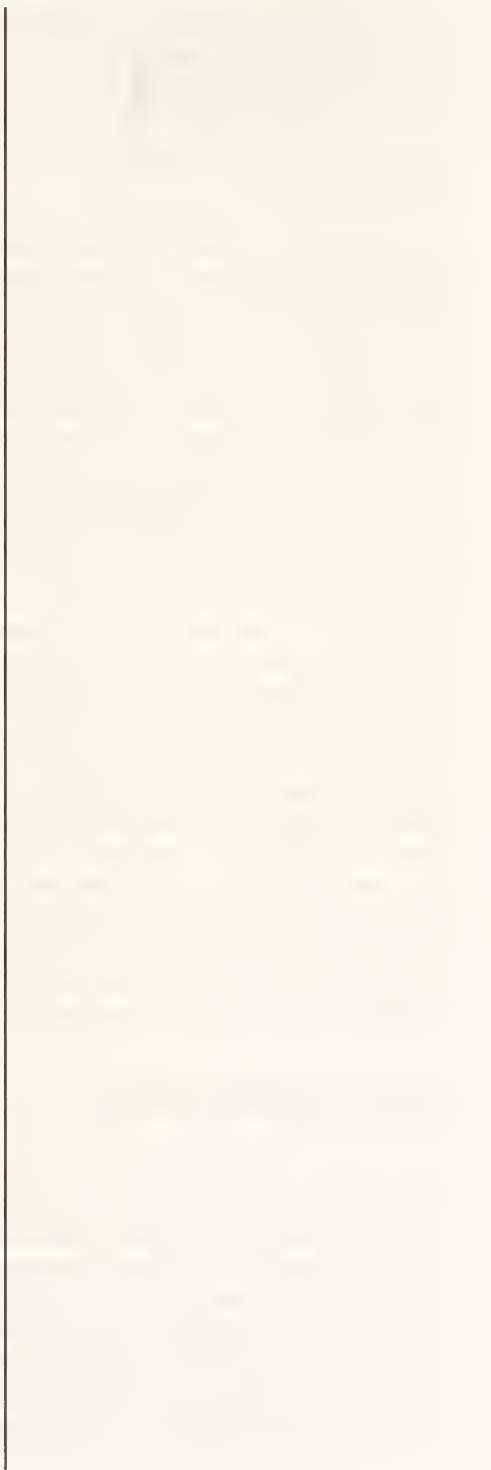
(3) Consolidated accounts shall give a true and fair view of the assets, liabilities, financial position, and profit or loss of the undertakings included therein taken as a whole.

Article 16

Conceptual basis

Financial statements are frequently described as showing a "true and fair" view of, or as presenting fairly, the financial position, performance, and changes in financial position of an enterprise. Although this framework does not deal directly with such concepts, the application of the principal qualitative characteristics and of appropriate accounting standards normally results in financial statements that convey what is generally understood as a true and fair view of, or as presenting fairly, such information.

Framework, paragraph 46



McMillan, 1997) stated that "(c)ompanies under common ownership required to prepare consolidated financial statements." In fact, Polish requirements with respect to the control of subsidiaries are in accordance with the EC 7th Directive and IAS in providing for control through provisions in the subsidiary's deed (or statute) or by virtue of a control contract. In addition, the criterion for control is not "common ownership" but control of voting rights.⁴

Over a decade ago, Nobes (1983) stated that "the real problem in international accounting is ... (that) there is too much *inaccurate* descriptive work." Meek and Saudagaran (1990) state "(a)t a minimum one should consult more than one source as a test for both accuracy and up-to-dateness. Better yet is consulting original documents and other sources from the country of interest." There is a danger that the errors of the past identified by Nobes (1983) and highlighted by Meek and Saudagaran (1990) will be repeated with reference to emerging market economies of Central and Eastern Europe whose accounting histories have been a neglected area of international accounting study. In performing its comparisons, this study has followed the advice of Meek and Saudagaran (1990) and has used original legislative sources.

The consolidation issue has been a focus of comparative research in a Western European context (FEE, 1993; Gray et al., 1993) due to harmonization pressures at the European level (European Commission, 1978, 1983) that have in turn impacted on the specification of international rules contained in IAS (Cairns, 1995). *De jure* compliance with EC Directives is a condition of accession to the EU for the associated countries of Central and Eastern Europe as detailed in the *White Paper: Preparation of the Associated Countries of Central and Eastern Europe for Integration into the Internal Market of the Union* (European Commission, 1995) (hereafter, *White Paper 1995*). Studies of *de jure* or formal harmonization in a comparative context (Rahman et al., 1996; Richard, 1998) are a necessary step prior to an empirical analysis of *de facto* harmonization (Tay and Parker, 1990) and especially appropriate with reference to neglected countries such as Poland and the Czech Republic that have not featured in either European (FEE, 1991, 1992) or international (Ordelheide and Semler, 1995) comparative surveys. More recently, the IASC has adopted a proposal to consider whether separate accounting standards may be appropriate for countries in transition (IASC, 1998). A focus on consolidation is therefore timely from both a European and an international perspective.

RESEARCH METHOD AND DATA

The choice of countries for comparative study can be criticized for reflecting the predilections of the researchers rather than the rigor of a research design but inevitable resource constraints—financial and human—have limited the article's scope.

The environmental differences among the countries are obvious from the indicators in Fig. 1 but both Poland and the Czech Republic are candidates for fast-track EU membership. The UK is a member and a potential model. EC Directives apply to each and UK influence was especially strong in the development of the 7th Directive. Accounting solutions embodied in IAS are influenced by Anglo-American principles and most IAS treatments are adopted by the UK rendering its accounting a useful embodiment of supranational rules.

Indicators (all data 1994 unless indicated)	UK	Poland	Czech Republic
World Bank classification of income status	High	Lower-middle	Upper-middle
Population (m)	58.4	38.5	10.3
Area (thousands of sq.km)	245	313	79
Urban population as a % of total population	89	64	65
GNP per capita (US dollars)	18,340	2,410	3,200
PPP estimates of GNP per capita (US=100)(%)	69.4	21.2	34.4
Average annual inflation 1990-94 (%)	4.0	36.9	21.3
GDP (million\$)	1,017,306	92,580	36,024

Figure 1. Selected Development Indicators: UK, Poland, Czech Republic.

Source: International Bank for Reconstruction and Development (The World Bank) (1996), World Development Report 1996: From Plan to Market.

Poland and the Czech Republic share similar histories in that both were among the more economically developed socialist states with Soviet-installed, rather than home-grown, socialist regimes and in each country democratization proceeded via peaceful elections in which the opposition to the socialist regime gained immediate government control to set in train a transition that has not been reversed. Other transition advantages included a history of previous reforms (Poland); a history of past resistance (Czech Republic and Poland); a history of a mixed economy during the inter-war period (Czech Republic and Poland).

In terms of cumulative inflows of foreign direct investment between 1989 and 1996 in Eastern Europe and the Baltic States as a whole, the Czech Republic and Poland rank second and third, respectively (behind Hungary) (EBRD, 1997). Both countries have experienced international pressures for accounting change emanating from foreign multinationals and the multinational audit firms, the latter having well-established offices in each country. Both countries have signed Europe (Association) Agreements with the EU as part of their pre-accession strategies and will need to comply with the accounting requirements of the EC's *White Paper 1995*. The European and international pressures on each country to harmonize their accounting with supranational requirements are comparable.

The comparison was undertaken in three stages. The first stage was a cross-national comparison to identify differences (Tables 1(a) and 2(a)).⁵ The second stage was a comparison of supranational requirements (Tables 1(a) and 2(a)).⁵ The third stage identified the extent to which national differences were explained by reference to supranational differences and identified country-specific differences, i.e., those that could not be explained by supranational differences (Table 3(a) and (b)). The latter have been characterized as differences of commission or omission. Country-specific differences of commission occur when a stated requirement in the national legislation

Code	Explanation
A	Equivalent to 7th Directive and IAS.
B	Equivalent to 7th Directive only.
C	Equivalent to IAS only.
X	Country-specific difference of commission.
N	Country-specific difference of omission.

Figure 2. Analytical Coding of National Requirements in a Supranational Context.

is *different* from corresponding supranational requirements. A country-specific difference of omission occurs when national requirements are *silent* in respect of a requirement of the supranational bodies (Fig. 2).

The approach identifies equivalencies across requirements (Code A) and when a country's requirements have been influenced by one or other set of supranational requirements (Codes B or C). Non-equivalence is defined as a situation where a supranational requirement differs or exists in one set of supranational rules but not the other. This approach identifies the relative influence of each set of supranational requirements on each country. The extent of non-equivalence with supranational requirements is illustrated by the identification of country-specific differences of commission and omission (Codes X and N).

The study identifies the frequency of equivalence or non-equivalence. The number of such differences will be influenced by the degree of disaggregation adopted in the analysis, e.g., the requirement for a management/directors' report could be disaggregated into its required contents. Despite this limitation, the level of disaggregation adopted has not been previously attempted in the literature and is within relevant parameters. The distinction between country-specific differences of commission and omission is an analytical approach that has not been attempted previously but is relevant to regulators assessing compliance with supranational requirements in context of the potential amendments and to other users wishing to assess the extent of accounting policy choice available nationally: country-specific differences of omission (silence in national requirements in respect of supranational requirements) are less of a barrier to *de jure* or *de facto* harmonization than county-specific differences of commission (explicit differences between corresponding national and supranational requirements).

The data consist of consolidation requirements for each country and for supranational bodies. Original sources in the native language have been consulted for both Czech and Polish requirements. The multinational nature of the research team, consisting of at least one member from each country, ensures that translations of relevant requirements are accurate.

The Czech requirements exist in separate sets of regulations with different authority. General provisions, limited to the establishment of a consolidation requirement per se, are contained in the *Zakon c. 563/1991 Sb. o ucetnictvi* (Act no.563/1991 on accounting, hereafter *Accounting Act 1991*) an act of parliament passed in December 1991. The detailed requirements are contained in the *Opatreni kterym se stanoví postupy pro*

provedeni konsolidace ucetni zaverky Cj. 281/73 570/93 (Measure that determines the procedures for preparing consolidated financial statements no. 281/73 570/93, hereafter *Consolidation Measure 1993*) issued in 1993 by the Ministry of Finance on the basis of derogation contained in Article 4, paragraph 2 of the *Accounting Act 1991*.

The Polish requirements have similar authority. The *Ustawa z dnia 29 wrzesnia 1994 r. o rachunkowosci* (Act of 29 September 1994 on accounting, hereafter *Accounting Act 1994*) is a parliamentary act effective from 1 January 1995. On the basis of derogation contained in Article 81, paragraph 3(2) of the act, the Ministry of Finance issued the *Rozporzadzenie Ministra Finansow z dnia 14 czerwca 1995 r. w sprawie szczegolowych zasad sporzadzania przez jednostki inne niz banki skonsolidowanych sprawozdan finansowych* (the Decree of the Minister of Finance of 14 June 1995 on the specific principles for the preparation of consolidated financial statements by entities other than banks, hereafter *Consolidation Decree 1995*). The decree contains more detailed guidance and similar to the Czech *Consolidation Measure 1993* specifies group-reporting formats in an appendix.

In the UK group accounting legislation is contained in parliamentary acts devoted to the regulation of joint-stock and limited liability companies specifically the *Companies Act 1985* as amended by the *Companies Act 1989*, the latter introducing the provisions of the EC 7th Directive. However, they have a similar legislative status as the Czech and Polish acts. At this point, the form of UK requirements begins to differ in that more detailed requirements not necessarily fully consistent with the provisions contained in company law are to be found in Financial Reporting Standards (FRS) issued by the Accounting Standards Board (ASB). Although standards are not identical to regulations issued by Ministries of Finance for the purposes of comparison they are treated as equivalent. The relevant standards are *FRS 2 Accounting for Subsidiary Undertakings* (ASB, 1992) and *FRS 9 Associates and Joint Ventures* (ASB, 1997).

Supranational requirements exist at the European and the international level. The European requirements are contained in the 7th EC Directive on consolidated accounts. The international requirements are those of the IASC, mainly *IAS 27 Consolidated Financial Statements and Accounting for Investments in Subsidiaries* (IASC, 1989b) and *IAS 28 Accounting for Investments in Associates* (IASC, 1989c).

THE POLITICAL AND ECONOMIC BACKGROUND

Of particular interest in the comparison is the fact that the UK is a mature market economy while Poland and the Czech Republic are in the process of a prolonged socioeconomic transformation from a command to a market economy. The differences revealed by the cross-national comparison and by the supranational comparison with IAS and the EC Directive (both designed for implementation in well-developed market economies) need to be understood within the transition context. Initial attempts at regulation in Poland and the Czech Republic may exhibit more differences with supranational requirements than the provisions of the UK with a longer tradition of consolidation. This section outlines why this may be the case. Furthermore, the different transition routes adopted by the two countries will explain the particular configuration of consolidation rules adopted. The issue here, not addressed elsewhere in the literature, concerns the impact upon the nature and extent of the differences in *de jure* consolidation rules that may be expected given the

transition to a market economy in general and the transition routes adopted by each country in particular.

Although Poland and the Czech Republic achieved a peaceful transition from Soviet-imposed single-party socialist rule to government by freely elected liberal democratic regimes, their political experiences after 1989 were very different. These different political experiences are important because fundamental economic initiatives such as privatization involve issues of both economic efficiency and social equity and the balance struck between the two is inevitably a political decision. This point is illustrated by the Czechoslovakian Federation split into the separate countries of the Czech Republic and Slovakia with effect from 1 January 1993. The rapid liberalization and privatization policies pursued by the Federal government from 1 January 1991 were controversial and perceived to have a more socially detrimental effect (specifically in terms of unemployment) on the Slovak as opposed to the Czech part of the Federation. The June 1992 national elections saw Slovakia electing a government with a more gradualist and socially oriented approach to economic transformation while the Czech Republic elected a government committed to the existing policy of speedy socio-economic transformation in which the priority remained the achievement of economic efficiency. The Polish political situation had been more volatile, characterized by frequent elections and more frequent changes of government. Partially free elections in June 1989 had ushered in a reforming Solidarity government that had initiated macroeconomic liberalization and privatization policies but the subsequent fall of the Berlin Wall in November 1989 had rendered the Polish constitutional arrangements, in which the former socialist government had been guaranteed a majority of the seats in deference to perceptions of continuing Soviet influence, both anachronistic and devoid of legitimacy. Fully free elections in October 1991 resulted in a fragmented parliament in which government was by increasingly unstable coalitions. Further elections in 1993, called to resolve the political uncertainty, brought into power a more socially minded left-wing coalition of parties that had its roots in the socialist parties of the pre-1989 political era. As a result, the pace of socioeconomic transformation slowed until subsequent elections saw the return of a more reform-minded right-wing government. The Polish experience illustrates that the balance between the political goals of economic efficiency and social equity had been much more difficult to achieve: there would appear to have been less consensus over the direction and pace of socioeconomic transformation in the early years of transition than in the Czech Republic.

The contrast between the two countries arises from their different experiences of previous reform. In Czechoslovakia, limited political and economic reform based on the Hungarian model had been brutally suppressed using Soviet military force in 1968. In the aftermath, classical command economy structures had been re-imposed and these had persisted relatively unchanged until 1989. The commitment in the new Czech Republic to rapid economic reform needs to be understood against this background. The Polish experience is one of failed reforms from the 1970s onwards that provoked social discontent and that led to the initial formation, subsequent suppression and ultimate political victory of the Solidarity movement. Post-1989 Polish governments had to take into account the aspirations of this strong trade union based constituency in the formulation of socioeconomic transformation policies. As a result, the Polish privatization strategy contained methods of transferring ownership that favored management and

employee buy-outs and the consequent establishment of insider control in newly privatized firms.

Fig. 3 compares the main privatization methods in Poland and the Czech Republic. Management and employee buy-outs are a primary feature of the privatization process in Poland and the Czech Republic remains the primary example of the mass privatization route in which the public are allocated vouchers for a nominal fee that are subsequently invested in privatized firms either directly or, more commonly, through the medium of intermediate investment funds. Although such an approach was advocated in Poland as early as 1991, legislation on mass privatization did not reach the statute book until 1993, was much smaller in scale than the Czech approach and in any case did not begin to be seriously implemented until 1995 as a result of the delays caused by the election in 1993 of a social democratic government more skeptical of privatization. In the Czech Republic, the first mass privatization wave occurred in 1992–1993 and the second in 1993–1994 and neither was interrupted by a change in the political persuasion of the government. Direct sale of enterprises to outside owners (usually via a public share issue) did not feature strongly in the Czech Republic but was an important initial privatization route (based on the UK model) in Poland: practical experience with the process revealed it to be a costly and time-consuming privatization method and ultimately led to its demise and the adoption of the mass privatization legislation.

The Polish and Czech mass privatization programs embody substantially different approaches. The Czech route emphasizes early privatization and leaves the necessary operational and financial restructuring of the newly privatized state-owned enterprises to the new private owners, relying on market pressures (e.g., hard budget constraints and competition) to establish good corporate governance practice. The danger that dispersed ownership structures will inhibit the emergence of corporate governance patterns that would facilitate restructuring was obviated by the Czech Republic's *laissez faire* approach to the establishment of privately owned investment funds (over 200 subsequently appeared) to act as intermediaries between voucher holders and firms. The Czech approach embodies a belief in the efficiency of rapidly established markets to solve the restructuring problems of the former command economy. The Polish approach differed in that comprehensive financial restructuring of the entities to be privatized was undertaken prior to their allocation to one of 15 state-established investment funds. The process was much slower and revealed a more skeptical attitude to the ability of the emerging market to pick privatization winners and losers correctly. For example, while Czech investment funds were initially limited to a maximum 20 percent stake in any one enterprise, each Polish privatized enterprise was to have a more influential stake (about 33%) held by one of the 15 investment funds. The Polish funds were designed to have a substantial interest in

	Sale to outside owners	Equal access voucher privatization	Management-employee buy-outs
Czech Republic	Secondary	Primary	-
Poland	Tertiary	Secondary	Primary

Figure 3. Methods of Privatization of Medium-Sized and Large Enterprises in the Czech Republic and Poland.

Source: Table 5.7, EBRD, Transition Report (1997).

ensuring the successful operational and financial restructuring of the firms allocated to their portfolio irrespective of the strength of external market pressures.

Four basic patterns of enterprise ownership and governance emerged in Poland and the Czech Republic (EBRD, 1995):

1. continued state ownership for unprivatized firms with control exercised by insiders (managers and employees);
2. insider ownership with control exercised by employees and managers;
3. domestic outsider ownership with control exercised by domestic investment funds and individual voucher holders; and
4. foreign outsider ownership (individual, firm or investment fund).

The privatization strategies and the nature of the ownership and governance structures in enterprises that have arisen as a result have implications for the financial reporting and consolidation. Continued state or insider ownership by employees and managers (the primary privatization route in Poland) result in corporate governance structures that do not stimulate a demand for external financial reporting nor in an active market for corporate control requiring consolidation rules to facilitate its efficient and transparent operation. Enterprises in state ownership will not be permitted to expand through merger or acquisition. Firms owned and controlled by insiders will be concerned with maximizing employees' job security and wage levels and will not have access to the necessary finance (due to the lack of a track record of successful performance) to fund expansion through acquisition. The fact of insider control and the lack of alternative opportunities in the labor market also make such firms difficult takeover targets for outsider control firms whether domestic or foreign.

Extensive outsider ownership characterized the Czech mass privatization program and under these conditions the demand for external financial reporting is maximized and consolidation rules will be needed to cope with the emerging market for corporate control. Against this background, the *Czech Accounting Act 1991* (Section 22), which came into force on 1 January 1992, contained a legal requirement for the preparation and audit of consolidated financial statements. The equivalent Polish requirement appeared much later in the *Accounting Act 1994*, which came into force on 1 January 1995. Up to this date, Polish privatization had been dominated by management and employee buy-outs and the mass privatization program had not yet been implemented. The timing of the incorporation of the consolidation requirement into law in each of the countries is the result of the adoption of a different dominant method of privatization.

By mid-1996, the market capitalization of the Prague Stock Exchange amounted to 42 percent of Czech gross domestic product; the equivalent figure for the Warsaw Stock Exchange was 5 percent (EBRD, 1996). This disparity had arisen despite the fact that the Warsaw Stock Exchange was reactivated in 1991, 2 years prior to its Czech counterpart in Prague and is entirely attributable to the different privatization strategies adopted: initial company listings in Poland were entirely the result of a slow stream of public offers for sale of attractive state-owned enterprises (and the mass privatization program was delayed) while in the Czech Republic the mass privatization route had resulted in numerous listings. Nevertheless, neither country could point to the emergence of an active market for corporate control. While in Poland the creation of such a market had not been a priority, in

the Czech Republic such market forces were integral to the effective corporate governance and restructuring of enterprises. The market's emergence in the Czech case was hampered by the predominance of investment fund intermediaries. The funds proved a popular intermediate investment location for voucher holders because of the benefits of diversification and their investment expertise. The more popular funds were set up and owned by banks that in fact, combined with the 20 percent investment limit in any one enterprise, limited the efficiency of the funds as primary agents of operational and financial restructuring. A recent amendment to Czech legislation allows investment funds to own controlling stakes in enterprises but in order to be effective the funds themselves need to be effectively governed, however, examples exist of such funds converting from joint-stock companies to unit trusts to prevent takeover. *De facto*, therefore, the expected demand for effective external financial reporting has not materialized in the Czech Republic and the early enactment of the consolidation requirement may prove to have been premature.

Although the consolidation requirement in the Czech Republic was in force for the 1992 calendar year, the detailed technical rules did not appear until the issue by the Ministry of Finance of the *Consolidation Measure 1993*, applicable for the first time to the 1993 calendar year. The delay between the enactment of the consolidation requirement and the issuance of detailed procedures is explained by the technical complexity of the subject area and by the fact that such procedures were not encountered under the command economy. In any case, Czech technical guidance on the preparation of consolidated financial statements came into force 2 years earlier than in Poland. The later Polish legislation will exhibit fewer differences with supranational rules given the greater amount of time allowed for the assimilation of the subject matter by regulators and because the requirements were drafted and enacted subsequent to the country's application for membership of the EU. The Czech requirements were a temporizing measure (Schroll, 1995) promulgated prior to application for EU membership and exact compliance with the 7th Directive was not a political priority.

A distinction needs to be drawn between regulations requiring the preparation, audit, and publication of consolidated financial statements and rules that establish the existence of group relationships per se. For example, the Polish *Ustawa z dnia 22 marca 1991 r.: Prawo o publicznym obrocie papierami wartosciowymi i funduszach powierniczych* (Act of 22nd March 1991: The law on public trading in securities and trust funds, hereafter *Securities Act 1991*), which reestablished the Warsaw Stock Exchange, contained definitions of subsidiary and associate companies without the requirement to prepare consolidated financial statements. Such provisions ensure the transparency of trading on the emerging securities exchange by preventing undeclared takeovers by concert parties of firms under common ownership. The Czech consolidation requirements need to be seen similarly in the context of the reestablishment of the Prague Stock Exchange in 1993 except that legislation went much farther in specifying the production of consolidated financial statements in line with the more rapid path of socioeconomic transformation adopted. Even the EC *White Paper 1995* recognized that compliance with the 7th Directive was a second stage measure, compared to the implementation of the 4th Directive, in the overall program of compliance with EC Directives (EC, 1995).

General features of the consolidation regulations in Poland and the Czech Republic are attributable directly to the transition. In each country macroeconomic liberalization began

and a small number of acquisitions took place prior to the establishment of the consolidation requirement, resulting in the necessity for the regulations in both countries to contain provisions specifying the accounting rules for such circumstances. In the early years of the transition, in the Czech Republic by design and in Poland by default, positive and negative goodwill on consolidation were calculated by reference to book values and not the market or fair values of the net assets acquired (in Poland the use of market values was introduced in the *Accounting Act 1994*). The establishment of reliable market values in a transition economy is both difficult and costly and legislation did not impose this burden on newly privatized firms but the consequences for the goodwill on consolidation figure need to be born in mind: the resulting number is a difference on consolidation devoid of the economic significance attached to the figure in well-developed market economies. Further aspects of the regulations attributable to the transition are discussed in the following sections.

COMPARISON OF OBJECTIVES AND CONTENTS OF CONSOLIDATED FINANCIAL STATEMENTS

The objectives of consolidated financial statements may be defined in terms of the representation of the activities of an economic or legal "reality" ("the group") or in terms of the needs of users or by a combination of these approaches. The Czech requirements exclude the use of group accounts as a basis for determining tax liabilities and dividend distribution policy. This exclusion is not found in other requirements and is a country-specific difference of commission. The objective of group accounts in the Czech requirements is "... to inform the shareholders and partners ...," however, it is clear that a focus on an "economic grouping" underlies the requirements that combine the economic and user needs approaches consistent with the aims of the mass privatization strategy. Polish legislation has no user emphasis that is consistent with the more insider-oriented privatization strategy but employs the idea of a capital (not economic) group. This is a country-specific difference of commission with reference to the IAS emphasis on a single economic entity. The UK standard specifies "single economic entity" and stresses the economic nature of a group. The IAS combines approaches by referring to both (unspecified) users and a non-legal single enterprise. The 7th Directive takes a user emphasis, referring to members and third parties. It is clear that there exists an array of differently phrased objectives.

In terms of content all requirements specify a balance sheet, profit and loss account, and notes on the accounts. In the Czech Republic, the management report and the cash flow statement are constituent parts of the notes. In Poland and the UK, they are primary statements. The 7th Directive does not require a cash flow statement. The IAS do not apply to management reports (IASC Framework, 1989). Despite the differences in supranational requirements, consolidated financial statements in all three countries effectively comprise the same principal documents.

All countries and the supranational rules acknowledge some notion of fair presentation, albeit phrased differently. The concepts underlying these phrases have defied unambiguous interpretation (Alexander, 1993). A debate as to the meaning of "true and fair" in the UK, "correct and faithful" in Poland and "fairly present" in the Czech Republic is outside

Table 2. (Extract) The Determination of a Group

Reference	United Kingdom	Reference	Poland	Reference	Czech Republic	Item
	<i>Parent/subsidiary relationships</i>					
FRS 2, paragraph 14, CA 1985, S258(2), (4)	An undertaking is the parent undertaking of another undertaking (a subsidiary undertaking) if any of the following apply: (a) It holds a majority of the voting rights in the undertaking. (b) It is a member of the undertaking and has the right to appoint or remove directors holding a majority of the voting rights at meetings of the board on all, or substantially all, matters.	AA 1994, Article 3(1)(4)	Holding entity—by this is meant a joint-stock company, a company with limited liability or any other share capital company: (a) that holds a majority of the total number of votes in the bodies of another (subsidiary) entity, including on the basis of agreements with others entitled to vote, or (b) that is entitled to take decisions concerning the financial policies and current operating activities of this other (subsidiary) entity on the basis of the Act, a company deed or contract, or	CM 1993, App. 1, Article 1, paragraphs 4,5; paragraph 2(1)	By a holding entity is understood a subject that exercises either directly or indirectly a dominant influence over subsidiary entities or a significant influence over associated entities. By subsidiary entity is understood a subject over which another entity exercises directly or indirectly a dominant influence. That subject is also considered a subsidiary entity in the case where the holding entity has more than a 50 percent share (participation) in its basic assets either directly or indirectly through one or more subsidiary entities over which the holding entity exercises a dominant influence. The amount of the share (participation) of the holding entity in the basic assets of that subject is made up of the direct share of one or more subsidiary entities in the basic assets of that subject and the direct share (participation) of the holding entity in the basic assets of that subject.	5

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Table 2. (continued)

Reference	United Kingdom	Reference	Poland	Reference	Czech Republic	Item
	(c) It has the right to exercise a dominant influence over the undertaking:		(c) which as a shareholder is entitled to appoint or dismiss the majority of the members of the management or supervisory bodies of another (subsidiary) entity, or		The dominant influence of one accounting entity (the holding entity) over another (the subsidiary entity) is understood to be a degree of dependence (influence) characterized by:	
	(i) by virtue of provisions contained in the undertaking's memorandum or articles; or		(d) whose management board members or the persons fulfilling management roles, or the members of the management board or persons fulfilling such management roles in a subsidiary entity, constitute at the same time more than half of the management board of another (subsidiary) entity.		(a) direct or indirect ownership of more than a 50 percent share (participation) in the basic assets of the subsidiary entity, as long as other arrangements do not apply as a result of written contracts or provisions in the articles of the company's statute.	
	(ii) by virtue of a control contract. The control contract must be in writing and be of a kind authorized by the memorandum or articles of the controlled undertaking. It must also be permitted by the law under which that undertaking is established.				(b) a written contract or provisions in the articles of the company's statute whereby the holding entity governs the financial and operating policies of the subsidiary entity and is also a shareholder or partner in the given entity.	
	(d) It is a member of the undertaking and controls alone, pursuant to an agreement with other shareholders or members, a majority of the voting rights in the undertaking.					

<p>(e) It has a participating interest in the undertaking and;</p> <p>(f) it actually exercises a dominant influence over the undertaking; or</p> <p>(g) it and the undertaking are managed on a unified basis.</p> <p>(h) A parent undertaking is also treated as the subsidiary undertakings of its subsidiary undertakings.</p>	<p>AA 1994, Article 55(2)</p>	<p>Holding entities (...), are obliged to prepare, each year, consolidated financial statements to include the holding entity and entities subsidiary to or associated with it at all levels, (...).</p>	<p>(Holding entity ...)</p>	<p>CM 1993, App. 1, Article 1, paragraph 6; paragraph 2(2)</p> <p>By associated entity is meant a subject over which another exercises, directly or indirectly through a subsidiary or subsidiary entities, a significant influence.</p>	<p>6</p>
<p>CA 1985, S258(5)</p>					
<p><i>Parent/associate relationships</i></p>					
<p>(1) An "associated undertaking" means an undertaking in which an undertaking included in the consolidation has a participating interest and over whose operating and financial policy it exercises a significant influence, and that is not</p>					

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Table 2. (continued)

Reference	United Kingdom	Reference	Poland	Reference	Czech Republic	Item
(a) UK, Poland, Czech Republic	(a) a subsidiary undertaking of the parent company, or		(c) that holds in another (associated) entity not less than 20 percent and not more than 50 percent of the votes at the general meeting of shareholders.			By the significant influence of one accounting entity (the holding entity) over another accounting entity (the associated entity) is understood to be that degree of dependence (influence) in which the holding entity owns directly or indirectly at least 20 percent and not more than 50 percent of the share (participation) in the basic assets of another entity, as long as written contracts or the provisions in the articles of the company's statute do not provide otherwise.
	(b) a joint venture dealt with in accordance with paragraph 19.					
	(2) Where an undertaking holds 20 percent or more of the voting rights in another undertaking, it shall be presumed to exercise such an influence over it unless the contrary is shown.		(f) that in some way other than that specified under letter (c), exercises a significant influence on the financial policies and current operating activities of another (associated) entity.			

<i>(b) IAS and the 7th Directive</i>	Reference	IAS	Reference	7th Directive	Item
IAS 27, paragraph 6	<p><i>Parent/subsidiary relationships</i> A parent is an enterprise that has one or more subsidiaries.</p>	Article 1	<p>(1) A member state shall require any undertaking governed by its national law to draw up consolidated accounts and a consolidated annual report if that undertaking (a parent undertaking):</p> <p>(a) has a majority of the shareholders' or members' voting rights in another undertaking (a subsidiary undertaking); or</p> <p>(b) has the right to appoint or remove a majority of the members of the administrative, management or supervisory body of another undertaking (a subsidiary undertaking) and is at the same time a shareholder in or member of that undertaking; or</p>	5	
IAS 27, paragraph 6	A subsidiary is an enterprise that is controlled by another enterprise (known as the parent).				
IAS 27, paragraph 12	<p>Control is presumed to exist when the parent owns, directly or indirectly through subsidiaries, more than one half of the voting power of an enterprise unless, in exceptional circumstances, it can be clearly demonstrated that such ownership does not constitute control.</p> <p>Control also exists even when the parent owns one half or less of the voting power of an enterprise when there is:</p>		<p>(c) has the right to exercise a dominant influence over an undertaking (a subsidiary undertaking of which it is a shareholder or member, pursuant to a contract entered into with that undertaking or to a provision in its memorandum or articles of association, where the law governing that subsidiary undertaking permits its being subject to such contracts or provisions. A member state need not prescribe that a parent undertaking must be a shareholder in or member of its subsidiary undertaking. Those member states the laws of which do not provide for such contracts or clauses shall not be required to apply this provision; or</p> <p>(d) is a shareholder in or member of an undertaking; and</p>		
	(a) power over more than one half of the voting rights by virtue of an agreement with other investors;				

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Table 2. (continued)

(b) IAS and the 7th Directive	Reference	IAS	Reference	7th Directive	Item
(b) power to govern the financial and operating policies of the enterprise under a statute or an agreement;					
(c) power to appoint or remove the majority of the members of the board of directors or equivalent governing body;					
(d) power to cast the majority of votes at meetings of the board of directors or equivalent governing body.					
					<p>(aa) a majority of the members of the administrative, management or supervisory bodies of that undertaking (a subsidiary undertaking) who have held office during the financial year, during the preceding financial year and up to the time when the consolidated accounts are drawn up, have been appointed solely as a result of the exercise of its voting rights; or</p> <p>(bb) controls alone, pursuant to an agreement with other shareholders in or members of that undertaking (a subsidiary undertaking), a majority of shareholders' or members' voting rights in that undertaking. The member states may introduce more detailed provisions concerning the form and contents of such agreements.</p> <p>The member states shall prescribe at least the arrangements referred to in (bb) above. They may make the application of (aa) above dependent upon the holding's representing 20 percent or more of the shareholders' or members' voting rights. However, (aa) above shall not apply where another undertaking has the rights referred to in subparagraphs (a), (b) or (c) above with regard to that subsidiary undertaking.</p> <p>(2) Apart from the cases mentioned in paragraph 1 above and pending subsequent coordination, the member states may require any undertaking governed by their national law to draw up consolidated accounts and a consolidated annual report if that undertaking (a parent undertaking) holds a participating interest as defined in Article 17 of Directive 78/660/EEC in another undertaking (a subsidiary undertaking), and:</p> <p>(a) it actually exercises a dominant influence over it; or</p>

(b) it and the subsidiary undertaking are managed on a unified basis by the parent undertaking.

Article 12

(1) Without prejudice to Articles 1 to 10, a member state may require any undertaking governed by its national law to draw up consolidated accounts and a consolidated annual report if:

- (a) that undertaking and one or more other undertakings with which it is not connected, as described in Article 1 (1) or (2), are managed on a unified basis pursuant to a contract concluded with the undertaking or provisions in the memorandum or articles of association of those undertakings; or
- (b) the administrative, management or supervisory bodies of that undertaking and of one or more other undertakings with which it is not connected, as described in Article 1 (1) or (2), consist for the major part of the same persons in office during the financial year and until the consolidated accounts are drawn up.

IAS 27 paragraph 11

A parent that issues consolidated financial statements should consolidate all subsidiaries, foreign and domestic, other than those referred to in paragraph 13.

Article 3

(1) Without prejudice to Articles 13, 14 and 15, a parent undertaking and all of its subsidiary undertakings shall be undertakings to be consolidated regardless of where the registered offices of such subsidiary undertakings are situated.

(2) For the purpose of paragraph 12 above, any subsidiary undertaking of a subsidiary undertaking shall be considered a subsidiary undertaking of the parent undertaking that is the parent of the undertakings to be consolidated.

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Table 2. (continued)

(b) IAS and the 7th Directive	Reference	IAS	7th Directive	Item
IAS 28, paragraph 3	IAS	<p><i>Parent/associate relationships</i></p> <p>An associate is an enterprise in which the investor has significant influence and that is neither a subsidiary nor a joint venture of the investor.</p>	Article 33	6
IAS 28, paragraph 4	IAS	<p>If an investor holds, directly or indirectly through subsidiaries, 20 percent or more of the voting power of the investee, it is presumed that the investor does have significant influence, unless it can be clearly demonstrated that this is not the case. Conversely, if the investor holds, directly or indirectly through subsidiaries, less than 20 percent of the voting power of the investee, it is presumed that the investor does not have significant influence, unless such influence can be clearly demonstrated. A substantial or majority ownership by another investor does not necessarily preclude an investor from having significant influence.</p>	<p>(1) Where an undertaking included in a consolidation exercises a significant influence over the operating and financial policy of an undertaking not included in the consolidation (an associated undertaking) in which it holds a participating interest, as defined in Article 17 of Directive 78/660/EEC, that participating interest shall be shown in the consolidated balance sheet as a separate item with an appropriate heading. An undertaking shall be presumed to exercise a significant influence over another undertaking where it has 20 percent or more of the shareholders' or members voting rights in that undertaking. Article 2 shall apply.</p>	

the scope of this article but has been addressed elsewhere in the literature (Sucher et al., 1996). Legal rules regarding cross-shareholdings significantly impact upon comparative group structures. Although cross-shareholdings are prohibited in the UK, they are allowed (or not prohibited) in Poland and the Czech Republic but there is a requirement to disclose such holdings. In Poland, such shareholdings are separately disclosed. In the Czech Republic the accounting treatment differs according to whether the holding is long- or short-term. This issue is not addressed in either IAS or the 7th Directive and has not been included in the supranational comparison in Table 3(a).

COMPARISON OF RELEVANT REQUIREMENTS FOR THE DETERMINATION OF A GROUP

Table 2(a) schedules the relevant requirements for the determination of a group for the three countries and Table 2(b) schedules the supranational requirements.

In the UK, consistent with the IAS and the 7th Directive, a group consists of the parent and its subsidiary undertakings. In the Czech Republic it is clear from Article 22(2) of the *Accounting Act 1991* that a group may comprise a holding entity with associates only.⁶ In the Polish requirements a capital group consists of the parent company and *either* subsidiaries *or* associates (*Accounting Act 1994*, Article 55(1)). In fact, Polish legislation exempts a parent with only associates from consolidation unless the parent is a listed company, in which case consolidation using the equity method is required. The Czech and Polish requirements define a group in a manner not recognized by supranational requirements and this results in country-specific differences of commission. The wider Czech and Polish definitions are appropriate given the shareholdings held by privatization investment funds as a result of mass privatization program.

Legally in the UK the parent is necessarily a limited liability company but the relevant FRS applies to any parent undertaking regardless of legal form or whether it is operating with or without a view to profit. In Poland, the holding entity must be a share capital company. The requirements are silent on the profit objective but a share capital company incorporated under the provisions of commercial law will be operating with a view to profit. The Czech requirements specify a business company that may include a partnership but that excludes operations without a view to profit. The IAS apply to any “enterprise” regardless of legal form but which operates with a view to profit. The 7th Directive is silent on the profit objective and is primarily directed at limited liability companies although unincorporated parent undertakings are also required to draw up consolidated accounts if any of their subsidiaries are a limited liability company but there is an option to exempt them. These different positions are summarized in Fig. 4.

The Czech Republic and Poland have limited their legislation to entities trading with a view to profit, in line with the IAS rather than the wider scope of the 7th Directive. Polish requirements are further limited to share capital companies and this, combined with the view to profit orientation, represents a country-specific difference of commission. In the transition from a command to a market economy, it is logical for new legislation to deal first with the newly emerging, profit-orientated business sector. However, a consequence of the Polish regulations is that existing state-owned enterprises whose legal form has not been changed to that of a share capital company do not fall within the scope of the

		Profit orientation	
		View to profit only	Any orientation
Legal form	Limited liability/share capital companies	Poland.	7th Directive & option (art.4(2)). UK (Companies Act).
	All entities	IAS. Czech Republic.	7th Directive + no option (art.4(1)). UK (FRS2).

Figure 4. Scope of Consolidation: Legal Form and Profit Orientation of Parent/Holding Company.

consolidation regulations. Important intercompany links in the still substantial state-owned sector of the Polish economy remain obscured and there is no level playing field for market transactions among state-owned and share capital (mainly private) enterprises. With respect to the legal form and profit orientation of subsidiary companies in all requirements the definitions are drafted to include all entities, regardless of legal form or profit orientation.

In terms of the parent/subsidiary relationship, a country-specific difference of commission arises only in the Czech Republic where there is no explicit mention of voting rights but reference is made to a share in the "basic assets."⁷ A provision in the Czech requirements deals with consolidation by more than one holding entity but does not cover the situation where one holding entity owns more than 50 percent of the equity share capital but another entity holds more than 50 percent of the voting rights. The focus on shares not votes is outdated and the temporizing Czech measures may have been modeled on out-of-date legislation.

All requirements specify a right to exercise control by virtue of a company deed or a contract. A related issue is whether the controlling company is required to be a member of the controlled undertaking. Under the UK and Polish rules, membership is not a requirement. In the Czech requirements, the *Accounting Act 1991* and the *Consolidation Measure 1993* differ. The former (Article 22(2)) uses the phrase "... regardless of the level of its ownership interest." The latter states "... and is also a shareholder or partner in the given entity." The 7th Directive allows either approach but to incorporate both is inconsistent. The relevant IAS does not require membership of the controlled undertaking ("... owns one-half or less ...") as long as the text bears the interpretation that ownership of nothing is still ownership. Cairns (1995) takes this view.

The Czech requirements for determining the parent/subsidiary relationship contain no further criteria. The UK and IAS criterion, control of the board, specifies the appointment and removal of directors holding a majority of the voting rights and not, as in Poland and the 7th Directive, the appointment and removal of a simple majority of the directors. The national differences are explained by differences in supranational requirements except for the country-specific difference of omission in the Czech Republic. Article 1.1(d) of the 7th Directive is an option whereby an entity may be considered *de facto* a subsidiary if the parent is a member and the majority of directors have been appointed solely as a result of the exercise of voting rights but this option has not been taken up in any of the requirements (including IAS).

The fourth criterion in Polish legislation, i.e., companies sharing a common board membership, has no equivalent in UK legislation. The Polish criterion applies whether or not the parent is itself a member of the subsidiary entity. A difficulty in the application of this rule in the absence of a uni-directional or any shareholding occurs where two companies have common majority board membership: which is the parent and which is the subsidiary given the absence of *de facto* criteria for determination of the relationship in Polish legislation? This criterion is equivalent to the option contained in Article 12 (1)(b) of the 7th Directive. The UK did not take up this option; the IAS and Czech requirements are silent. In respect of control through agreements with others entitled to vote the UK, Polish, and supranational requirements are equivalent. The Czech Republic exhibits a country-specific difference of omission in having no equivalent criterion. The UK requirement regarding *de facto* control originates as a 7th Directive option and has not been taken up by the Polish legislators. The decision by Poland not to incorporate the option leaves its criteria for determining the parent/subsidiary relationship more consistent with IAS that similarly have no overriding *de facto* criteria. By default the Czech Republic is also in this position. The UK and the 7th Directive require consolidation with respect to groups with subsidiaries and the intention of the Polish and Czech legislation and the IAS is identical. Neither the countries nor IAS contain a provision equivalent to that in Article 12(1)(a) of the 7th Directive.

Further differences arise in the definition of a parent/associate relationship. The Czech requirements use numerical thresholds of more than 20 percent and less than 50 percent but stated in terms of share ownership and not voting rights. The issue of ownership within the relevant parameters but with no exercise of significant influence is dealt with only in terms of written contracts or provisions in the entity's statute. The Czech definition of significant influence presumes the existence of a shareholding. The Polish legislation requires that an entity in which the parent holds between 20 and 50 percent of the voting capital be treated as an associate. An additional requirement indicates that a significant influence may exist in situations other than that of holding this specified level of voting capital. Both the UK and the IAS stress the exercise of significant influence and the 20 percent threshold is a rebuttable presumption of the existence of significant influence. The 7th Directive uses the term "presumed" but without further explanation. Country-specific differences of commission in the Czech Republic and Poland are observable from this comparison. The Czech Republic does not recognize the possibility of significant influence where share ownership is less than the 20 percent threshold. In circumstances where voting rights are between 20 and 50 percent, the UK, IAS, and 7th Directive requirements acknowledge that significant influence may not exist. The Czech regulations provide that the parent/associate relationship based on the thresholds may not subsist only in the presence of statutory or contractual provisions. In Poland, it would appear that there is no acknowledgment of ownership within the thresholds without significant influence. The Czech and Polish decisions to eschew *de facto* significant influence criteria are attributable to the short period of transition during which track records of the exercise of *de facto* significant influence will be difficult to establish hence regulations that emphasize legal criteria. The exercise of *de facto* significant influence is a more subtle form of control that requires the operation of a sophisticated market economy to appreciate.

In the UK, the *Companies Act 1985* dealt with joint venture relationships and required inclusion using proportional consolidation unless the joint venture was a

corporate body. In the latter case, joint ventures were treated as either associates or subsidiaries depending upon the circumstances. *FRS 9 Associates and Joint Ventures* (ASB, 1997) has now clarified the treatment of joint ventures. The "gross equity method" is required for joint ventures by the standard. This is an expanded form of equity accounting. As regards supranational rules, the IAS allow use of either the proportional method or the equity method. The 7th Directive specifies proportional consolidation as an option otherwise equity accounting is used. The national requirements exhibit country-specific differences of omission: neither Poland nor the Czech Republic regulates the consolidation of joint ventures.

COMPARISON OF EXEMPTIONS FROM THE CONSOLIDATION REQUIREMENT

In all requirements, an exemption exists for small-/medium-sized groups. In the UK, Poland, and the 7th Directive, the size criteria are specified in terms of balance sheet total, turnover, and number of employees and the exemption relates to two of these three thresholds. The Czech Republic specifies balance sheet total and turnover only and both thresholds apply. In each of the countries exemptions on the grounds of size do not apply if any member of the group is a listed company. The IAS do not include any specific size criteria but are not intended to apply to immaterial items. The supranational rules are effectively equivalent in that both address the problem of size criteria and no country-specific differences arise.

In each country the consolidation requirement applies not only to the direct subsidiaries of the parent but also to sub-subsidiaries of the parent, i.e., where the subsidiary of a parent company is itself a parent. As a result, national requirements address the problem of exempting parent undertakings that are themselves subsidiaries. The shareholding in the exempted parent must exceed 90 percent in the Polish requirements and 95 percent in the UK. The Polish exemption requires the prior agreement of the minority whereas in the UK the minorities must request preparation of the consolidated accounts in the absence of which agreement to the exemption is assumed. In the Czech requirements a level of shareholding exceeding 90 percent automatically exempts the sub-group. If the holding is between 50 and 90 percent then the minority may request group accounts in the absence of which agreement to the exemption is assumed.

Unlike Polish requirements the UK allows UK-established wholly owned parents of companies registered in EU member states exemption from consolidation. This is unsurprising, as Poland cannot be expected to favor members of a club to which it does not belong. The Czech Republic, not a member of the EU, exempts sub-groups with foreign (not just EU) parents from consolidation if ultimate parent's accounts are prepared in accordance with the 7th Directive. The IAS and the 7th Directive exempt wholly owned parents. Neither Polish nor Czech requirements distinguish between wholly owned and virtually wholly owned parents. Both the IAS and the 7th Directive exempt virtually wholly owned parents and both indicate 90 percent as the appropriate virtual threshold and require some form of minority approval.

The 7th Directive extends this exemption for the wholly owned and virtually wholly owned parents of ultimate parents where the latter are governed by the law of a Member State. However, the 7th Directive contains an option allowing Member States to extend

this exemption to non-EU ultimate parents conditional upon the ultimate parent's consolidated accounts being drawn up in accordance with the 7th Directive or in an equivalent manner. The IAS, unsurprisingly, do not specify any jurisdictional boundaries on the exemption. Each of the countries adopts a different approach within the parameters of the supranational rules. Poland adopts the IAS approach; the UK adopts the 7th Directive without the option to extend to non-EU ultimate parents; the Czech Republic adopts the 7th Directive with this option. There are no country-specific differences despite the diversity.

COMPARISON OF BASES FOR EXCLUSION FROM CONSOLIDATION

Next to be considered are the bases upon which it is permitted to exclude subsidiaries from the group accounts. Polish regulations and IAS require exclusion of subsidiaries and associates acquired exclusively with a view to resale. The Czech requirements adopt the permissive approach of the 7th Directive: the decision is at the discretion of the holding entity. In the UK the exclusion is with reference to subsidiaries held with a view to resale *and* that have not previously been consolidated. A difference within UK requirements, however, can be observed between the *Companies Act 1985* and *FRS 2 Accounting for Subsidiary Undertakings* (ASB, 1992). The former states that the subsidiary may be excluded, the latter that it should be excluded. The approach of the standard is considered best practice. Each set of requirements seems to allow such a subsidiary to be excluded from consolidation for a number of successive years. In the UK, however, *FRS 2* establishes that there should be a reasonable expectation of disposal within 1 year of acquisition as in the IAS that refers to "... disposal in the near future." There is no such condition attached to the Polish or Czech requirements nor in the 7th Directive.

The UK devolves the decision on materiality levels to the entity and, effectively, its statutory auditors consistent with the approach of the 7th Directive. The Polish and Czech requirements exhibit country-specific differences of commission in specifying thresholds of insignificance. In Poland, the thresholds are 10 or 20 percent of balance sheet or revenue totals of the holding company and the group (before exclusions), respectively. The Czech requirements refer to balance sheet and revenue totals without numerical thresholds. IAS do not apply to immaterial items.

There is a Polish requirement for exclusion on the basis that control is expected to last for less than 1 year from the balance sheet date. There is no equivalent basis in any other requirements. The Polish requirement requires the de-consolidation of a subsidiary where disposal is expected within 1 year of the balance sheet date. In the UK it is a requirement that any subsidiary previously consolidated will continue to be so up until the date of disposal.

All requirements recognize restrictions on control as a basis for exclusion. Differences exist in terms of whether the exclusion is obligatory or permissive, the way restrictions are characterized and the extent to which there is explanation of the effect of the restrictions on control. The obligatory nature of the exclusion is found in the IAS, in *FRS 2* in the UK and in the Polish legislation. The permissive approach is adopted by the 7th Directive, UK law, and the Czech requirements. The restrictions

are characterized in the IAS, the 7th Directive, and the UK as having to be both severe and long-term. The Polish legislation is brief in the extreme: the exclusion applies to control that is restricted in a material way. The Czech requirement specifies "long-term" but does not specify nor define the degree of restriction. It does, however, specify a cause for the restrictions, i.e., political reasons. These are country-specific differences of commission.

Neither the Polish nor Czech requirements contain any explication of the effect of the restrictions on control and these represent country-specific differences of omission. In the UK and the 7th Directive restrictions are explained in terms of the exercise of rights over assets or management of the subsidiary. The IAS explains the restrictions in terms of the ability to transfer funds to the parent. None of the explanations of what contributes restrictions are identical. The extent to which they are equivalent is more problematic. The UK and 7th Directive requirements are clearly equivalent. The IAS criterion would appear to be more restrictive in its emphasis on rights of repatriation of funds. The brevity of the Polish requirement means that it may bear any interpretation including those not meeting supranational criteria. The phrase "political reasons" in the Czech requirements either subsumes all of the above criteria or is different from them depending upon its interpretation.

The IAS prohibits dissimilar activities as a basis for exclusion of a subsidiary. In the UK exclusion on this basis is seen as so exceptional that it is not possible to identify circumstances in which it may occur. In the Polish requirements "production, construction, and service activities" are dissimilar to the provision of "banking or insurance." The Czech requirements are drafted strangely, however, the effect is to exclude on the basis of dissimilar activities the entities identified in Article I (2) of the *Chart of Accounts Decree 1992*, e.g., banks, insurance companies, national property funds and state budget entities. The UK requirements follow the 7th Directive in that dissimilarity of this type is not considered sufficient grounds for the exclusion of subsidiaries. Exclusion on this basis is mandatory in Poland, the UK, and the 7th Directive but is permissive in the Czech Republic that represents a country-specific difference of commission. The Czech Republic and Poland exhibit country-specific differences of commission in the treatment of banking and insurance subsidiaries.

Disproportionate expense and undue delay are not recognized as bases for exclusion in Poland or the IAS and although they are reasons for exclusion in UK company law and the 7th Directive, they are not permitted under the UK's *FRS 2 Accounting for Subsidiary Undertakings* (ASB, 1992). The Czech requirements allow exclusion on the basis of disproportionate expense but only if the subsidiary is based abroad. Once more, the Czech requirements are the most permissive and represent a country-specific difference of commission.

The Czech requirements permit two further bases for exclusion: the first basis permits the exclusion of partnerships and the second basis permits the exclusion of subsidiaries in liquidation. These bases for exclusion represent a country-specific difference of commission. Article 15(1) of the 7th Directive contains an option permitting the omission from consolidation of any parent undertaking not carrying on any industrial or commercial activity that holds shares in a subsidiary undertaking on the basis of a joint arrangement with one or more undertakings not included in the consolidated accounts. This option has not been taken up in any of the countries and does not feature in the IAS.

DISCUSSION OF RESULTS

Table 3(a) summarizes the equivalence or non-equivalence of national requirements. Table 3(b) quantifies their frequency. Table 3(b)(i) focuses on requirements where the 7th Directive and the IAS are equivalent and Table 3(b)(ii) on non-equivalent requirements.

An important result is the identification of a number of non-equivalencies between IAS and the 7th Directive. This result conflicts with previous work in the area. While Cairns (1995) states that “(t)he tests for the existence of control in IAS 27 are virtually the same as in the Seventh Directive” this study has identified three differences relating to: tests for control of the board; common board membership; de facto control. The interpretation of “virtually the same” is subjective and depends upon the level of detail compared as illustrated in the approach taken by the EC Contact Committee on the Accounting Directives (European Commission, 1996):

One approach would be to compare systematically the two accounting systems (IAS and Accounting Directives) and highlight the existing differences. However, this approach was dismissed because of the substantially different way in which accounting is dealt with in the Accounting Directives and in the IAS. (. . .) For the above reasons, a systematic comparison between IAS and the Accounting Directives would result in the collection of a huge amount of differences. However, only a limited part of this information would be useful for the objective of the analysis. The Contact Committee has therefore not entered into a detailed examination of those issues which are logically dependent on the fundamentally different nature of the two systems (Accounting Directives and IAS).

That the majority of non-equivalencies are systematic is not borne out by the analysis in this article that identifies 15 non-equivalencies. Perhaps four issues (single economic entity, management report, parent undertaking, and the exclusion of financial subsidiaries) may be attributed to systematic differences. The other 11 non-equivalencies cannot be explained away in this manner. The Contact Committee identifies exclusion on the basis of dissimilar activities as one unsystematic difference (European Commission, 1996). The approach adopted by the Committee is less rigorous than this study as it involves an a priori judgment as to which differences are systematic and which are not. For transition economies these supranational non-equivalencies provide an impediment to smooth accounting reform. On the one hand, the political goal of EU membership requires compliance with the 7th Directive; on the other hand the economic imperative of attracting foreign direct investment favors compliance with IAS. It has been reported that the EC has proposals in process that will allow listed companies in EU member states to use IAS in their main accounts (Kelly, 1999). It is not clear how these proposals will affect the requirements of the *White Paper 1995*. In terms of compliance with supranational requirements, transition countries have to aim at a constantly moving target.

The cross-national data were compared to equivalent (Table 3(b)(i)) and non-equivalent supranational requirements (Table 3(b)(ii)). The UK complies fully with equivalent requirements that are unsurprising given that it is a mature market economy closely involved in the development of the supranational requirements. Both Poland and the Czech Republic, however, are in transition. The 7th Directive (1983) and the relevant IAS (1989) pre-date the transition. The requirements of both countries were promulgated after

Table 3. De Jure Comparison in a Supranational Context
 (a) Analysis of *de jure* comparison in a supranational context

Item	Issue	UK	Poland	Czech Republic
1.	Objective: single economic entity, excluded uses (dividend and taxation purposes). Contents: profit and loss account, balance sheet, and notes on the accounts, management report/review, cash flow statement.	C A	X A	C X
2.	Definition of a group: parent and subsidiaries parent with associates only Undertaking/entity: parent (legal form and profit orientation) subsidiaries (legal form and profit orientation).	A A B C	A B C	A B C
3.	Parent/subsidiary relationships: majority of voting rights, control by deed or contract, control of the board, common board membership, control through agreements with others entitled to vote, <i>de facto</i> control, control of sub-subsidiaries (vertical groups).	A A C C A B A	X A B B A C A	C X N C N C A
4.	Parent/associate relationships: 20 to 50 percent threshold, plus rebuttable presumption,	A	X	X

7.	Joint venture relationships: joint control definition	A	N	N
8.	Exempt parent undertakings:			
	size criteria,	A	A	A
	90 percent threshold, plus minority agreement, jurisdictional boundaries.	B	C	B
9.	Bases for exclusion from consolidation:			
		view to resale,	C	CB
		materiality,	B	XX
		control not for the long term,	A	XA
		restrictions on control:		
		permissive exclusion,	C	CB
		nature of restrictions,	A	XX
		explication of restrictions;	B	NN
		dissimilar activities:		
		permissive exclusion,	B	BX
		exclusion of financial subsidiaries;	B	XX
disproportionate expense or undue delay,	C	CX		
other bases.	A	AX		

(continued on next page)

Table 3. (continued)

(b) Summary of <i>de jure</i> comparison in a supranational context		UK	Poland	Czech Republic
Equivalence/non-equivalence with:	Category			
(i) Equivalent supranational requirements				
7th Directive and IAS	A	17	12	8
Country-specific difference of commission	X	0	4	7
Country-specific difference of omission	N	0	1	2
(ii) Non-equivalent supranational requirements				
7th Directive only	B	8	4	4
IAS only	C	7	6	5
Country-specific difference of commission	X	0	4	4
Country-specific difference of omission	N	0	1	2

Key: A = Equivalent to 7th Directive and IAS; B = Equivalent to 7th Directive only; C = Equivalent to IAS only; X = Country-specific difference of commission; N = Country-specific difference of omission.

these dates but the timescale for full assimilation of the issues has been relatively short resulting in the observable differences. Poland exhibits greater equivalence than the Czech Republic but this may be explained by its earlier adoption of an EU accession strategy and later regulation (Fig. 5). The Czech Republic exhibits a higher number of country-specific differences and thus the rules are more idiosyncratic which result is attributed to earlier relevant legislation (1993). Other inaccuracies due to the hasty introduction of simplified consolidation rules in the Czech Republic are especially visible in the (lack of) criteria specifying the parent/subsidiary relationship. Failure to re-specify ownership in terms of voting rights and to add other criteria will leave Czech consolidation requirements open to abuse through creative accounting techniques as well as deficient in respect to compliance with the 7th Directive. These differences provide evidence of the effects of adopting different methods of privatization as discussed above.

Where no supranational equivalencies exist (Table 3(b)(ii)) a difference between the UK and the transition economies is again observable. In respect of the 15 non-equivalencies, the UK has complied with either the 7th Directive or the IAS. Further analysis of the country-specific differences of commission reveals few in the more fundamental requirements, e.g., contents of the financial statements, the parent/subsidiary relationship (Table 3(a)). More frequent are country-specific differences of commission in issues such as the parent/associate relationship and bases for exclusion. An important country-specific difference of omission is the absence of requirements on consolidation accounting for joint ventures in Poland and the Czech Republic. This absence may be compensated by the country-specific differences of commission on accounting for associated companies that define a group in terms of a parent and associate only (for listed companies in Poland; for all companies in the Czech Republic). This may be a transitional solution but given the development of innovative trading and investment relationships it will be necessary in the future to devise accounting methods to which distinguish between associates and joint ventures. That the transition economies favor legal criteria for defining the parent/associate relationship over the criterion of *de facto*

Event	UK	Poland	Czech Republic
Date of Europe (Association) Agreement	Not applicable	1 February 1994	1 February 1995
Date of application for European Union membership	10 May 1967	5 April 1994	17 January 1996
Date of accession	1 January 1973	To be agreed	To be agreed
Date of relevant consolidation legislation (7th Directive : 1983)	1989	1994	1993

Figure 5. Chronology of Events Relevant to EU Accession and Consolidation Requirements. Source: Adapted from Avery and Cameron, 1998.

significant influence preferred by the UK and supranational rules is attributable to the short period of existence and emerging nature of the market economy.

The differences with respect to bases for exclusion from consolidation are more difficult to explain systematically except in terms of the timescale for full assimilation. The Polish criterion that excludes subsidiaries from consolidation on the grounds that control is not for the long term falls into this category, as does the Czech basis for exclusion on the grounds of political restrictions on control. Both of these idiosyncratic provisions need to be revised to achieve compliance with supranational requirements. In contrast, the exclusion of financial subsidiaries from consolidation is a systematic difference that reflects a greater need for separate regulation of the reforming financial sector given the adverse consequences of banking collapse for the socioeconomic transformation process as a whole.

The analysis of the data in Table 3(b) is performed in terms of the supranational comparison and does not highlight where national equivalencies with supranational requirements coincide, i.e., to what extent do the 8 equivalencies with supranational rules for the Czech Republic identified in Table 3(b)(i) match the 12 equivalencies identified for Poland? Table 4(a) lists patterns of compliance and their incidence for equivalent supranational requirements and Table 4(b) for non-equivalent supranational requirements. The results indicate that the analysis in Table 3(b) implicitly overstates the extent of uniformity, especially in relation to non-equivalent supranational requirements. Polish and Czech equivalencies with the 7th Directive (code B) each number a total of four (compared to the UK's total of eight), however, Table 4(b) lists only one case where these equivalencies coincide (i.e., in a BBB pattern as in Table 3(a)). Also, there is only one instance of a CCC pattern despite the fact that the number of matches from Table 3(b)(ii) could number as many as five, the total number of Czech equivalencies with IAS. In terms of equivalent supranational requirements (Table 4(a)) there is a better cross-

Table 4. Cross-National Patterns of Compliance with Supranational Requirements

<i>Pattern</i>	<i>Incidence</i>
(a) Equivalent supranational requirements	
AAA	7
AAx	5
Axx	3
AAN	1
ANN	1
Total	17
(b) Non-equivalent supranational requirements	
BBB	1
CCC	1
BBx	1
Bxx	2
BNN	1
CCx	2
BBC	1
BCC	4
BCx	1
BCN	1
Total	15

national match with seven from a possible eight AAA patterns occurring. Nevertheless, the analysis confirms the existence of substantial cross-national diversity in the application of supranational *de jure* requirements among the three countries.

CONCLUSIONS

The article presents a comparative analysis of *de jure* consolidation requirements in the UK, Poland, and the Czech Republic highlighting the existence of non-equivalencies cross-nationally and supranationally that are non-trivial and more frequent than the previous research suggests. In particular, the differences exhibited by the economies in transition provide evidence of the prolonged but different nature of the accounting reforms. A number of these differences detailed above arise from the incomplete or inaccurate incorporation of supranational provisions into national requirements and because of this, their planned revision will not be problematic. Other differences will be more difficult to eliminate as they are attributable to the prolonged transition and the nature of privatization strategies: the wider definition of a group; the legal form and profit orientation of the parent; the avoidance of *de facto* significant influence tests for associates; the lack of specific joint venture consolidation rules; the exclusion of financial subsidiaries from consolidation. These differences may or may not become permanent as the transition economies of the Czech Republic and Poland mature.

In the absence of a theoretical framework for determining the content and sequence of accounting reform in transition, accounting change defaults to an iterative process of learning by doing. On this basis, further research may reveal that the experiences of Poland and the Czech Republic are representative of other economies in transition.

NOTES

1. The study is part of a larger comparative research project on the accounting and taxation aspects of groups within the three countries sponsored by the UK's Economic and Social Research Council (ESRC) whose generous financial support is gratefully acknowledged by the authors (R000222118).
2. The larger research project referred to in footnote 1 above will subsequently deal with group accounting requirements, a *de facto* comparative analysis of published group financial statements and a comparison of requirements for tax, as opposed to accounting, groups.
3. In the same table, Jermakowicz and Rinke (1996) state that "Czech law does not require Statement of Cash Flows," which would not seem to be consistent with Article 5 of the Decree on Financial Statements for Entrepreneurs, No. 281/71 701/1995, which states that a cash flow statement is required as a component part of the notes to the accounts. With reference to Poland, Jermakowicz and Rinke (1996, p. 80) that consolidated accounts are required if a company holds 50 percent of the equity or controlling interest, when in fact it is clear from the relevant Polish requirements that, unlike the Czech Republic, the share of voting rights is the criterion. Additionally, Polish law does require consolidated accounts to be prepared for groups consisting of a holding company and associates only, as in the Czech Republic, but that unlisted groups are exempted from this requirement (see main text below). It is also not the case that the reporting period in Poland is required to be the calendar year (*Accounting Act 1994*, Article 3 (1)(8)) although this is the case for the Czech Republic (*Accounting Act 1991*, Section 3(2)).

4. With respect to the cash flow statement in Poland, Adams and McMillan (1997) state that there is a requirement to produce a cash flow statement according to one of three templates. However, given that one of the templates is designed for insurers, another for banks, and the third for all other companies, the implication that companies have some sort of choice as to template is misleading.
5. Due to limitations of space, only extracts from Tables 1 and 2 are reproduced here. Full versions of the tables are available from the authors upon request.
6. Article 22(2) of *Accounting Act 1991*: Consolidated financial statements shall be prepared by a company (entity) having at least a 20 percent ownership interest in another company, or being authorized to manage another company (entity) on the basis of a contract or company statutes (articles of association), regardless of the level of its ownership interest.
7. Zelenka (1995) translates this as: "... direct or indirect holding of more than 50 percent of the subsidiary's equity share capital, ..." This translation does not mention voting rights and therefore does not alter the analysis.

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Problems in Comparing Financial Performance Across International Boundaries: A Case Study Approach

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Key Words: International accounting practices; Financial reporting issues; Dual listed companies

***Abstract:** In increasingly global markets for finance, goods, and services, a variety of decision makers need to assess companies from numerous countries on a common basis. Differences between national and international accounting principles and practices make such a task difficult, if not impossible.*

This article considers the contribution of previous research to resolving this problem. Much of the earlier work in this area has used metrics based on a broad database of companies from many different industries and worked out conservatism indices based on a comparison of profit levels of companies reporting in two generally agreed accounting principles and practices (GAAPs). While useful, this does not address the problems of conversion for any one industry or company. In order to examine the implications of GAAP differences for international comparisons, a case study approach is adopted, considering two of the major players in the European steel industry. Accounting information is produced for both companies under their domestic GAAPs and under United States (US) GAAP, thus allowing for an analysis based on a common, US, GAAP. As a part of this analysis, a time series approach is taken.

The article concludes that there are additional factors that may affect the evaluation of relative conservatism and the financial comparison of individual companies even when carried out on a common GAAP basis.

The use of financial analysis, based on published accounts, is both commonplace and fraught with difficulties. Even within one country, company directors may choose accounting policies that differ from those of their competitors making the validity of any comparison questionable. The level of difficulty is increased if the analysis requires comparison of companies from different countries as the set of available policy choices may be different for each one. The existence of differing GAAPs (generally agreed accounting principles and practices), the reasons for this and the problems caused, has given rise to an extensive literature that has attempted to

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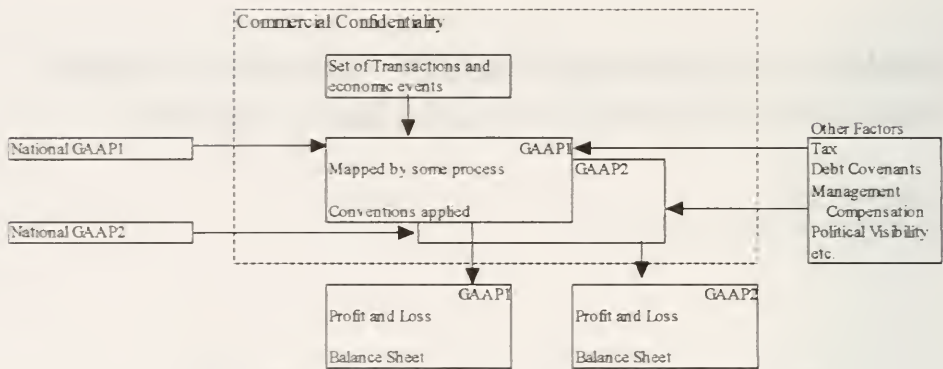


Figure 1. International Accounting Differences.

catalogue and describe differences and develop taxonomies; for example, Nobes and Parker (1998).

In parallel with this literature has been one that has considered the effects on reported performance of alternative GAAPs. A number of adjustment indices, that measure the relative conservatism in the level of published profit, have been developed and these provide a conversion multiplier metric for translation from one GAAP to another (for example, Gray, 1980; Simonds and Azieres, 1989; French and Poterba, 1991; Economist, 1992; Weetman et al., 1998). It is worth noting that all these studies have examined the effect of GAAP conversion on profit rather than that on other measures such as return on equity.

Companies that produce more than one set of accounts, each governed by different GAAPs, have provided one means of comparing the out-turn effect of one set of accounting principles with another. However, these results can only be indicative, as the available companies for such studies are limited in number and unlikely to be an unbiased sample of companies from an accounting regime. Analysis of such companies shows that the degree of disparity in GAAP translation from company to another can be large and impossible to predict from a linear conversion metric. For example, Pereira et al. (1994) calculate that on converting RTZ's net income from UK to United States (US) GAAP, the metric falls by 59 percent in 1993, but the same adjustment to Midland Bank's figures produces an increase of 20 percent. Hence, while conservatism studies are of interest, they would have to be used with caution when applying a conversion ratio to a particular company.

To a great extent, the cause of differences, and any understanding of real underlying performance, is hidden to the external user. Samuels et al. (1995) examined the possibility of translating the accounts from six different European countries as an outsider. They concluded that not enough information was available to the external analyst to make the necessary adjustment (p. 371). Hawkins (1990) is more pragmatic in setting out the Merrill Lynch method of translation, but observes that the method lacked accuracy despite being the best that could be done. The process of mapping raw accounting data to each GAAP that might be published takes place inside the company and is confidential with only the legally required information being made public. This process is shown in Figure 1, taken from Whittington and Steele (1998).

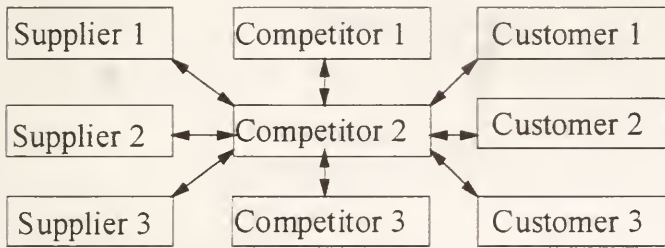


Figure 2. Supply Chains and Comparative Analysis.

While recognizing this problem of the “black box,” the article investigates whether a comparison between two competitor companies, which are based in different countries, might be said to be more meaningful when based on a common GAAP than when carried out based on the companies’ domestic GAAPs. In addressing this issue, it also considers the relative stability of translation for one company.

THE NEED FOR COMPANY APPRAISAL

Many companies and individuals need to make economic choices and decisions based on the information available to them. An important subset of decisions faced by companies and individuals require analysis of individual companies and, in many cases, the comparative analysis of competitor companies. For example, an investor concerned to spread risk will attempt to diversify a portfolio over a number of industry sectors. The question that arises is which company in a sector should be chosen and which rejected. Also, companies that trade with others need to assess whether they have chosen the most appropriate trading partner. Figure 2 shows three competing supply chains and the arrows indicate the companies that “competitor 2” would need to analyze. In order to decide whether they have the best trading partners, customers, and suppliers, the company needs to analyze each of the available alternatives and to assess its own performance, comparison with competitors is required.

Some of the pieces of the decision jigsaw will be formed from analysis of the accounts of the companies concerned. Indeed, comparative ratio analysis of companies in one industry sector reduces some of the problems inherent in analyzing a company without having considered the context and the particular features of the industry. A company from an industry where cash payment for sales is the norm, for example, may well have a current ratio considerably lower than a second company in another sector whose customers generally pay after six weeks. Such a comparison would not, in itself, reveal whether either company had a liquidity problem.

Despite the advantages of analysis by competitor comparison, put forward by Moon and Bates (1993), two otherwise identical companies may publish differing accounts due to different accounting policy choices. These differences may be due to a number of reasons. Each company may have a different view of the commercial and economic environment, which may lead to differing assumptions of likely asset life. One company may decide to value intangible assets, another may not do so. The problem becomes one of a higher order

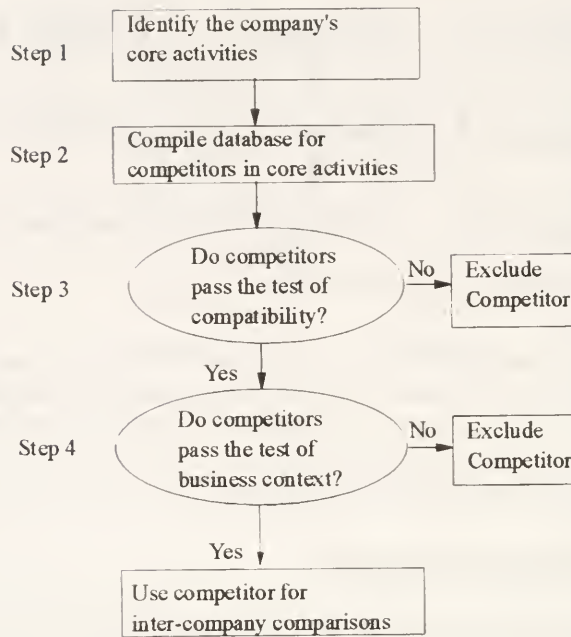


Figure 3. Choosing Companies for the Purpose of Intercompany Comparisons (from Ellis and William, 1993).

when the companies concerned are based in different countries with dissimilar culture, relationship between tax (see Lamb et al., 1998) and financial reporting, legal system, and GAAP. Some textbooks, for example Ellis and Williams (1993), advocate a selection process, as in Figure 3, where companies with incompatible accounting policies are weeded out and excluded from analysis. The desire for such a process is understandable, but will not stop senior managers requesting and needing comparison with key competitors, who may be few in number and based in different countries.

This article seeks to provide insight to these issues by adopting a case study approach, considering two key players in the European steel industry.

THE CASE STUDY: BACKGROUND

Competition in the European steel industry is international, but, mostly, still within the continent; the concept of the global steel company is still in the future, but perhaps the near future. Table 1 shows the world's leading steel companies and their sales in million of tons for 1995. It can be seen that, by this definition of size, British Steel and Usinor were the two leading European companies at the time. Both companies produce a wide range of steel products and are alternative suppliers for companies in a variety of industries including construction and vehicles. This implies that a meaningful comparison of their relative performance and financial strength will be important to investors, suppliers, customers, and other steel companies as well as to each other.

In addition to producing accounts in accordance with their domestic GAAPs, UK in the case of British Steel and French in the case of Usinor, both companies also restate their

Table 1. Largest Steelmakers

Company	Country	1995	
		Rank	Output
Nippon Steel	Japan	1	26.84
Posco	South Korea	2	23.43
British Steel	UK	3	15.74
Usinor	France	4	15.50
Riva	Italy	5	14.40
Arbed Group	Luxembourg	6	11.50
NKK	Japan	7	11.26
US Steel	USA	8	11.03
Kawasaki	Japan	9	10.44
Sumitomo Metals	Japan	10	10.44

Note: Million tons of steel sales in calendar year. Source: International Iron and Steel Institute.

Table 2. Accounting Adjustment Indices

Country	Smithers et al. (1992)	Simonds and Azieres (1989)	Gray (1980)
USA	97	NA	NA
UK	100	100	100
France	89	78	71

financial numbers in line with US GAAP. It might be assumed that such restatement to one common GAAP would improve the quality of analysis that can be undertaken and the quality of any decisions based on the results of such analysis. A time series analysis questions whether using different GAAPs produces systematic differences in the results of the analysis.

Three of the conservatism studies mentioned earlier (Gray, 1980; Simonds and Azieres, 1989; Economist, 1992) provide adjustment metrics for conversion between UK and French GAAP, our interest here. The relevant restated portion of their findings is shown in Table 2. Each of the three statistics implies that French GAAP is more conservative than UK GAAP, but differs in the degree of relative conservatism. A US comparison is also shown because both British Steel and Usinor restate their results for their US investors in accordance with US GAAP. The result shown in the table implies little difference between US and UK GAAP. Other research that has compared US and UK GAAP has concluded that US GAAP is generally more conservative (see Weetman and Gray, 1990, 1991; Weetman et al., 1998).

DATA SOURCES

The information required for the analysis is taken from the public domain. British Steel shares are traded on the International Stock Exchange in London and American Depository Receipts, equivalent to 10 shares, are traded on the New York Stock Exchange. This dual listing requires the company to produce a UK set of annual report and accounts and also a document for the Securities and Exchange Commission, form 20-F. Dual listing

Table 3. Adjustments Stated as Required in the Conversion to US GAAP

	<i>British Steel (US\$)</i>	<i>Usinor (US\$)</i>
Profit adjustments		
Profit attributable to shareholders: domestic GAAP	372	351
Amortization of goodwill	-23	-1
Interest costs capitalized (net of depreciation)	31	9
Investment write-down	0	15
Pension costs	-30	0
Stock-based employee compensation awards	-10	0
Treasury stock	0	1
Rationalization costs	23	0
Deferred taxation	15	-12
Accounting change	0	-23
Profit attributable to shareholders' US GAAP	379	340
Shareholders' equity adjustments		
Shareholders' equity: domestic GAAP	7,779	4,478
Goodwill	348	355
Interest costs capitalized (net of depreciation)	231	47
Pension costs	173	0
Stock-based employee compensation awards	-19	0
QUEST shares held in trust	-30	0
Treasury stock	0	-49
Rationalization costs/Restructuring provisions	24	16
Deferred taxation	-835	121
Investments in equity securities	52	0
Proposed dividend	231	0
Minority interests	0	0
Accounting change	0	61
Investments	0	48
Shareholders' equity: US GAAP	7,954	5,078

in the US has become an increasingly common practice for UK companies with some 90 companies likely to have to file a 20-F for the accounting period covering the end of 1997. The latter contains a wealth of information, including the adjustments required to convert British Steel's profit for shareholders from UK to US GAAP. The changes to convert shareholder's equity from one GAAP to the other are also included. Both the UK and US documents are independently audited.

The data for Usinor is taken from the company's annual report and accounts. Usinor is quoted on the Paris exchange, but unlike British Steel, it does not have a full listing in the US. Investment is possible in the US, however, through private placements. This method does not usually require the filing of a 20-F document, but Usinor provides information on French and US GAAP differences for both profit and shareholders' equity as a note to the English language version of their annual accounts. The company produces its main set of accounts in accordance with both International Accounting Standards (IAS) and French GAAP. The auditor comments that there is a material transaction that is not in accordance with French GAAP (or IAS) in 1993 and 1994. Each year until 1997, the auditor also comments on the translation to US GAAP as being shown "on a consistent basis," but does not state whether the revised figures also conform to US GAAP. This phrase was not

used by the auditors of any of the other French companies filing 20-Fs. For the year ending December 1998 the comment is more straight forward, stating that "a complete reconciliation. . . is set forth in note 26" (page F2 in the 20-F for that year).

Table 3 shows the adjustments required for translation of domestic GAAP to US GAAP for both British Steel and Usinor for the years ending March 1998 and December 1997. Note the number of adjustments and that some counter each other out. Hence, there is a greater degree of underlying disharmony between the GAAPs than the net movement in profit or equity suggests.

The two companies do not have the same financial year-ends. British Steel has a financial year-end of March 31 and Usinor, December 31. Despite the 3-month difference, it was decided not to adjust the results, but to compare, for example British Steel's year ending on March 31st 1996 with Usinor's ending on December 31st 1995. Two reasons for this were, firstly, to limit the impact of one-off adjustments to one time period and, secondly, a realization that the UK and French economies did not have identical growth paths. Given a longer time series of data for both companies, the second point might be addressed by considering relative performance at similar stages of each company's domestic economic cycle. The importance of the economic cycle cannot be overstated for companies such as these (Financial Times, 1996).

CONSERVATISM INDICES

British Steel has had a quote in New York and produced a 20-F since privatization in 1988. The prospectus also included a previous year, so there are 11 data points available for the translation. Weetman et al. (1998) examine the trend in GAAP translation for UK companies with US listings from 1988 to 1994. Using the conservatism index first introduced by Gray (1980), they examine whether UK GAAP has moved closer to US GAAP over the period. They find that the distance between the two accounting approaches has widened rather than diminished as the number of companies with a material increase in reported profit when converting from UK to US GAAP has increased. Profit is a residual arising from the gap between revenue and cost, hence materiality of difference is dependent on the size of the gap. Basing materiality on a percentage of turnover would be an alternative, but, as in the case study here, assuming a materiality level of perhaps 3 percent of turnover could easily lead to the disappearance or doubling of profit that would be deemed immaterial.

The British Steel conservatism index tells an interesting, but unclear story over the 11 years (Table 4). In 5 out of the 11 years the increase in profit when converting to US GAAP is material as defined in Weetman et al. (1998), that is a gain of over 10 percent, in four there is no material adjustment and in two a material decline. Taking just the movement between 1988 and 1994, as in the aforementioned article, there is a large increase in the relative liberalism of the UK figure. However, over the 11 years as a whole, there is no discernible time trend, a regression returning an R^2 of just 0.02. The second column in the table excludes 1992 and 1993, as in these years British Steel was loss making and Whittington and Steele (1998) point out that the conservatism index has a discontinuity at zero; there remains 5 years of material

Table 4. British Steel Conservatism Index

<i>Year</i>	<i>Index value</i>	<i>Ignoring years with losses</i>
1988	0.949	0.949
1989	1.391	1.391
1990	1.234	1.234
1991	1.376	1.376
1992	1.079	
1993	0.539	
1994	2.059	2.059
1995	1.365	1.365
1996	1.079	1.079
1997	0.727	0.727
1998	0.983	0.983
Index < 0.9	2	1
1.1 > Index > 0.9	3	2
Index > 1.1	5	5

Table 5. Usinor Conservatism Index

<i>Year</i>	<i>Index value</i>	<i>Ignoring years with losses</i>
1993	0.769	
1994	1.032	1.032
1995	0.882	0.882
1996	1.521	1.521
1997	1.097	1.097
Index < 0.9	2	1
1.1 > Index > 0.9	2	2
Index > 1.1	1	1

increase on translation, three of no significant change, and one material fall. The only noticeable trend is that of the last 3 years, two are not significant, and the other is a fall. Hence, for the way in which GAAP translation affects British Steel at least, UK GAAP has become relatively less conservative over the last 3 years than before.

As Usinor was privatized by the French government rather later than British Steel in the UK, there are less years of translation available. All three of the adjustment indices in Table 2 would lead to the expectation that the US GAAP profit reported would be higher than the French one. Table 5 shows that of the 5 years of conservatism indices, two show a material fall on translation from French to US GAAP, two no significant change, and one material rise. When rejecting the loss making 1993, there remains only one significant fall.

The variability in index is high year by year and this might be caused by a number of factors. Changing GAAPs due to introduction of new standards will mean that each year's translation is not necessarily comparable for the one before or the one after. Changing activities of the companies concerned may give rise to more significant positive or negative factors on conversion than before. For example, the movement in the index for British Steel from 1990 to 1991 could be said to be due to the

Table 6. British Steel

<i>(US\$ million)</i>										
<i>GAAP</i>	<i>March 1994</i>		<i>March 1995</i>		<i>March 1996</i>		<i>March 1997</i>		<i>March 1998</i>	
	<i>UK</i>	<i>US</i>	<i>UK</i>	<i>US</i>	<i>UK</i>	<i>US</i>	<i>UK</i>	<i>US</i>	<i>UK</i>	<i>US</i>
Net income	105	51	736	539	1,290	1,318	491	675	384	367
Equity	5,551	5,660	6,641	6,682	7,882	7,972	8,362	8,653	8,370	8,575
Return on equity (%)	2	1	11	8	16	17	6	8	5	4
<i>Usinor</i>										
<i>GAAP</i>	<i>December 1993</i>		<i>December 1994</i>		<i>December 1995</i>		<i>December 1996</i>		<i>December 1997</i>	
	<i>France</i>	<i>US</i>	<i>France</i>	<i>US</i>	<i>France</i>	<i>US</i>	<i>France</i>	<i>US</i>	<i>France</i>	<i>US</i>
Net income	-1,199	-1,559	410	397	1,109	1,258	339	223	372	339
Equity	3,377	3,577	4,136	4,493	5,902	6,297	5,727	6,067	4,691	5,315
Return on equity (%)	-35	-43	10	9	19	20	6	4	8	6

acquisition and goodwill write-off that British Steel carried out in that year. Indeed, if it had been accounted for in the US manner in the UK accounts, then the conservatism index for 1991 would have been lower than 1990 rather than higher. Both companies have a high level of volatility in their profit levels over the periods under examination and this might also cause a distortion on the translation.

RATIO ANALYSIS

The conservatism index addressed the question of change in profit level on GAAP translation. Investors, and indeed others concerned for assessing company success, are interested in comparing profit to the level of investment made in order to generate the return. This assessment requires the use of ratios such as return on capital employed, return on net assets or return on equity.

The relative conservatism of profit calculation may be undermined by the relative conservatism of the equity stake. As not all changes in reserves are effected through the profit and loss account under some GAAPs, the likely relative change is not clear. However, it is also possible to analyze the effect of GAAP translation on some balance sheet and return based measures as well as profit because the 20-F requires a restating of the equity stake on conversion as well as the profit for the year. A breakdown of the material reasons for difference in both these figures is given by most companies, the alternative being the preparation of complete financial statements to US norms. The key measure analyzed is return on equity, this compares the profit available for shareholders to the level of shareholder investment. The ratio, and movement of it, may be taken to give an indication of relative success or failure.

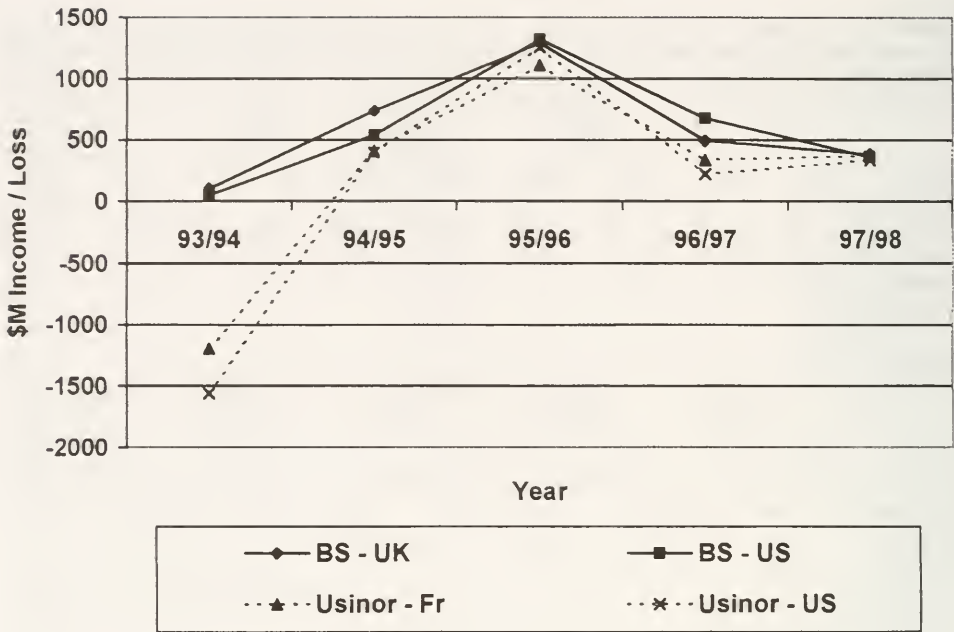


Figure 4. Net Income.

RETURN ON EQUITY

Table 6 gives the key figures for both British Steel and Usinor for the last 5 years. The accounting information has been translated into US dollars in order for direct comparison, using average rates for profit and loss account items and closing rates for balance sheet figures.

The relative movement of the domestic and US GAAP lines in Figure 4 indicates that over this limited period there is no linear pattern of adjustment in translating either company's profits from their domestic to US GAAP; this concurs with the conservatism index findings in Tables 4 and 5. Both the UK and US GAAP British Steel figures are higher than Usinor's in every year except 1997/1998, when the French GAAP profit for Usinor is greater than the US profit for British Steel despite still being below the UK GAAP profit. Figure 4 also highlights the similar trend behind each company's result showing how both companies are subject to similar competitive and economic pressures.

Figure 5 shows the size of the equity stake in each company under both domestic and US GAAP. There is a small, but repeated increase in equity when restating both companies' domestic GAAP figures to US GAAP. This appears particularly stable for Usinor. The level of British Steel's equity investment is considerably larger than that of Usinor, hence it is not clear whether the higher profit level of the UK company will translate into a higher return on equity.

Arguably, British Steel's equity stake is overstated as it includes the sizeable, £2,338 million (approximately US\$3,935 million), statutory reserve that was set aside on

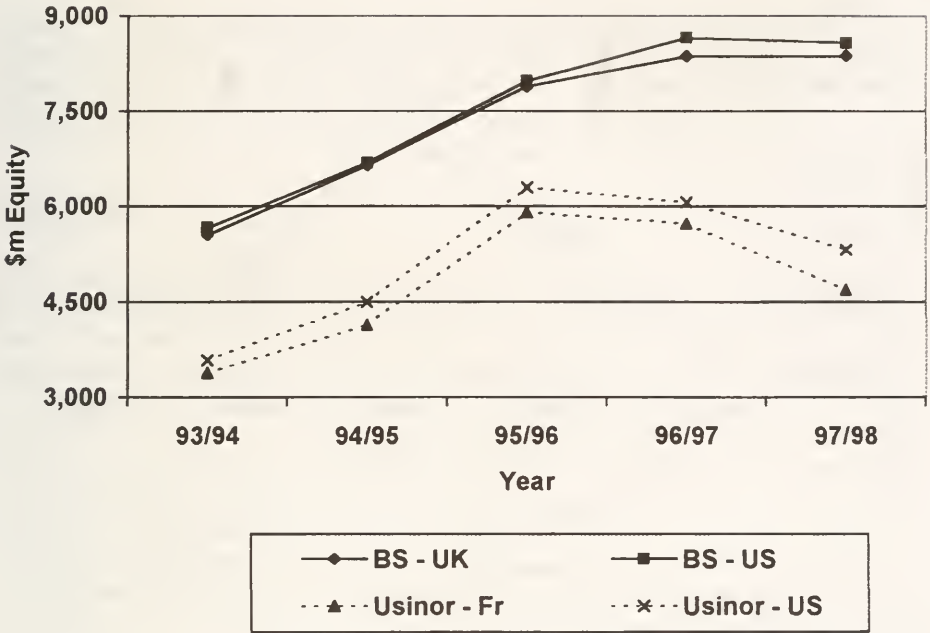


Figure 5. Equity.

privatization to equate the balance sheet size with the value of the issued shares. In effect there is no duty of care due to any stakeholder for this sum as the funds represented by it were not provided by the current shareholders. For the purpose of comparison, however, it needs to be included as it does represent investment made at an earlier stage in the company's life. British Steel's equity stake is also likely to be higher than Usinor's due to adopting a different, longer, view of likely asset life. This policy of slower depreciation should lead to higher profits, as seen above, and higher equity stake as long as both companies keep investing in fixed assets.

The return on equity figures, from Table 6, are plotted on Figure 6. Usinor's return for 1993 is not shown as the large negative percentage distorts the y axis range unduly. Again, Figure 6 shows the two companies moving in tandem and that the industry is a volatile one. There is no obvious pattern behind the relative performance of one company against the other or, indeed, between either basis for reporting. It would seem that British Steel outperformed on both a domestic and common GAAP basis in 1993/1994, but that Usinor did the same in 1995/1996 and 1997/1998. The results for 1994/1995 and 1996/1997 are more confused. In 1994/1995, British Steel outperforms on a domestic comparison and Usinor does so under US GAAP. In 1996/1997, British Steel outperforms on the US GAAP figures, but Usinor does so on the domestic ones. Without considering the remaining differences in accounting policy choice and application, the figures suggest that since 1993/1994 performance has been fairly similar and certainly that neither company is consistently outperforming the other.

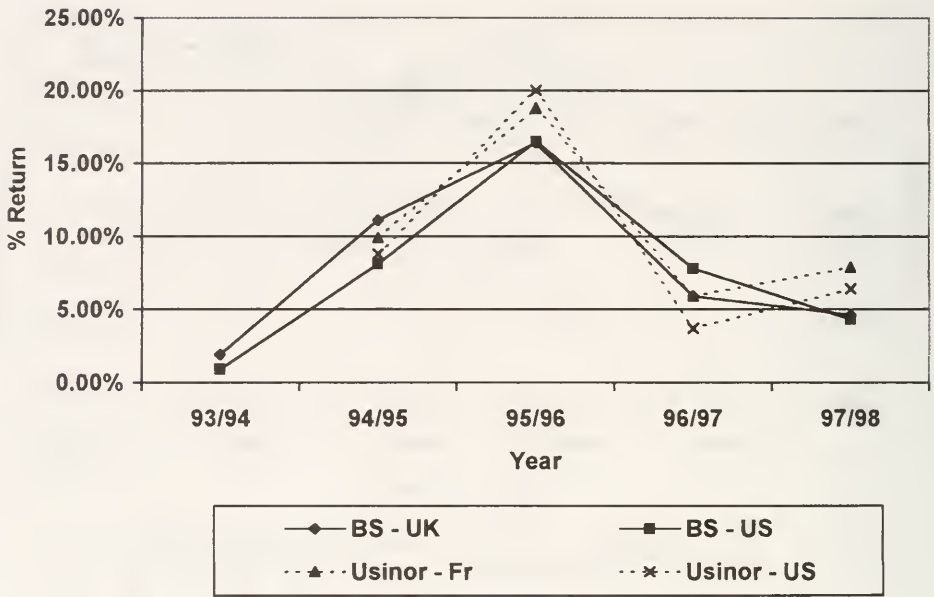


Figure 6. Return of Equity (US\$ million).

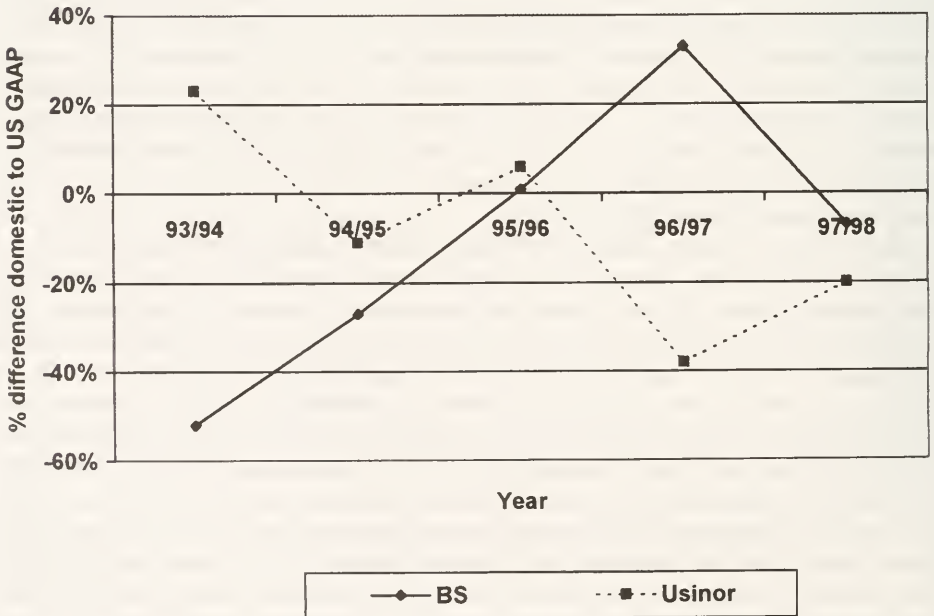


Figure 7. Percentage Difference on Return of Equity.

Figure 7 shows the percentage difference in translating the return on equity from domestic to US GAAP. There appears no common pattern of adjustment here, the particularly large swings in 1996/1997 occurred when return on equity was low. Hence, a difference of 2.2 percent represents a swing of some 60 percent.

CONCLUSION

The degree in improvement in the quality of analysis of using a common GAAP is difficult to quantify. If one of the companies is outperforming the other consistently, then the consistent GAAP analysis does no more to reveal this than the domestic comparison. The seeming lack of predictability, at least from past conversion factors, of the overall effect of conversion to US GAAP, especially for British Steel, as shown in both Table 4 and Figure 7, potentially undermines any attempt to address the problem of future trends and likely relative success of each company. However, some progress towards predicting converted profit or return may be possible because component parts of the conversion could be forecast with some accuracy.

The high level of cyclical variation in the industry may distort consistent differences that might have been found if performance were more stable. The cyclical impact on profit and return for both companies is clearly seen whichever GAAP is adopted.

An analyst is interested in investigating both static and dynamic performance using a variety of analytical techniques and should be concerned about how differences in accounting might potentially undermine any conclusions that might otherwise be reached. Year-on-year changes in relative performance might be caused by a combination of four factors:

- a. change in company performance,
- b. change in performance of key markets and economies;
- c. change in corporate accounting policy choice; and
- d. change in either domestic or US GAAP.

The assessment of underlying corporate performance would be the objective of customer, supplier or competitor appraisal, the other three factors are likely to distort the interpretation of financial results in such an analysis. The differing relative importance of individual markets to each company would need to be understood. In this instance, the French domestic steel market is of greater importance to Usinor and the UK market similarly to British Steel. Both are players in each, but the effect of boom or slump in either will not cause equal joy or pain.

A decision to change accounting policies may not be apparent to the casual reader of a set of accounts, but the impact on profit could be significant, particularly if profit levels are not high. It needs to be remembered that US GAAP still allows a degree of accounting policy choice for a company and so, for example, British Steel and Usinor use very different asset lives for similar categories of asset when US GAAP is adopted. Domestic cultural and legal frameworks for each company remain unaltered and the application of US GAAP under these differing circumstances is unlikely to produce completely comparable accounts. If one were to introduce a US company into the comparison, it would be

materially affected by the nature of pension funds in the US and how US companies are instructed to account for pension and post-retirement liabilities. Any time series analysis would be affected by the related changes in US GAAP over the last few years.

GAAPs only remain "generally accepted" within a short time frame, and in many years, one could argue that introduction of new standards implies a discontinuity from previous results for the same company.

The need to produce comparative company analysis spanning international boundaries is likely to increase rather than diminish as many markets continue their trend to globalization. Analysis of published accounts is not the only tool available; use of stock market data, undercover investigations, conversations with mutual trading partners, for example, are also useful. It would be anticipated, at least by non-accountants, that ratio analysis could play a part in building up a complete picture. Hence, the quality of such analyses remains a serious issue. A line-by-line approach to accounting statement adjustment can be attempted, reworking each company to a common base, but lack of information will force the analyst to rely on their own judgment as well as published information. The additional US GAAP data may assist in this lengthy process. The individual undertaking the task needs to be well informed regarding all relevant GAAPs.

Further Research

The examination of other pairings of companies that report in multiple GAAPs would shed further light on the advantages of common GAAP assessment; choosing an industrial sector with a more stable environment might enable the benefits of using a common GAAP to appear more obvious. Further longitudinal studies of companies to seek out any common adjustment factor for a single firm may also be of interest. The volatility in the conservatism index over time for one company suggests that there may be further work to be done in this area focusing on the underlying causes of the measurement disparity between GAAPs. This article has highlighted the need to assess the effect of GAAP selection on the balance sheet as well as the profit and loss account. There is further work here, too, assessing GAAP impact on issues such as leverage and provisions.

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Controlling Multinational Companies: An Attempt to Analyze Some Unresolved Issues

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Key Words: Control in multinationals; Control theory; Cross-cultural understanding; Dialogue method; Enculturation; Managerial accounting; Models of thinking; Performance evaluation

Abstract: Controlling multinationals with managerial accounting often is inefficient due to lack of understanding. Language, external variables, and headquarters decisions create distortions, which prevent comparison with domestic data and require subsidiary accounting adjustments. Furthermore, background and national cultural value systems let individuals perceive and react non-uniformly to similar issues. Therefore, steps are needed to assure cross-cultural understanding for communications. This suggests that some accounting problems may be communications and understanding issues, which need to be resolved first. This article describes a method to enhance understanding in cross-cultural management. This is demonstrated for the management accounting, control, and performance evaluation process.

SOME UNRESOLVED CONTROL ISSUES IN MULTINATIONAL FIRMS

The need for effective control in multinational firms has increased due to the proliferation of international engagements by large and small companies. Initially, it was assumed that existing business and accounting procedures could easily be transplanted into other countries. Only after problems arose from a lack of understanding between working groups in headquarters and subsidiaries, companies were forced to reexamine the reasons. This analysis revealed that several causes contributed—often jointly—to a limited understanding, thus decreasing the effectiveness of cooperation. Unfortunately, these problems are not attributable to language issues alone as was first thought. Rather, they arise from both:

- different business environments (in the broadest sense) affecting operational outcomes, and
- different background knowledge and culturally determined value systems

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OPERATIONAL VARIABLES

Different business environments are the result of external variables. Operating in any national environment automatically invokes such specific variables. Some of these are shown in Fig. 1.

Although not an exhaustive description, the exhibit provides an overview. These variables influence business performance to varying degrees. Not all factors impact simultaneously and pull in the same direction, it can rather be expected that they are dissimilar for each subsidiary in each country and do not coincide with domestic influences. Therefore, each creates a unique distortion in performance measurements, which in turn require adjustments to arrive at comparable, economically valid evaluations for each subsidiary.

In addition to being subject to external variables, subsidiaries of multinational corporations often are assigned a special mission and will have an organizational structure imposed by headquarters. Only this approach will assure a highly integrated and efficient overall international structure. This type of international task diversification seems to be the essence and advantage of multinational firms. It is a necessary condition to accomplish strategic goals as well as operational efficiency. However, this internal task distribution frequently influences not only operational results but also the attitudes within both subsidiaries and headquarters.

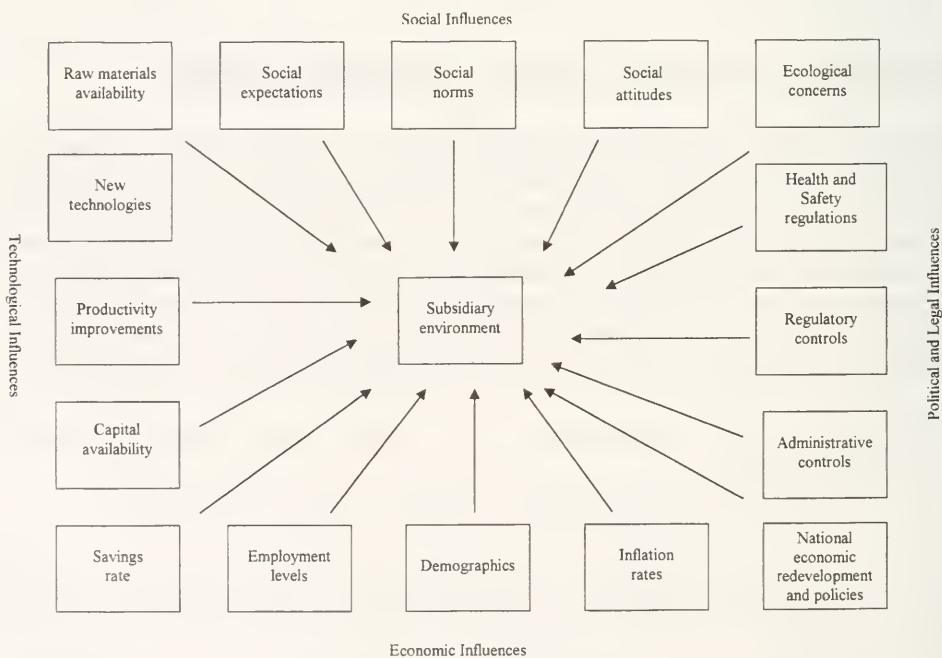


Figure 1. Influences Affecting the Operating Environment of Subsidiaries in Foreign Countries (adapted from Cravens, 1982).

In view of these influences, Bartlett and Goshal (1992) distinguish between four different strategic mentalities in multinational business units, which can be used in response:

1. an international mentality where the main role of the foreign subsidiaries is to support the domestic parent company in different ways,
2. a multinational mentality with a more flexible approach to the company's international operations by modifying products, strategies and even management practices country by country,
3. a global mentality thinking in terms of a world market and manufacturing products on a global scale in a few highly efficient plants, often at the corporate center, and
4. a transnational mentality with a more responsive approach to local needs, which retains the unit's global efficiency.

However, none of these seem to solve our problem of limited understanding.

In addition to external variables, headquarters of highly integrated corporations will (often ad hoc) impose decisions and constraints on individual subsidiaries to maximize efficiency and total profit. These are likely to create additional distortions in performance measurements. Specific objectives set by headquarters, for example, influence tasks assigned to a subsidiary (sometimes restricting development of business functions), transfer prices, purchasing or selling requirements, headquarters cost reallocation, charges for know-how fees, and similar items, which all have an influence on subsidiaries' cost structure. The resulting (temporary or permanent) differences prevent a direct comparison with data customarily used for analysis of domestic operations.

The managerial accounting system in multinational companies, therefore, has to provide appropriate procedures to prevent misinterpretations of actual performance. This can be accomplished by developing subsidiary specific measurement and decision support systems (Holzer and Schoenfeld, 1986; Schoenfeld, 1991). In some cases, this may even lead to a performance and economic evaluation that is based more on negotiated expectations (planning data) than on facts. This is due largely to the problem that not only past results but also future directions (goals) are part of the performance picture. Since the future is unpredictable, many data can only be developed through subjective assumptions. A management accounting system, therefore, can only be regarded as a useful management tool when it permits to deal with these issues.

There is also a necessity to increasingly incorporate qualitative data into the control process. This trend is not entirely new, but it appears to be more important in a multinational setting. The growing reliance on qualitative (subjective) assessments, for which no (strict accounting) rules can be developed, does require full understanding of issues by all individuals involved in the control process. It is absolutely critical to assure a functioning control process. This need gets even stronger the more control processes are extended to include resources (this is obvious in the cases of human and intangible resources from several countries). Their maintenance and utilization must be assessed—and that can presently be done only through the use of subjective measures (for more details, see Noerreklit and Schoenfeld, 1996).

CULTURAL VARIABLES

Different background knowledge and culturally determined value systems exist in all multinational companies, because employees grow up and are educated in different national environments and thus have non-congruent value systems. Such different values may (at a minimum) place a different emphasis on specific issues. Different emphases and values are typically placed on specific subjects during the educational process (e.g., ethics, family relationships, work, sports, art, moral contained in children stories, songs, and proverbs). Everybody exposed to more than one cultural environment has experienced these. Each of these influences (individually or jointly) will evoke slightly or substantially different reactions in people. This applies for day-to-day life as well as for management decisions as a special dimension of life. It suggests different actions to resolve similar problems (e.g., under-utilization of capacity may suggest lay-off in the US, however, in Europe—due to the existing labor law and tradition—a lay-off is too costly or unacceptable socially; similar situations exist in cases of product liabilities or other legal issues). Additional problems arise from the fact that up-to-date information (news items reported in the daily or weekly press) does not always emphasize the same issues or future prospects (e.g., economic issues such as growth, unemployment, currency issues, strikes, cost of living indices etc.). Even if the same issues are reported, they may have a different impact on the perception of individuals. Consequently, company-wide suggestions and references in discussions or memos do not evoke similar ideas for feasible solutions in managers from different segments and levels within the multinational firm. This inevitably leads to a “non-congruent understanding” of problems at hand. Normally, participants interpret issues by utilizing their personal “thought models.” Differences are likely to have a minimal impact if everybody comes from a similar environment, but an organization may become dysfunctional if backgrounds vary too widely.

Misunderstanding or different interpretations are frequently called “communications problems.” To overcome these, a minimum of additional knowledge (facts and interpretations) is required in a multinational environment. Unfortunately, the required specific information cannot be anticipated for every situation. Obviously, knowledge of both (or more) environments appears to be the optimal solution to assure full understanding. To accomplish this, companies often transfer individuals to other subsidiaries for limited time periods. This is a costly and not always effective solution, because even then sufficient background knowledge maybe missing. Attempts to avoid misinterpretation are made frequently by providing additional facts. These data are selected on the basis of what one side or one individual deems important. Unfortunately, this frequently results in redundant background data combined with the omission of some vital information. This outcome suggests that a procedure assuring “sufficiency” of information as a basis for effective communication needs to be developed, because there is no assurance that a sufficient number of managers will be exposed to extended cross-cultural experience.

To adjust to varying business environments and cultural differences, several approaches have been suggested in the literature. Perlmutter (1969) has classified multinational companies' approaches as ethnocentric, geocentric, or polycentric. Companies operating on an ethnocentric principle, assume that their own cultural background including ways of analyzing problems, values, beliefs, language, and non-verbal communication is universally applicable. Polycentrism implies that the culture of the country in which the firm is

operating will be optimal and should be adopted. Obviously, that creates problems of non-matching cultures in the overall organization. Others, finally, use the principle of geocentricism. That is the belief that a synergy of ideas from different countries of operation should prevail. This, in turn, requires a common framework with enough freedom for individual locations to initially operate regionally to meet the cultural needs of their employees. It, however, also implies that eventually cultures will merge and converge. All of these approaches assume usable final results, but do not deal with the conflict potential before such results emerge.

UNDERSTANDING THE CONTROL TASK IN A MULTINATIONAL FIRM

Traditional control theories either take an ethnocentric approach using a top down method (Anthony and Govindarajan, 1994; Kaplan and Norton, 1996) or a polycentric approach advocating a high degree of autonomy for subsidiaries (Chandler, 1962). Neither addresses the inherent problems of conflict or misunderstanding. Only recently, Simons (1995a,b) has suggested a more interactive method. Simons (1995a) developed a control framework with the purpose “to encourage employees to initiate process improvement and new ways of responding to customers’ needs—but in a controlled way.” For this purpose, he suggests the utilization of four levers of control: diagnostic control systems, beliefs system, boundary system, and interactive control.

Diagnostic control systems are the traditional approach; they use tools such as setting targets, measuring output, comparing output with preset standards, and the necessary feedback to management thus permitting fine tuning inputs and processes to assure that future outputs will more closely match goals. However, diagnostic controls are not sufficient to ensure effective control, because they may enforce dysfunctional short-term behavior if there is pressure (for example to obtain difficult performance targets). To avoid dysfunctional reactions diagnostic controls need to be supplemented with a belief and a boundary system. The belief system articulates values and direction that senior managers want their employees to embrace. It draws their attention to “how the organization creates value” (“Best Customer Service in the World”); the level of performance the organization strives for (“Pursuit of Excellence”); and how individuals are expected to manage both internal and external relationships (“Respect for the Individual”). The boundary system is the opposite; it articulates the values and directions that employees should not embrace.

While the diagnostic system identifies shortfalls it is in itself not sufficient to explore emerging threats and opportunities. Therefore, senior managers need an interactive control system. That is a scanning system with the purpose of finding new products, line extensions, processes, markets, etc. It is interactive because senior managers participate, regularly and personally, in the decisions of the subordinates and focus organizational attention and learning on key strategic issues. “Interactive control systems have four characteristics that set them apart from diagnostic control systems. First, they focus on constantly changing information that top-level managers have identified as potentially strategic. Second, the information is significant enough to demand frequent and regular attention from operating managers at all levels of the organization. Third, the data generated by the interactive system are best interpreted and discussed in face-to-face meetings of superiors, subordinates, and peers. Fourth, the interactive control system is a

catalyst for an ongoing debate about underlying data, assumptions, and action plans (Simons, 1995a).”

Any interactive system inevitably requires cultural understanding. This brings to the foreground again the issue of acculturation. This is the process of adjusting and adapting to a new culture to overcome the existing enculturation (the initial socialization process each individual has undergone to adapt to his/her own cultural environment). It remains an open question whether acculturation can be fully accomplished. In some areas, acculturation may not even be necessary, because only issues matter that have a direct impact on business operations. It is, however, not clear which areas these are and whether the same issues will be relevant at all times. Thus the potential for misunderstandings may remain ever present. The problems can be overcome—at least partially—through “intercultural” business communications’ as some authors claim (Chaney and Martin, 1995).

From this brief discussion it is apparent how difficult, inefficient, or almost impossible it may become to manage large-scale multinational operations by using exclusively technical accounting adjustments. Such tools do not assure full understanding on the management level. However, this problem does not necessarily concern the entire management hierarchy. Rather, it is limited to management groups for whom continuous interaction is required, that is groups (or individuals) charged with the task to provide linkage. These groups are identified in Fig. 2 for both headquarters and the

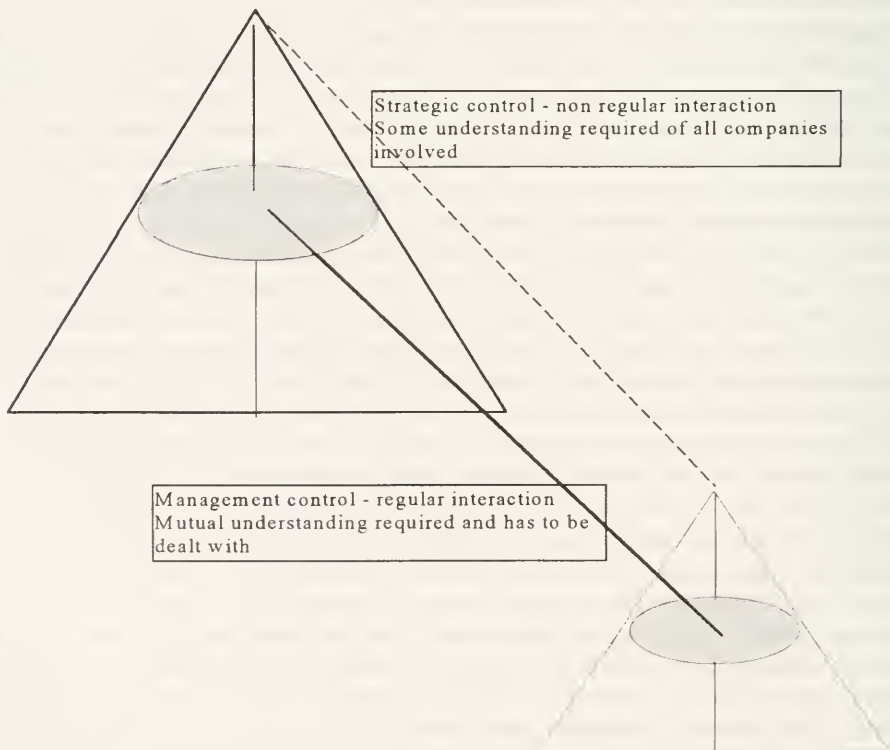


Figure 2. Organizational Levels for Whom Understanding is Required.

subsidiaries. The linkages required have to occur at both the strategic and the management control level.

Even if only selected groups of managers are involved, it is still important to explore the issues in depth. Therefore, this article aims to develop a model for overcoming misunderstandings. First, an approach to analyze the understanding issue in a multinational firm is suggested. Second, a method for dealing with some of the problems in the control process will be addressed.

INDIVIDUAL THINKING AND CONTROL

A firm can be viewed as a social construction created by human beings (Berger and Luckmann, 1966). Within it, each human being has his/her individual way of thinking about and understanding of reality. Based on this understanding managers of a company create, for example, outside contacts, internal management controls and accounting systems, make decisions, etc. Their model of thinking and interpretation of reality will eventually determine which strategies are to be developed, which resources will be acquired, which type of control system will be used, how new relationships will be integrated, etc. The individual firm's model of thinking, therefore, is created by its managers and is culturally determined by their backgrounds.

A manager as a human being is complex, adaptive, and creative, but also consistent in his/her way of thinking and acting as a result of his/her subjective logic (Hegel, 1963, part II). Subjective logic in this context is the model of thinking by which an individual perceives, understands, and interprets reality. It is a pattern of rationality according to which experience and observations are arranged. It determines how people argue, decide, and act, and it in turn determines an individual's picture of reality, i.e., how other people, economic theories, competition, etc. are viewed. This subjective approach is called logic, because it is a question of arguing and thinking in terms of concepts. The logical aspect covers everything individuals are able to find out with reason. It is the rational element commonly found in our abilities to calculate and reason in a stringent manner, which represents the formal aspects. Mathematics, statistics, formal logic, and the like are recognized disciplines. Logic is, however, also a question of reasoning with concepts essential to our lives. This skill is generally overlooked in society, where it is often substituted very inefficiently by attempts to make "objective" investigations. A person's reasoning with concepts is subjective, because it is learned and developed over time in a social process. It is not an instinct people are born with, but created by an individual's experience, upbringing, and education, interaction with others, etc. and develops differently in each individual. Its existence can be observed in concepts and arguments used in disagreements between people. To a great extent, education, experience, and social relationships determine and influence how people think and act. Thus, there are differences in the subjective logic of, for example, economists, accountants, engineers, and designers, Frenchmen and Germans, men and women, Catholics and Protestants, to mention just a few. The culture of the country in which an individual has been raised and lives and the education received determines a person's subjective logic (enculturation). In a business setting, the subjective economic logic as a pattern of rationality determines how employees actually interpret and

understand management control and accounting tasks as well as the economic situation of the firm.

All business interactions of human beings are based on their subjective economic logic; their joint actions, however, are controlled by their social logic. Social logic (Noerrekliit, 1987) is an intra-organizational model of thinking (intra-organizational model), arising from common ideas, interpretations, and patterns of thought a group uses when deciding and acting. The model is created through continuous interaction and represents the common ground for cooperation. This intra-organizational model is created jointly by its participants and (at the same time) continuously influences them.

The "dominant" intra-organizational model determines the concepts according to which cooperation actually occurs. Fig. 3 illustrates how people with different individual models of thinking, i.e., their subjective logic, create a joint field for ideas, interpretations, and patterns of thought, an intra-organizational model.

It should also be noted that organizations usually have more than one intra-organizational model. These models are in conflict with each other. This can be observed when comparing groups such as top management, financial departments, factory foremen, workers, etc. interacting with each other. In a multinational company the problem is aggravated by the diverse cultural and environmental backgrounds in each subsidiary. Fig. 4 illustrates parent company and subsidiary interaction of intra-organizational models.

The only common area of understanding for the entire organization is the inter-organizational model of thinking (inter-organizational model), which is created by joining several intra-organizational models. The remaining gaps between intra-organizational

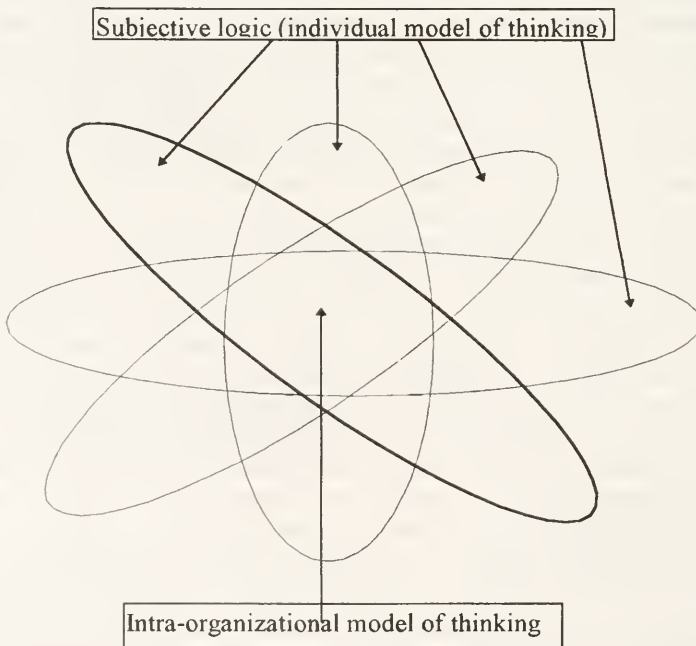


Figure 3. Subjective and Intra-Organizational Models of Thinking.

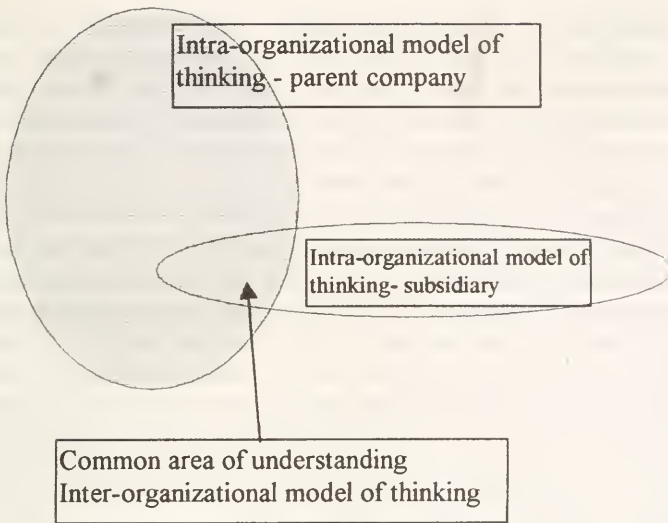


Figure 4. Intra-Organizational and Inter-Organizational Models of Thinking.

models are the causes for non-understanding and thus the cause for potential conflicts. However, if used constructively, these may represent a potential for new opportunities. These “white spaces” are areas of potential growth and “value migration” (movement of ideas from one industry/subsidiary to another). Gaps may be used to induce new (strategic) ideas for development of the company. However, to assure understanding and common concepts, it is necessary to develop the intra-organizational models for all interacting groups. For this purpose, a method to develop the intra-organizational models is needed (Fig. 5).

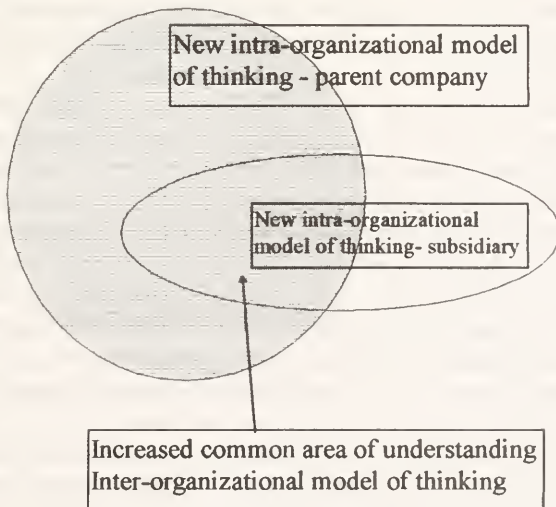


Figure 5. Developing an Inter-Organizational Model of Thinking.

The intra-organizational model constitutes the "company culture" of the subsidiaries, and the inter-organizational model of a multinational group its corporate or group culture. Since all social structures are created by human beings and at the same time influence individuals; the development of models requires a continuous interaction—voluntary and involuntary—between existing models. This point of view is also shared by Giddens (1984).

Unfortunately, models of thinking cannot be observed directly. However, language (for the language dimension, see Wittgenstein, 1962.) can be used as a tool for understanding and building a bridge connecting different "understandings." This implies that the area of common understanding (overlap between different intra-organizational models) can be enlarged. The inter-organizational model, however, can only be communicated by using intra-organizational models, because only in the latter the concepts and language of the "world" in which the employees live, think, and interact are to be found. Therefore, control of a multinational company implies influencing the relevant intra-organizational models.

Based on the above framework, the tools and methods to effectively enlarge areas of understanding will be described. Accounting and control theories are used as a sample in which concepts are developed into a common area of understanding. Common understanding needs to be developed to assure cooperation, because—as stated before—it is insufficient to construct technical models only. To accomplish this goal it is necessary to use a method, which will help participants to understand and accept such a system. Since language is the major tool, a language bridge should be built to connect the theoretical to the actual system. This makes it possible for subsidiary and headquarters managers to reach consensus by means of a common language.

A METHOD TO IMPROVE THE CONTROL SYSTEM FOR MULTINATIONAL FIRMS: DESCRIPTION OF THE ACTORS METHOD

The actor method described here is general; it can be used for all kinds of conflict resolution. For illustration purposes, the description provided concentrates on the development of a performance evaluation system. The term facilitator describes the individual responsible for the process.

The "actor method" (Arbnor and Bjerke, 1997) is an established tool to both develop and influence thinking and acting. It is a continuous process of interactions and reflections. Dialogue rather than questionnaires are used to avoid pre-categorized patterns of thinking. A dialogue is a dynamic and reflective process of conversation between two or more persons; participants ask questions and give answers. The participants are creatively and logically challenged describing issues and searching (together) for concepts and models of understanding. Each participant's concepts and thoughts of reality are reflected in the dialogue and will (it is hoped) develop further. The method is structured to understand and influence actors (participants). The goal is to maintain motivation and engagement necessary to facilitate development of individual models of thinking (subjective logic); validity depends on the extent to which this is accomplished.

The actors' method is different from a positivist approach. In positivism, reality is concrete and subject to rules and or natural laws. It has a structure independent of the observer (Arbnor and Bjerke, 1997). However, validity in positivism emphasizes the objectivity of reality. Knowledge should be factual and as unspoiled by "biased"

subjective impressions as possible. Validity exists to the extent to which statements, descriptions or theories are correct or true.

To develop the actor's models of thinking and concepts of reality the facilitator uses a dialectic strategy. First he creates a bridge between his own and the participant's concept of reality. He accomplishes this by being open, avoiding prejudice, and accepting the ideas and understanding offered. Next, he creates an anti-thesis by introducing other interpretations. Finally, he attempts to develop a common understanding through synthesis (Noerrekliit, 1986). These steps (phenomena) are not sharply separated and occur continuously.

Fig. 6 illustrates such a dialogue. In it a development in both participants' models of thinking is noticeable. First, performance evaluation measurements are discussed moving from return on investment to goodwill (including non-financial criteria). Second, a gap

Facilitator: *How do you think the performance of your division should be evaluated?*

Manager subsidiary: *Return on investment.*

Facilitator: *Would that be a correct reflection of your effort and of the economic position of your activity?*

Manager subsidiary: *Not quite, I am administrating goodwill - and ROI does not reflect that sufficiently.*

Facilitator: *Then goodwill should be included in your performance measures. It is also important for the Headquarters management to know about that.*

Manager subsidiary: *Yes, but how should we measure it?*

Facilitator: *We could measure customer satisfaction? Would that be okay?*

Manager subsidiary: *Yes, and satisfaction of the employees and the conditions of buildings and equipment?*

Facilitator: *How do you define goodwill?*

Manager subsidiary: *Goodwill is the issue of having sufficient resources to plan and operate in the future. Financial results are historical and do not reflect whether we are in good position to make a profit in the future.*

Facilitator: *Kaplan has come up with the balanced scorecard as a framework for translating strategy into operational terms. It suggests four areas of measuring Financial, customer, internal business process and learning and growth. He sees a cause and effect relationship between the four chains starting with learning and growth. Do you think that will do it?*

Manager subsidiary: *It may give some inspiration, but I am not sure that it includes the areas, which we consider important in our strategy. You can see here, which areas we include in our strategic plan. Furthermore, I do not see the relationship between the resources like you described it. I see the areas as equal areas, which should all be given attention for development.*

Facilitator: *We could find measures for each of these areas described in your strategic plan. Furthermore, we could measure if they are sufficiently developed.*

Manager subsidiary: *Yes that will be a good idea. Do you have any literature on and suggestions of how these can be measured?*

Facilitator: *I will find some for our next meeting.*

Figure 6. Example of Parts of a Dialogue (extract from a case study in a Danish company).

appears in the participants understanding of goodwill, which is clarified. Third, there is an argument from the balanced scorecard, which addresses cause and effect relationship between the subsidiary's strategic plan and its cohesion with resources.

The results of this (linguistic) method are not guaranteed; they depend on the ability of the facilitator to create a meaningful dialogue (Noerreklit, 1986). Success requires to encourage expression of ideas from participants, and to abstain from introducing his own preconceived ideas. He/she must be able to gain the confidence of participants and to express a different opinion without jeopardizing confidence. Thus opportunities for developing concepts and contributions to thought models are created. That implies the facilitator should:

1. listen carefully and attempt to recognize opinions and signals from dialogue participants;
2. interact with participants in a language they are able to understand;
3. hold back his own emotions;
4. show respect in spite of disagreements;
5. be psychologically flexible;
6. be sensitive to situations, and
7. be able to guarantee confidentiality.

The participants in the process should be selected managers responsible for linkage from both subsidiaries and headquarters. To be successful it is important that the overall strategy of the multinational firm has been formulated, communicated, and understood beforehand by the managers of the subsidiaries. Mintzberg (1987) emphasizes that frequently a gap between the planned and the actual strategy exists. To avoid this, top managers should have a basic understanding of the subjective and intra-organizational models of the entire group involved in strategy development. The dialogue described above is an important tool in this process of understanding and should be part of the management style. Top managers should provide "guidance to organizational members as to where to look for surprises and what type of intelligent information to gather" (Simons, 1992). Subsidiary managers must do similarly, to link their own understanding to the understanding of their employees.

THE FOUR PHASES OF THE METHOD

The actor method consists of four phases: (1) pre-understanding, (2) understanding, (3) diagnosis, and (4) post-understanding. Throughout the processes, the facilitator alternates between interacting with all participants and reflecting on the material gathered. The four steps can be described as follows.

Pre-Understanding Phase

The facilitator gathers all available information about the group as a whole, the situation, and problems of the subsidiary. This includes (i) the general situation, history and economic problems, (ii) strategy and mission, organization, and responsibility

structures, and (iii) the administrative setup, existing performance measurements, and their problems. The information is collected from documents and preliminary dialogues with headquarter managers. Then, a preliminary analysis of existing control issues and expected results is compiled. This step is preliminary because the actual picture may change over time as more information is collected. Often, one kind of problem after closer analysis may turn out to change in nature. This openness of the process is unique for this method and distinguishes it from others, which frequently start with a predetermined theory or a predetermined control model. Finally, the facilitator summarizes the task at hand by identifying theories and constructing a theoretical control system. In this process, options and resource demands should be identified and managers for further control process development should be selected.

Understanding (Analysis) Phase

The facilitator attempts to form a picture of (i) headquarters management's skills in and motivation for developing a control system, the prevailing subjective logic and the intra-organizational models of thinking, including the perception of the company's strategies, goals, and missions assigned to the subsidiaries, financial and non-financial performance concepts, other identifiable targets, and the results expected from the management control system; (ii) the same information about the subsidiary's management; (iii) areas of coincidence and differences between these two "understandings" are determined through dialogues. During this process, the facilitator continuously reviews the information as it accumulates. He searches for the level of understanding and meaningful concepts and structures in the subjective economic logic of all participants. From this he may be able to determine the prevailing intra-organizational model. Then, he analyzes its comprehensiveness, consistency, and existing conflicts within and between subjective/intra-organizational models. Finally, he devises additional dialogue steps to clarify and develop an intra-organizational model with sufficient common ground to develop a functional control concept.

The individual managers' demands and hopes should provide basic ideas for such a comprehensive control system. Preferable these ideas are presented repeatedly to all participating managers. This group together with the facilitator has to discuss, comment on, and combine these ideas. During this process the managers knowledge and understanding of the intended system and its underlying ideas will develop gradually. At the same time, the participant's engagement, their abilities for developing and using the system, and their capabilities for cooperation can be evaluated. These results will emerge, because managers are continuously confronted with new procedures and ideas for the project, i.e., suggestions for systems enhancement, perceived problems, new options, and requirements for procedural formalization of control and accounting task. The following examples show the type of issues, which might emerge:

Example 1: *Headquarters' management had a strategy to increase the overall profitability by reducing non-value-adding activities. The subsidiary management did attempt to improve results by increasing sales through stepped-up marketing efforts and investment in new*

equipment. In the subsequent dialogue, a performance measure was developed that reduced scrap, non-value adding activities, and permitted minor investment in equipment.

Example 2: *A German subsidiary experienced environmental problems with its packaging materials due to strong negative reaction from society. The US headquarters' management was not fully aware of the magnitude of the problem, because the problem is not currently an issue in the parent company.*

Diagnostic (or Evaluation) Phase

Existing problems are identified. These are often traceable to multiple causes such as existing control procedures and goals, organizational issues, subjective economic logic of the managers, conflicts between intra-organizational models, employee motivation, employee relationships, and level of cooperation, to name just a few. In this phase at least the following issues should be evaluated:

1. the managers' understanding and acceptance of the existing system;
2. the capability of the system to solve control problems (adaptability);
3. required system development tasks to overcome problems, close gaps, and add new concepts.

These findings in turn need to be discussed with all participants and should lead to the identification of new procedures or steps to solve some problems immediately and prevent additional problems in the future.

Solutions are often difficult to find particularly when there are gaps and conflicts in the managers' demands and understanding. The situation is aggravated when a firm has strategic and financial problems, and when stability of operations is difficult to obtain. In these cases, the suggested method seems to be especially important, because it does not view conflicts as just problems or expressions of emotions. Instead, these are analyzed and utilized to find the cause(s) and character of problems. In this situation language serves as tool to influence patterns of thinking. Even if potential solutions are evasive or are rejected, the method at least uncovers causes and creates understanding about the background and reasoning that led to the existing solution.

Post-Understanding Phase

Implementation of new systems and related procedures should be instituted. During test runs, continuous feedback from the managers is required and may result in continuous dialogues. These enhance knowledge and increase understanding at all levels and may even initiate a change of concepts.

Experience with the actors method shows that the dialogue technique is successful, because it gives participants a feeling, that their situation, thoughts, and contributions

are taken into consideration and that they receive increased attention. As a consequence, they usually become more interested and engaged in the project and gain additional confidence. Experience also shows, that a system emerging from a dialogue will have a higher degree of simplicity and applicability than the initial version of a strictly theoretical system.

CONCLUSION

The efficient and effective utilization of management accounting and control systems in multinational corporations require both an adaptation to and a development of the intra-organizational models of both the headquarters' and subsidiary management. Only this will create a sufficiently large area of common inter-organizational thinking. Therefore, it is important (i) to understand and influence the pattern of management's thinking, and (ii) to adapt the management control and accounting models to these patterns. For this purpose, the actor method is a possible tool.

This method seeks to translate management accounting, control theories, and existing practice into a language understood by all managers involved. The method should be used continuously during all periods of systems development, implemented or change. As a result, problems with implementation could be minimized.

The method focuses on understanding and influencing underlying thought models. If a person is not capable of understanding and interacting with subjective logic, he/she will fail to communicate and influence coworkers. By using a strategy of dialogue, the actor method becomes a systematic tool, which facilitates understanding models of thinking used by managers. This method does have a greater success potential than others for resolving problems and conflicts by a coordinated integrated effort. It first exposes and then adjusts existing models of thinking thus permitting joint understanding and actions at all level of a multinational organization.

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Book Review Section

The book review section is interested in works published in any language, as long as they are comparative or international in character. The author or publisher of such works should furnish the book review editor with two (2) copies of the work, including information about its price and the address where readers may write for copies. Reviews will be assigned by the book review editor. No unsolicited reviews will be accepted. Suggestions of works that might be reviewed are welcomed.

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Book reviews

The IASC–US Comparison Project: A Report on the Similarities and Differences Between IASC Standards and US GAAP, based on a study undertaken by the FASB Staff and edited by Carrie Bloomer, Norwalk, CT: FASB, second edition, 1999, xii + 502 pp.

In 1995, the International Accounting Standards Committee (IASC) began a process aimed at completing a set of so-called core accounting standards. And the International Organisation of Securities Commissions (IOSCO) agreed to evaluate those standards in order to determine whether they could be endorsed as a worldwide common minimum standard for cross-border capital market transactions. All major capital markets in Europe, the Far East, and North America (the other jurisdictions are organized in the Emerging Markets Group within IOSCO) subsequently started their own evaluation process. They also had an intensive exchange of opinions within IOSOC Working Party Number 1. The attention accorded this joint project of IOSCO and the IASC is certainly much higher in Europe and in Japan than it is in North America. It is therefore very helpful that the FASB has updated and expanded this report, which was first issued in 1996. In February 2000, the SEC published a *Concept Release on International Accounting Standards*, asking 26 questions and included as Appendix D an excerpt from this FASB publication: Chapter 2—Summary of Observations, in its entirety.

The Foreword summarizes the objectives of the publication: (1) to give investors a tool for comparing companies that use either US GAAP or International Accounting Standards (IASs) and (2) to provide standard setters, the FASB and IASC, with a common basis by which they can both raise the quality of their standards and at the same time narrow the gap between their two products. The FASB acknowledges that the comparison may be biased and that, for many of the IASs, only limited experience concerning their application is available.

The Comparison Project is published in two parts. In Chapter 1 of the first part, the reader is introduced to the IOSCO/IASC project and to issues bearing on the acceptance of IASs in jurisdictions around the world. The IASs and the related Interpretations (issued by the Standing Interpretations Committee) treated in the report are listed in an appendix. Chapter 2 gives a condensed overview of the differences found between IASs and US GAAP. The second part, which encompasses 90 percent of the book, contains a detailed analysis of the differences between 28 IASs and their US GAAP equivalents (Chapters 3 through 30).

In the context of global capital markets, both investors and the enterprises seeking capital face the same problem: financial statements are either to be reconciled to the rules of the capital market where a listing is envisioned or to be based from the very beginning

on standards that are recognized internationally. The FASB leaves no doubt that *national capital market authorities will have to maintain sovereign control and responsibility within their jurisdictions for the reporting of companies seeking capital*. This may be the key for a better understanding of the discussions held at an international level.

The FASB's study does not claim to be comprehensive. However, factual data like the increasing number of companies in many European countries already using IASs or the admittance by the Swiss Stock Exchange (as one of the larger capital markets) of listings based on financial reporting in compliance with IASs may be of some relevance, and they should not be confined to two rather short sentences in the report (p. 12). The FASB does seem to dread a trend by which domestic issuers would still have to adhere to national standards, while foreign listed companies could choose the core IASs, a situation that would reduce the comparability so wholeheartedly fought for in the past. Other reservations expressed by the FASB are the limited experience with IASs and the less elaborate due process (drafting and exposure) followed by the IASC. Another criticism has already been overcome by the new organization of the IASC, with full-time membership (except for two members to be picked from the "pool" of the preparers) and other changes, which will bring the IASC procedures closer to the philosophy of the US standard-setting process. The FASB admits that not only foreign companies are asking for a consensus on the IOSCO/IASC project. The pressure from within the US, where the stock exchanges want to play an even more important role for international issuers and investors, may be of more relevance.

Another dimension has been somewhat overlooked: the initiatives by certain large banks to form a common exchange platform for securities as well as the IT-based concepts of most major stock exchanges may well give them, in the near future, a unique opportunity to compete with heavyweights like the New York Stock Exchange or the London Stock Exchange. The so-called New Markets established in Germany and other European countries have already opted for reporting requirements linked to either IASs or US GAAP. National regulators will certainly retain control of their domestic issuers. But the well-educated institutional investors and intermediaries may well choose one day the IT platform for investments in major foreign issuers. It is hard to imagine that countries will be able to prevent their citizens from making sound investments abroad by accessing digital exchange platforms and downloading information on the issuers from the Web. Therefore, the focus in Chapter 1 may overemphasize national capital market authorities and regulators, where a link to the demand from the market would be more appropriate. But there is no doubt that both the FASB (as an observer in meetings of the IASC board) and the SEC (as a leader within IOSCO) are playing an important role in the progress made so far on an international level. And the three elements highlighted by the SEC as the grounds for endorsing the IASCs core standards are key to any reasonable solution for all parties concerned: *A core set of standards constituting a comprehensive and generally accepted reporting basis—standards of high quality granting comparability, transparency, and full disclosure—and rigorous application and interpretation of the IASs.*

The analyses in Part II are based on criteria described in Chapter 2 of Part I. The classification of the differences concerning *recognition, measurement, availability of alternatives (options), lack of standards for a particular topic, and others* does not introduce any novelty into the discussion. But it assists the process of reaching a judgment on whether specific differences may have a negative impact on the information process.

The FASB project is limited, however, to a comparison of the standards and does not consider the actual application or the enforcement of IASs in other jurisdictions. This task is left to further studies. Unfortunately, many of the academic research papers in this area (e.g., in France, Germany, and Switzerland) are not available in English translation.

The authors acknowledge that the merit of providing more extensive guidance does not always belong to US GAAP. The question to be answered eventually is, whether the IASs are structured and written in such a way that they can be consistently interpreted and applied in order to meet the demand for the international comparability of financial statements. The FASB, however, does not question whether this holds true for its own standards as well. And it does not question whether a reasonable and feasible comparability can be reached at all. The need for industry-specific standards has long been sensed by the FASB (whereas the IASC is only now starting to work on this problem), and this proves that comparability is constrained not only by differences in accounting rules.

Those looking for a quick and basic understanding of the similarities and differences between the two sets of accounting standards will find Chapter 2 very helpful, as it gives good and fair examples of the strengths and weaknesses of both systems. But this chapter also shows that US GAAP may sometimes be the answer to specific national issues that are of lesser importance abroad. The propensity to structure lease transactions so as to avoid capitalization (recognition) is one example. On the other hand, the requirement to expense all internally generated development cost as incurred is a concept that many other countries share with the US. The IASs very often reflect a compromise not so much between different ideologies but rather on disparities in facts at an international level.

Some differences could be easily overcome. This is the case for in-process research and development acquired, as well as for the maximum life allowed for the amortization of goodwill. Other differences should not be stressed as much as in the FASB publication. This is true for classification issues like the one on mandatorily redeemable preferred stock or the one concerning dividends in the Statement of Cash Flows. And, last but not least, there are issues where the US position is simply a matter of belief, not of better arguments, like the reversal of impairment losses not allowed under US GAAP.

The arguments concerning the rebuttal of the revaluation concept for fixed assets are also not very convincing. Sometimes the FASB relies too much on specific solutions that fit the needs in its national jurisdiction, as is the case of post-retirement benefits. And some differences are of no importance, considering the scope of the project launched by IOSCO, i.e., lowering the hurdles and cost for cross-border listings and other capital market transactions. In this regard, one is unable to see why the FASB keeps repeating the fact that US standards apply to not-for-profit organizations and the IASs do not.

The FASB is certainly right when it says that the extent to which the reported financial information meets the demands of its investors and other users is crucial and not so much whether there are differences between two specific sets of standards. But it is questionable whether the fact that IASs do not focus on any particular economic or legal environment—and the conclusion that, because of this, IASs may have a tendency toward being more general—is really a flaw. Therefore, the second conclusion seems to be more appropriate: for accounting standards to be really international in their approach, they have to refrain from relying on a very particular environment, and it would be more helpful to give local guidance on any issues that may be dealt with differently in various countries, like e.g., post-retirement benefits and pension plans.

The analyses in Part II have been prepared very thoroughly, and they are certainly comprehensive. One can draw extensively from this source, not just when comparing standards but even more so when trying to understand the rationale behind some of the rules. The FASB has not been looking for an easy "game at home," because it invited selected reviewers to comment on the comparison. Some comments have been included in the introductions to the reviews of the 28 standards. Most of these thoughts are worth repeating, but only very few can be cited here:

- "Both IAS 14 and Statement 131 provide useful information about a company's segment performance and investment. Any non-compatibility caused by either standard would not worry most analysts, since the individual company segment disclosures are specific to each company and, except for minimum disclosure requirements, are by their nature non-compatible (p. 161)."
- "The two most important differences likely to impair comparability are the different classification criteria for a business combination (i.e., poolings vs. purchase), and the accounting treatment of acquired in-process R&D ... (p. 289)."
- "Most US analysts are greatly troubled by at least three aspects of US GAAP dealing with business combinations ... IAS 22's treatment of these three business combinations issues would be preferred over US GAAP's by many analysts (p. 289)."
- "There is little difference between the allowed alternative of IAS 23 and Statement 34. Any differences caused by the different definition of borrowing costs, for example, would be lost in a shuffle (p. 321)."
- "US analysts ... would most probably find IAS 28 acceptable in nearly all respects at the principle level, but with some exceptions ... would not find its disclosure provisions acceptable ... Opinion 18's disclosures are considered very useful by analysts (p. 349)."

These few selected comments show that, among other things, US analysts with broad international experience have overcome the easy attitude expressed in a European saying: "Things the farmer doesn't know well, he doesn't eat." In fact, many differences could be discarded as being of little importance, or the IASC approach may sometimes even be favored over the traditional US solution.

There is no doubt that US GAAP possesses the advantage of well-established experience in applying and interpreting its standards. For further discussion within the US, it may therefore be more important to focus on the merits of the solutions proposed by the IASC and on a limited number of exceptions for which a restatement to the US approach may be desirable. In the end, the real problem lies in the interpretation of the IASs and with the enforcement of compliance by the regulatory bodies in the leading capital markets. Extensive guidance may be one proven tool to narrow the room left to preparers and auditors. But a "reengineering" of the US concept with more focused rules (it is easier to write 10 pages on a subject than to nail things down on 1 or 2 pages) and a more meaningful application of often-cited but rarely followed general rules like substance over form (e.g., in the leasing discussion) may eventually lead us further toward one common set of reporting standards for multinational public companies than an endless list of "may-be differences." The FASB publication is a good

starting point, and some of the deficiencies of the first edition have been eliminated. What we need now is an unbiased discussion focusing on material issues as well as a spirit of accepting “new and foreign solutions.”

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International Financial Reporting and Analysis: A Contextual Emphasis, by Mark E. Haskins, Kenneth R. Ferris, and Thomas I. Selling, Irwin McGraw-Hill, second edition, 2000, xii + 557 pp.

This well-written textbook covers much more than the title implies. Although it is written for financial reporting and analysis, most of the book would make a great international accounting text. This textbook's strength is that it encourages students to look at cultural backgrounds in order to understand financial reporting; however, its weakness is that it requires a strong US financial reporting background. As a consequence, US-trained analysts, accountants, and educators would derive the most benefit from this textbook's approach.

In Part I (Chapters 1–3), the book begins with a comprehensive background of international financial reporting. It includes the cultural aspects related to accounting, professional standard-setting organizations, and financial reporting in the European Union. Part II (Chapters 4–6) discusses financial statement analysis. Part III (Chapters 7–13) provides detail regarding environmental factors, selected financial reporting practices, and analytical considerations in seven selected countries.

Chapter 1 (“Accounting and Its Global Contexts”) uses Hofstede's cultural framework to help students understand how “collective mental programming” (1) affects beliefs and attitudes; (2) is reflected in a country's legal, political, and business environments; and therefore (3) influences that country's accounting and financial reporting. In this chapter, the authors expand on Hofstede's cultural research by integrating several related research studies. This chapter explores Hofstede's cultural analysis, including examples, in the seven countries that are further developed in Part III of the text. This is one of my favorite chapters, as it is well written and clearly demonstrates the importance of understanding the cultural background of a country to be able to understand its financial reporting.

Chapter 2 is titled “Harmonization of International Accounting and Reporting Standards,” and it examines harmonization and the effect of capital and information flows. Students are introduced to, and given examples of, reporting strategies, from “convenience translations” to “world standard reports”: the various ways in which multinationals cope with the absence of a universally accepted set of accounting standards. The relevant political organizations (United Nations, OECD) and professional organizations (IASC and IFAC), and a federation of securities market regulators (IOSCO), are introduced and discussed. This chapter also comments on selected IASC standards.

Chapter 3 (“Financial Reporting and the European Union”) focuses attention on the European Union’s fourth and seventh directives.

The concentration in Part II is on fundamental analysis. While Chapters 1 through 3 are outstanding chapters on international accounting or financial statement analysis, the focus changes in Chapter 4 to strictly financial statement analysis, and the audience changes to one that must be skilled in both accounting and finance. One drawback common to the three financial statement chapters is that the end-of-chapter material concentrates on procedural rather than contextual exercises. Much of the work entails recasting financial statements to compare them with US GAAP.

Chapter 4 (“Financial Statement Analysis: An Overview”) focuses on detailed ratio (du Pont) analysis, and it includes lessons in projecting financial results and valuing ownership interests.

Chapter 5 (“Special Issues in Financial Analysis”) concentrates on data comparability issues and techniques that are used to try to compare the information found in non-US financial statements with US GAAP. Several examples are provided that display the journal entries that would be made to adjust non-US statements to US GAAP. To fully understand this chapter, students should have a strong background in accounting, probably including work through the advanced accounting level.

Chapter 6 (“Accounting for Foreign Operations”) provides a nice introduction to foreign operations by examining foreign exchange transactions, the mechanics of exchange rates, and hedging, and gives a brief overview of SFAS No. 133. Accounting for foreign subsidiaries and SFAS No. 52 are also covered.

Each of the seven chapters in Part III, which constitutes one-half of the book, introduces a country and includes an introduction to environmental factors, selected financial reporting practices, and analytical considerations for that country. The countries, Great Britain, Germany, Japan, Sweden, Mexico, South Korea, and Italy, were chosen to represent a broad spectrum of beliefs and to open the students’ minds to how the cultural, legal, and political environments shape the business environment. Each chapter introduces the selected country, and discusses its cultural environment followed by its legal, political, and business environments. The section on the business environment includes forms of business, reporting, and audit requirements, the accounting profession, and the capital markets. Each chapter addresses the communication (or lack thereof) between the companies and their stakeholder constituencies, and it concludes with a summarized update on recent political and economic activity. An excellent list of further readings is also included for each chapter. The chapter exercises that follow the textual material concentrate on analyzing foreign financial statements and recasting them to US GAAP. The last exercise for each chapter concentrates on a du Pont analysis in that country. Although the text takes a conceptual approach, most of the exercises are procedural.

The end-of-text materials consist of two appendices, a glossary, and an index. Appendix A provides a comparison of accounting and reporting practices for Australia, Canada, China, Denmark, France, Hong Kong, India, New Zealand, Spain, and Switzerland, while Appendix B provides an overview of US GAAP.

This textbook has both strengths and weaknesses. Some of the many strengths include the cultural, political, and business integration, the flawless integration of research, and the interesting use of anecdotal citations from the financial press. Weaknesses include the

reliance on the US paradigm as a basis for understanding financial reporting, the heavy dependence on restatement and ratio analysis, and the absence of cases in the end-of-chapter material. While Parts I and III would be well suited for MBA students, Part II might be difficult without a strong accounting background. The inclusion of short cases in the end-of-chapter material would go a long way toward engaging the students and increasing their conceptual understanding of financial reporting and analysis.

Changes from the first edition include eliminating two chapters (“Financial Analysis: Further Considerations” and “Harmonization’s Future”), updating the examples and exhibits, replacing Brazil with Mexico throughout the text, and modifying of the end-of-chapter material. In the first edition, each chapter contained more varied types of end-of-chapter material. The second edition uses exercises only. Cases are available in a separate casebook edited by one of the authors of this text and also published by Irwin.

Although I feel that the analysis chapters focus too heavily on fundamental analysis, as a result of reviewing the text I am more convinced than ever that every student of accounting or finance should learn the material taught in Parts I and III of this text. Although the authors do concentrate on the financial statements, they also fully integrate the cultural aspects of businesses into the study of financial reporting. This promotes a better understanding of business practices, in general, and a comprehensive understanding of why just restating financial statements would not give a full picture of a company that operates in a foreign country. In other words, students are taught in Part III to look beyond the numbers in order to understand the company, the culture, and the country.

Although we offer an international accounting course at the undergraduate and graduate levels, we do not offer a course in international financial statement analysis. Therefore, based on the title, I would probably not have considered using this text. I hope that instructors will be motivated to look beyond the title and evaluate this textbook for potential adoption.

If I were to offer an international accounting course in an MBA program, I would exclude Part II, unless the students had an extremely strong financial accounting background, and I would supplement the remaining material with additional readings (international tax, managerial accounting, etc.). While the authors’ concentration on financial reporting and analysis is a bit heavy for an international accounting course, the presentation of the material in the text is compelling enough to warrant serious consideration as the primary text for this type of course.

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Continuous Quality Assurance—Statutory Audit in Europe, by *Fédération des Experts Comptables Européens (FEE)*, April 1998, 44 pp., free.

Setting the Standards—Statutory Audit in Europe, by *Fédération des Experts Comptables Européens (FEE)*, June 1998, 89 pp., free.

Statutory Audit Independence and Objectivity—Common Core of Principles for the Guidance of the European Profession: Initial Recommendations, by *Fédération des Experts Comptables Européens (FEE)*, July 1998, 85 pp. (sections in English, French, and German), free.

The Fédération des Experts Comptables Européens (FEE) represents 38 accountancy institutes in 26 countries with over 400,000 individual members, of which about 45 percent practice public accounting. Though comparable in size to the AICPA, FEE's task is more difficult. FEE is charged with developing accounting and auditing standards to be applied by auditors in European Union (EU) Member States (in addition to their task of applying national laws and regulations). Member States represent a broad spectrum of accounting, capital market, and regulatory traditions, with some national laws facilitating information for investors and protection of investor interests, while others protect the interests of the government or large creditors such as banks.

FEE recently published three booklets discussing the statutory audit applied by auditors in the EU. All three booklets address the importance of credible financial information as an element for the proper functioning of a capital market. FEE's efforts will facilitate development of a single capital market for Europe, and in particular, integration of European markets through the introduction of the euro as a common currency. In a sense, this parallels the US experience denominated in a single currency, but it is more difficult because FEE standards must function in combination with disparate national laws, which is not true for US standards. Thus, Europeans face questions of the role of FEE standards vis-à-vis international accounting standards and national standards.

The first booklet (*Continuous Quality Assurance*) outlines problems of maintaining quality control for the conduct of audits in any country throughout the EU. The idea is that a common level of audit quality control procedures across Member States will enhance investor confidence in financial reporting in the new market. The recommended procedures largely parallel US requirements for peer review as a means of quality control. Appendices survey the national audit quality control and statutory audit requirements of 15 Member States plus the Czech Republic, Norway, Romania, Slovenia, and Switzerland. The surveys include numbers of entities with statutory audit requirements and numbers of companies on listed stock exchanges, as well as numbers of individual auditors and audit firms that perform statutory audits, and the sizes of the audit firms. The range of these statistics across Member States is large and will be useful to researchers in considering different market structures for statutory audit services and their implications for stock price studies.

The second booklet (*Setting the Standards*) presents the results of a FEE study on the national auditing standards of 14 Member States (plus the five other countries listed above), compares them with international standards (International Standards on Auditing, or ISAs), and emphasizes areas in which they differ. As with the first booklet, the objective is to obviate the need for an investor to question whether the audit approach and quality in one Member State differ substantively from those in another. The areas of difference are primarily due to matters of local regulation and some differences of audit process.

As to matters of local regulation, a primary set of differences concerns national standards that differ from ISAs and differences in accounting for related parties. Audit process differences are mainly due to matters not covered by individual country regulations. Some of these differences will become more important as audit outsourcing

increases in Europe. (Outsourcing problems across national borders are more pronounced than exist across states in the US or across provinces in Canada.) Finally, there are differences due to differing legal responsibilities of auditors across countries and local audit requirements. Important differences relate to the "expectations gap" (similar to that in the US in the late 1980s), including the auditor's responsibility for detecting and reporting lack of compliance with business laws and regulations, fraud, and illegal acts, and doubt about a company's ability to remain a going concern. Since national laws differ, auditors' reports (even unqualified audit opinions) must be interpreted differently across national borders. All of these differences provide areas for cross-cultural research in international accounting and auditing.

A major part of the second booklet is an overview of national standard-setting processes across Member States. For scholars, this comparison will be useful for evaluating the environment and impact of auditing standards on financial reporting. It also outlines ISAs and a standardized Audit Process. Perhaps the most useful part of the second document is the results of a survey (Part E). In this section, researchers list the ISAs and report whether compliance with the ISAs also ensures compliance with European national auditing standards in the areas of auditors' responsibilities, planning, internal control, audit evidence, using the work of others, and audit conclusions and reporting. This section comprises 60 pages of the 89-page text. Researchers will find Part E useful as a reference for evaluating auditing practices across countries.

The third booklet (*Statutory Audit Independence and Objectivity*) is perhaps of the broadest interest to those outside of Europe (especially to North Americans). It provides a useful document for comparing concepts of independence in the US (especially the Independence Standards Board's conceptual framework document) versus those in Europe. While many things are the same, such as the apparent definition of independence and its relation to integrity and objectivity, a primary difference in the FEE document is its focus on a list of threats to independence and how the threats might be mitigated or overcome. The list of threats is divided into the following elements: self-review, advocacy, familiarity or trust, and intimidation. In general, these threats are to be mitigated by internal steps taken by the audit firms and monitored by professional regulatory authorities, by publicly visible steps taken by the individual firms, and by a refusal to act when there are no other appropriate courses of action to abate the perceived problems.

More than half of the 22 pages (in English) in this booklet are devoted to describing particular threats to independence and how they might be resolved as well as requirements for their resolution. These are divided into eight categories. The first addresses personal, business, or financial links between statutory auditors and their clients. Included are business or personal relationships between the parties, financial relationships (for example, ownership of stock in clients), and employment relationships. The solutions offered are largely consistent with those in North America. A second major category is holding a managerial or supervisory role in an audit client, and a third is performance of other services by the auditor (an area with substantially different laws across borders). The other services include consulting, accounting record-keeping services, valuation of assets or liabilities for recording in the financial statements, acting as an advocate in litigation, and recruiting senior personnel. The solutions will be familiar to most North American readers, but the reasoned approach is refreshing.

Audit fees comprise a fourth category of threats to independence, again paralleling problems in North America. The mix of consulting and auditing fees is considered, as are uncollected fees and "loss leader" pricing. In contrast to US and Canadian standards, the fifth category considered is "acting for a client for a prolonged period of time," pointing out the need for rotation of auditors because of close relationships that otherwise develop between persons.

The last three categories are actual or threatened litigation with the client, seeking a second opinion from other statutory auditors, and the role of audit firms. One unusual feature of the FEE recommendations is a requirement for communication between the two audit firms when a second opinion is sought. If this communication is not permitted, then the second auditor should decline to act.

Overall, I believe that the three FEE booklets provide an extremely useful review of current auditing standards and standard-setting in Europe. The summaries of current practices should be valuable to any researcher interested in conducting cross-cultural studies in accounting and auditing. These studies would include analyses of auditing procedures, the effects of audit reporting, and the effects on auditing and reporting (and capital market reactions) of country-specific laws and regulations as well as market practices.

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Significant Current Issues in International Taxation, by *Ahmed Riahi-Belkaoui*, Quorum Books, Westport, Connecticut, 1998, xiv + 183 pp.

This compact book introduces basic international tax principles and selected significant issues. It is easy to read, provides useful numerical examples, and includes copies of many relevant tax forms for reference purposes. The book also summarizes international tax research findings from the academic literature. Hence, the book provides an effective, quick overview for casual readers who desire to know the basic principles of international taxation. It is not geared for readers who desire in-depth insights into significant current issues.

The first two chapters of the book introduce international tax principles, including the philosophies of international taxation and the role for tax treaties. The explanation of the US foreign tax credit system in Chapter 2 is especially clear. For academic researchers, the most useful part of these two chapters is Appendix 1.B, which reproduces the literature review by Louise E. Single and John L. Kramer, "Tax Policy and the Location of Plants and Profits," published in the 1996 number of *Journal of Accounting Literature*.

Chapters 3 through 5 then each addresses a significant international tax issue. Specifically, Chapter 3 clearly and concisely summarizes tax transfer pricing regulations and related documentation requirements. Chapter 4 introduces foreign sales corporations and other tax incentives for exports. Chapter 5 explains value-added taxation systems in Europe, providing detailed numerical examples. All three chapters are ideally suited for international tax novices, who require basic introductions to fundamental concepts.

Despite its strengths, this book reflects several limitations. First, the book generally does not provide firm-level examples of the relevant issues. For example, the chapter on transfer pricing would be more useful to readers if the author had discussed the outcomes from recent court cases to illustrate the key points of debate between taxpayers and tax regulators. In addition, the discussion of foreign sales corporations lacks any examples of the tax benefits that specific firms have garnered from these entities.

Second, it is unclear how the author chose which significant international tax issues to include in the book. For example, Chapter 4, on tax incentives for exporting, addresses domestic international sales corporations and foreign sales corporations in detail. However, the chapter does not even refer to the potentially much stronger foreign tax credit incentives for exports under Internal Revenue Code section 863(b). Furthermore, the book does not address the many significant international tax issues relating to cross-border acquisitions, capital structure, and the international location of debt and interest expense, or the repatriation of profits from foreign subsidiaries. Hence, the book is far from being comprehensive.

Third, as happens to all tax books, this book already is somewhat outdated. The US is now under tremendous pressure from its trading partners to eliminate or drastically alter foreign sales corporations, which comprise the bulk of Chapter 4. Also, the subsection on escaping tax on capital gains in the US (pp. 77–78) does not account for the stringent constructive sales rules the US has now imposed on many of the listed strategies. In addition to missing recent changes in tax rules, the book misses all of the recent academic transfer pricing and international location research, which is substantial.

Fourth, while the book provides useful lists of pros and cons relating to different tax issues, it generally does not clarify the criteria that readers could use for effective decision making. For example, rather than merely listing the pros and cons of using foreign branches versus foreign subsidiaries (pp. 74–75), it would be useful if the book had helped clarify the conditions under which one organizational form is preferred over the other.

Fifth, the book contains many stand-alone sections that are not well integrated with each other. For example, the text of the book does not refer to line items on the many tax forms that have been dropped into the book, even though the tax forms could have been used to illustrate the mechanics of different tax provisions. Also, instead of incorporating findings from academic research throughout the book, these findings generally are relegated to stand-alone Appendix 1.B, the article by Single and Kramer.

In short, this book provides a brief introduction to the most basic international tax principles. Readers who need a brief overview of this type will benefit greatly from the book. Readers who are in search of a deep, comprehensive analysis of significant current issues in international taxation will likely feel unsatisfied.

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New York, NY, USA

INSTRUCTIONS FOR AUTHORS

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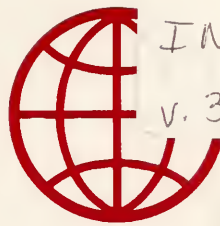
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Introducing the New Editor of the International Journal of Accounting

My term as editor of *The International Journal of Accounting (TIJA)* will end with Volume 36, Number 2, to be issued in the second quarter of the year 2001. I am grateful to the authors, staff, and publishers for their generous support during my tenure as the editor of TIJA and hope for their continued support for the Journal in the future.

Professor A. Rashad Abdel-khalik of the University of Illinois is the new editor. His appointment begins immediately. However, we have agreed that I will handle a subset of existing manuscripts that are close to acceptance to meet the publication requirements through Volume 36, Number 2. Professor Abdel-khalik's first issue of record will be Volume 36, Number 3 due out in the third quarter of the year 2001.

All new manuscript submissions should be addressed to Professor Abdel-khalik at the TIJA address included in this issue. Professor Abdel-khalik is already handling new submissions and in doing so, he will benefit from his prior experience as editor of *Journal of Accounting Literature* and *The Accounting Review*.

Please join me in welcoming Professor A. Rashad Abdel-khalik as the new editor of The International Journal of Accounting.

Young Kwon, Editor
University of Illinois
Champaign, IL, USA

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Accounting Practices and the Market Valuation of Accounting Numbers: Evidence from Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand

Roger C. Graham* and Raymond D. King†

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Key Words: International accounting practices; Valuation; Asia; Clean surplus; Conservatism

***Abstract:** This study examines the relation between stock prices and accounting earnings and book values in six Asian countries: Indonesia, South Korea, Malaysia, the Philippines, Taiwan, and Thailand. The analysis is based on a residual earnings model that expresses the value of the firm in terms of book value and residual income. The model holds for any clean surplus accounting system. However, for finite time horizons, biased accounting may affect model estimates. The six countries examined in this study differ in faithfulness to clean surplus accounting as well as bias (conservatism). The study addresses two questions. First, are there systematic differences across countries in the value relevance of accounting, and are these differences related to accounting differences? Second, are there systematic differences in the incremental and relative information content of book value per share (BVPS) and abnormal (residual) earnings per share (REPS) across the countries, and are such differences related to accounting differences? We find differences across the six countries in the explanatory power of BVPS and REPS for firm values. Explanatory power for Taiwan and Malaysia is relatively low while that for Korea and the Philippines is relatively high. These differences are generally consistent with differences in accounting practice; however, since Korean accounting practice is strongly influenced by tax law, we did not expect the high association for Korea. Second, with respect to the incremental and relative explanatory power of BVPS and REPS, we find BVPS to have high explanatory power in the Philippines and Korea but little in Taiwan. In all six countries REPS has less explanatory power than BVPS in most years. Again, the evidence may be interpreted as suggesting accounting practice affects valuation (with Korea again as the exception). Finally, we provide evidence on the sensitivity of the timing of comparisons of stock prices and accounting values. We find that comparing prices at year-end (even though annual accounting information has not been released at that time), in general, provides the highest correlation between market and accounting numbers.*

Differences in accounting practices across countries are a major concern to investors, accounting standard setters, stock exchanges, and financial analysts. The International

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Accounting Standards Committee (IASC) and the International Organization of Securities Commissions (IOSCO) have devoted considerable effort to standardization or harmonization of accounting practices across countries. Investment professionals claim that accounting differences may impede international capital flows (Choi and Levich, 1991). This study examines the relation between accounting numbers and firm market values in six Asian countries with diverse accounting practices: Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand. We focus on the incremental and relative explanatory power of book value and residual earnings. Because accounting systems differ across the six countries, we examine whether those differences are related to the valuation usefulness of accounting measures. Our objective is to provide evidence on the value relevance of accounting numbers from different accounting systems. Such evidence should inform the current debate over international accounting standards and practices.

Our analysis follows a model developed by Preinreich (1938), Edwards and Bell (1961), and Peasnell (1982) and formalized by Ohlson (1991, 1995) and Feltham and Ohlson (1995) sometimes termed the *Residual Earnings (Income)* model. The model formally states a simple concept: firm value is a function of book value and future residual earnings. A key aspect of the model is that its valuation accuracy does not depend on a particular set of "good" accounting procedures. The only requirement on accounting procedures is *clean surplus accounting*, that is, book value of equity changes only with income or loss and net capital investments and withdrawals (dividends) by owners. In addition, empirical applications of the model to finite horizons are potentially affected by bias in the accounting system. Therefore, comparisons across countries with different accounting practices are one way to investigate the value relevance of different accounting practices.

Across the six countries, accounting systems vary in their faithfulness to clean surplus accounting and in the extent to which they exhibit bias (conservatism). Hence, it is possible that accounting values from some of the countries may provide better estimates of firm value than accounting values from the other countries. Therefore, the usefulness of accounting for firm valuation may differ across countries as well. On the other hand, the accounting standards developed in these countries may be partly based on International Accounting Standards (IAS) or US GAAP. This would tend to make accounting procedures and their value relevance similar. Saudagaran and Diga (1997) report that of our six countries, only Korea has not adopted some or all of IAS.

We investigate the value relevance of different accounting practices using an empirical model that regresses current book value and current residual earnings on market prices. In contrast, the residual income model is based on *expected* residual earnings. Considerable prior research, as discussed in the next section, examines the contemporaneous relation between accounting and market values. In this study, we examine that relation for six Asian countries. However, our interest is in the relation between accounting practices and the value relevance of accounting numbers. We focus on differences in accounting procedures across the six countries that affect book value and residual earnings.¹ The accounting procedures selected: accounting for goodwill, asset revaluations, leases, research and development (R&D) expenditures, and the equity method of accounting for affiliated companies each may be categorized in terms of faithfulness to clean surplus and extent of conservatism.

We address the implications of these accounting procedures for the value relevance of accounting information. Philippine firms, for example, record goodwill and revalue assets,

but firms in Taiwan do neither. This means that book values in the Philippines will reflect market values of assets more closely than in Taiwan. Therefore, we expect the explanatory power of book value will be greater for Philippine firms than for Taiwanese firms. As another example, only Indonesian and Malaysian firms capitalize leases and R&D expenditures and use the equity method for affiliated companies. These are less conservative accounting practices than alternatives used in other countries.

We find accounting in Korea and Taiwan to be least faithful to clean surplus accounting. Korea does not capitalize goodwill and asset revaluations are amortized to equity according to tax law. Taiwan does not capitalize goodwill nor allow asset revaluations. Korea is also the only country not to use the equity method for affiliated companies. Thus, the earnings of Korean firms do not include the earnings of affiliated firms. Philippine firms, however, amortize both goodwill and asset revaluations to income. Recall that violations of clean surplus accounting occur when income does not reflect changes in equity value. Thus, violations of clean surplus bias empirical calculations of residual earnings. Therefore, we expect the explanatory power of residual earnings will be highest for Philippine firms and least for Korean and Taiwan firms.

Overall, our results show significant differences across countries in the value relevance of accounting earnings and book values. Explanatory power over all firm-years ranges from $R^2 = .17$ in Taiwan to $R^2 = .68$ for Korea. The incremental explanatory power of book value per share (BVPS) and residual earnings per share (REPS) is similarly diverse. Incremental explanatory power of BVPS over all firm-years ranges from 7.2 percent (Taiwan) to 65.3 percent (Philippines). For REPS, the incremental explanatory power over all firm-years ranges from 1.4 percent (Korea) to 13.2 percent (Thailand).

Generally, we find differences in accounting appear to be related to differences in value relevance. We find that the explanatory power of book value is highest in the Philippines and lowest in Taiwan. This is consistent with our expectations based on the accounting differences in the two countries. Indonesia and Malaysia have accounting systems that are less conservative than other countries. However, we find the incremental explanatory power of book value does not stand out as high in Indonesia or in Malaysia. This result is only partly consistent with our expectations. We also expected that the relative explanatory power of residual earnings would be high in the Philippines and low in Korea and Taiwan, and the results support this prediction. Our comparisons across countries should be viewed with caution because the number of years of data available ranges from only 2 years for the Philippines to 10 years for Malaysia.

The next section of the article briefly reviews related research and this is followed by the section discussing accounting differences in the six Asian countries. This is followed by the description of the sample and development the study design. The section presenting the analysis of our data and reporting the results of our tests follows. A final section summarizes our findings.

RELATED RESEARCH

Research concerned with the relation of accounting numbers and stock prices covers decades. In this brief review we summarize recent research with study designs and research methods similar to ours. We see two principal strains: first, research focused on explaining

stock prices with accounting book value and earnings; and second, research examining the *incremental* explanatory power of book value and earnings in the presence of the other.

Stock Prices Explained by Book Value and Earnings Per Share

Examining a large set of US firms, Bernard (1993) found that book values explain 55 percent of the cross-sectional variation in market prices. When current return on equity (ROE; ranks) was added to the regression, these two accounting measures explain about 64 percent of the variation in market prices. Bernard (1994) finds that return on common equity (ROE) is mean reverting over time so that firms with the highest (lowest) current ROEs tend to have lower (higher) ROEs in later years.

King and Langli (1998) examine the explanatory power of BVPS and earnings per share (EPS) for three European countries: Germany, Norway, and the UK. They find significant differences in the valuation power of accounting book value and earnings across the three countries, and they interpret some of the differences as consistent with diversity in accounting practices. They also find future earnings realizations as proxies for expected earnings do not have incremental explanatory power beyond that of current earnings and book value.

Frankel and Lee (1999) look at the relation between accounting values, earnings forecasts and market prices across 20 countries (including Korea and Thailand) for 8 years, 1987–1994. Sample sizes for Korea and Thailand are small with 3 to 8 observations per year (33 total firm-years) for Korea and 1 to 40 observations per year (162 total firm-years) for Thailand. They find that estimates of value based on the residual earnings model have incremental explanatory power beyond book value and earnings in explaining market value in all countries. In addition, they find evidence of superior returns to trading strategies based on an estimate of value from a residual earnings model.

Joos and Lang (1994) relate book value and earnings to stock prices for France, Germany, and the UK. Their sample covers 1982 to 1990, and they focus on the effects of implementing the accounting related directives of the European Union. They find the explanatory power of book value and earnings together ranges from 20 to 38 percent for Germany, from 48 to 78 percent for France, and from 14 to 42 percent for the UK. They do not examine incremental explanatory power. Evidence on changes over time is ambiguous, probably because the time periods for the sample are relatively short.

Harris et al. (1994) examine the value relevance of accounting numbers for German firms compared to that for a matched set of US firms for 1982–1991. They find little difference in overall value relevance (R^2) between German and US firms. However, coefficients (multiples) on book value and on earnings for German firms are greater than for matched US firms. Further, they find that consolidation increases the value relevance of accounting numbers, and restatements of earnings to adjust for transitory elements in German accounting also increases explanatory power.

Incremental Explanatory Power of Book Value and Earnings Per Share

Collins et al. (1997) examine the incremental explanatory power of book value and earnings across a 41-year time period (1953–1993) for US firms. They find a decline

in the ability of earnings to explain market prices over this period. But the explanatory power of book values increases such that total explanatory power is actually higher in more recent periods. Average adjusted R^2 for a model regressing BVPS and EPS on stock price for the first 10 years (1953–1962) was .50 increasing to .69 for their most recent 10-year period (1984–1993). Collins et al. (1997) investigated possible reasons for these changes. They find the reduced explanatory power of earnings is explained by an increase in the incidence of one-time items and reported losses as well as a decrease in the size of firms in the sample.

King and Langli (1998) examine a 15-year period (1982–1996) for Germany, Norway, and the UK. They find that for Germany the incremental explanatory power of book value increases significantly while that for EPS decreases. There is no significant change in their common information. For Norway, there is no significant change in the incremental explanatory power of book value or EPS over time. While for the UK, the incremental explanatory power of book value increases and the incremental explanatory power of EPS is unchanged over the time period.

Harris et al. (1994) also examine the separate explanatory power of book value and of earnings using simple regressions with only one variable. They do not report the test statistics. However, they say that while the explanatory power of EPS in Germany is approximately equal to that in the US, the explanatory power of book value is much lower. This contrasts sharply to the King and Langli (1998) results for a longer time period. The Harris et al. (1994) results are not, however, tests of incremental explanatory power since the simple regressions use only one variable.

This study extends the evidence summarized above. We examine the value relevance of accounting numbers for companies in Asian countries. Prior financial reporting research in English language journals has been limited.

ACCOUNTING DIVERSITY ACROSS THE SIX COUNTRIES

The accounting systems in all six countries have developed relatively recently. The six accounting systems differ on some dimensions but are similar on others. Two dimensions that we examine are (1) the model on which the accounting systems are based and (2) the type of standard setting body. Table 1 shows these characteristics for the six countries. IAS was the primary basis for accounting standards in Indonesia, Malaysia, and Thailand (although Thailand has also been influenced by US GAAP). US GAAP, on the other hand, was the primary basis in the Philippines and Taiwan (although Philippine GAAP is secondarily based on tax law). Korean accounting standards are unique in that they are based on Korean tax law that, like tax law in all countries, emphasizes cash realization. Different accounting models may lead to differences in the value relevance of the resulting accounting numbers. We have no prior expectations concerning the relative value relevance of IAS versus US GAAP. It is likely, however, that tax law is more susceptible to political influence than other accounting bases. To the extent that such political influence might serve to make accounting less informative, Korean accounting may be less value relevant because it is based on tax law.

The standard setting bodies in four of the six countries are independent of the government. In Korea and Taiwan, however, standard setting is not independent. Where

Table 1. Accounting Standards and Standard Setting in the Six Countries

Country	Primary basis for accounting standards	Independent accounting standards setting body?
Indonesia	IAS	yes
Korea	Tax Law	no
Malaysia	IAS	yes
Philippines	US GAAP	yes
Taiwan	US GAAP	no
Thailand	IAS	yes

standard setting is influenced or controlled by government there is greater potential for political influence in the standards setting process. As where accounting follows tax law, this may lead to lower value relevance of accounting numbers.

We analyzed the accounting standards and practices for each country using a variety of sources including Akathaporn (1995), Graham and Wang (1995), and publications from the AICPA (1989, 1990, 1992), CIFAR (1995), Deloitte Touche Tohmatsu International (1995a,b, 1996a,b, 1997), Price Waterhouse (1995a,b, 1996a,b,c,d), and Mathew Bender & Co.(1996). Under the residual earnings model the only crucial accounting characteristics are *unbiased accounting* and *clean surplus accounting*. Conservative accounting practices are biased since value changes are reflected asymmetrically, value declines are recognized more quickly than value increases. The clean surplus relation (CSR) allows book value of equity to change only with income or loss and net capital investments and withdrawals (dividends) by owners. CSR is violated if changes in book value can by-pass income. We focus our analysis on the effects of accounting differences on book value and on residual (abnormal) earnings, the accounting arguments in the residual earnings model. However, accounting differences affect valuation only when they are violations of unbiased accounting or clean surplus accounting.

Differences Across Countries Affecting Book Value

Revaluing assets is a violation of CSR if the accompanying credit is taken directly to equity. Yet asset revaluations bring book value nearer to market value. Immediate write-off of goodwill violates CSR and usually moves book values farther from market values. In summary, both recognizing goodwill (consistent with CSR) and revaluing assets (violating CSR) bring book value nearer to market value. Hence, developing predictions on the effects of specific accounting treatments on value relevance is not always clear. Conservative accounting (bias) is expected to generally reduce the value relevance of both book value and earnings since the essence of conservatism is delay in reflecting certain events in the accounting records.

Recording goodwill is common practice in Indonesia and the Philippines, and uncommon but allowed in Malaysia and Thailand. Korea and Taiwan do not allow goodwill to be recorded. Asset revaluations are common in all countries except Indonesia and Taiwan where they are allowed but restricted in practice. Table 2 presents a summary of our analysis of these accounting practices.

Table 2. Goodwill and Asset Revaluations on the Balance Sheet

<i>Country</i>	<i>Goodwill recorded on balance sheet?</i>	<i>Asset revaluation on balance sheet?</i>
Indonesia	yes	uncommon
Korea	no	common
Malaysia	some	common
Philippines	yes	common
Taiwan	no	uncommon
Thailand	some	common

Table 3. Other Asset Values on the Balance Sheet

<i>Country</i>	<i>Capital leases on balance sheet?</i>	<i>R&D expenditures on balance sheet?</i>	<i>Equity method used for affiliates?</i>
Indonesia	yes	yes	yes
Korea	some	yes	no
Malaysia	yes	yes	yes
Philippines	no	no	yes
Taiwan	some	no	yes
Thailand	not until 1996	yes	yes

Asset revaluation and goodwill are both recorded only in the Philippines, and neither is recorded in Taiwan. The other four countries allow one procedure or the other but not both. We expect the incremental explanatory power of book value to be high in the Philippines and low in Taiwan relative to the other five countries. However, the effect of these accounting practices on the incremental explanatory power of book value for the other countries is ambiguous.

The six countries also differ in other accounting practices, including capitalizing leases, capitalizing research development costs, and applying the equity method to affiliated firms. Firms that capitalize and use the equity method are likely to have book values that are closer to market values than firms that do not.² Table 3 presents a summary of our analysis of these accounting practices.

Only Indonesia and Malaysia allow or require all three accounting procedures. The effect of these accounting differences on incremental explanatory power is ambiguous for the other countries. However, we expect the explanatory power of book value in Indonesia and Malaysia to be higher than in Thailand and Taiwan.

Differences Across Countries Affecting Residual Earnings

As explained in the previous section, conservatism is expected to reduce the value relevance of both book value and residual earnings. In addition, we can make some predictions about the effects of clean surplus accounting for goodwill and asset revaluations on the value relevance of book value. However, the effects of these accounting practices on the value relevance of residual earnings are less clear.

The Philippines is the most faithful to clean surplus accounting as both goodwill and asset revaluations are amortized to income over their useful lives. The other

Table 4. Goodwill and Asset Revaluation Amortization

<i>Country</i>	<i>Goodwill amortized to?</i>	<i>Amortization period</i>	<i>Revaluations amortized to?</i>	<i>Amortization period</i>
Indonesia	income	useful life	—	—
Korea	—	—	shareholder equity	per tax law
Malaysia	—	immediate write-off	shareholder equity	useful life
Philippines	income	no more than 40 years	income	useful life
Taiwan	—	—	—	—
Thailand	—	immediate write-off	shareholder equity	useful life

countries (1) do not record goodwill (Korea and Taiwan), (2) do not record asset revaluations (Indonesia and Taiwan), (3) immediately write-off goodwill to equity (Malaysia and Thailand), or (4) amortize asset revaluation increments to equity (Korea, Malaysia, and Thailand). Korea and Taiwan are least faithful to clean surplus accounting. Korea does not capitalize goodwill and asset revaluations are amortized to equity according to schedules mandated by tax law. Taiwan does not capitalize goodwill nor allow asset revaluations. Korea is also the only country that does not use the equity method for affiliated companies; therefore the earnings of Korean firms do not include the earnings of affiliated firms. We expect the relative explanatory power of residual earnings to be high in the Philippines and low in Korea and Taiwan. The effect on the explanatory power of residual earnings for the other countries is ambiguous. Table 4 presents a summary of the amortization practices.

Summary of the Research Questions

Our examination of accounting practices reveals some systematic differences across the six countries. While the differences appear to be substantial, it is an empirical question whether they result in meaningful violations of the CSR or in significant accounting bias (conservatism), the important factors for the residual earnings model. Accounting bias will likely reduce the explanatory power of both book value and earnings. Furthermore, violations of the CSR may either increase or decrease the explanatory power of book value depending on whether the violation moves book value toward or away from market values. Because countries differ on both dimensions, *ex ante* hypotheses on which effect will dominate are problematic. Even so, we expect that bias and CSR violations will affect the value relevance of accounting numbers in systematic ways. Particularly because Philippine firms record both goodwill and asset revaluations and Taiwan firms do neither, we expect the value relevance of book value to be greatest in the Philippines and least in Taiwan. Because both Indonesian and Malaysian firms capitalize leases and R&D expenditures and use the equity method we expect the value relevance of their book values to exceed the value relevance of book value in Thailand and Taiwan. Because Philippine firms amortize both goodwill and asset revaluations to income, we expect the value relevance of residual earnings to be high in the Philippines.

In addition, we investigate changes in the value relevance of accounting numbers over time. Our sample contains 3,655 firm-years across six countries. We have sufficient data for only 2 years of yearly regressions for the Philippines but 10 years for Malaysia. We

Table 5. Sample Countries and Firm-Years

<i>Sample selection</i>	<i>Firm-years</i>
Indonesia	338
Korea	902
Malaysia	1,311
Philippines	139
Taiwan	369
Thailand	596
Sample size	3,655

trace the total explanatory power of accounting earnings and book value and the incremental explanatory power of each earnings and book value in the presence of the other across time for each country.

SAMPLE AND STUDY DESIGN

Our sample covers publicly traded firms in Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand across the period from 1987 to 1996. The stock prices and accounting data for this study are from the *Worldscope Global Researcher*. The sample selection criteria are:

1. Accounting data is from consolidated financial statements.
2. Financial firms are excluded (insurance, banks, and other miscellaneous financial firms). Accounting practices for these firms are so distinct that their valuation parameters are likely to be substantially different from those for industrial firms.
3. Firms with negative book values are deleted. These firms are likely to be in financial distress and may be interesting in their own right. However, the focus of this study is the across country differences in value relevance of accounting numbers derived under different accounting practices. Hence, restricting our sample to firms with positive book values will allow us to focus on firms where differences are mostly likely to reflect accounting differences.
4. Twelve firms with EPS greater than their BVPS are deleted since data on those firms is likely to contain errors. These firms constituted less than 1 percent of the sample.
5. Twenty firm-years with excessive statistical influence in our regressions were deleted. The firm-years showed undue influence by the diagnostics and cutoff rules described in Belsley et al. (1980).

These restrictions on the sample will have several effects. First, the model will appear to "fit" better than it would fit unrestricted data. That is, the explanatory power of book value and of residual earnings information in the sample is likely to be greater than for an unrestricted sample. Second, the samples across the six countries will be more homogeneous and the effects of different business cycles in the six countries will be reduced. This should allow a better focus on the effects of accounting differences. Table 5 shows the countries and number of firm-years.

Table 6. Descriptive Statistics on Variables for Six Southeast Asian Countries

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>5th Percentile</i>	<i>Median</i>	<i>95th Percentile</i>
Panel A: Indonesia						
Price	338	2,813	2,261	556	2,236	6,500
BVPS	338	1,668	1,175	361	1,374	4,394
EPS	338	242	305	43	154	765
REPS	338	-75	272	-474	-52	180
ROE	340	0.15	0.09	0.03	0.14	0.30
Panel B: Korea						
Price	902	25,629	34,972	8,002	18,100	63,921
BVPS	902	21,019	31,375	6,282	14,104	50,225
EPS	902	1,353	4,324	-979	786	5,007
REPS	902	-372	3,334	-3,291	-398	2,389
ROE	902	0.07	0.14	-0.09	0.06	0.26
Panel C: Malaysia						
Price	1,311	5.16	5.99	0.94	3.84	13.96
BVPS	1,311	1.71	1.11	0.53	1.44	3.72
EPS	1,311	0.18	0.21	-0.03	0.15	0.56
REPS	1,311	0.06	0.19	-0.17	0.04	0.37
ROE	1,311	0.13	0.15	-0.04	0.12	0.38
Panel D: Philippines						
Price	139	19.06	31.65	0.17	6.37	81.37
BVPS	139	7.91	12.00	0.17	2.54	38.68
EPS	139	0.97	1.71	-0.08	0.37	4.94
REPS	139	-0.14	1.32	-2.75	-0.01	1.30
ROE	139	0.16	0.14	-0.04	0.14	0.40
Panel E: Taiwan						
Price	369	30.55	13.21	14.95	27.89	53.83
BVPS	369	12.43	2.81	7.80	12.19	17.51
EPS	369	1.20	1.25	-0.79	1.16	3.16
REPS	369	-0.18	1.25	-2.17	-0.21	1.84
ROE	369	0.10	0.11	-0.06	0.09	0.26
Panel F: Thailand						
Price	596	95.79	102.39	18.25	59.59	330.00
BVPS	596	41.35	35.05	11.05	31.09	117.83
EPS	596	5.93	8.32	-1.14	3.59	21.24
REPS	596	-0.23	5.10	-6.41	-0.78	7.48
ROE	596	0.12	0.14	-0.06	0.13	0.34

Price = Stock price at the end of year t . BVPS = Book value of shareholders' equity at the end of year t . EPS = Earnings per share for year t . REPS = Residual (abnormal) earnings per share = $EPS_t - r * ((BVPS_t + BVPS_{t-1})/2)$ where r is the country average lending rate in year t taken from the International Financial Statistics Yearbook. Price, book value, EPS, and REPS amounts are in nominal local currency. ROE = Return on equity = $EPS_t / ((BV_t + BV_{t-1})/2)$.

Table 6 provides descriptive statistics for the sample. Per share values are in nominal currency of the countries, so comparisons are difficult. However, we can compare ROE (the ratio of EPS to average book value) across countries and the differences are substantial. Median ROE ranges from 6 percent (over 8 years) in Korea to 14 percent

Table 7. Correlation Statistics on Variables for Six Asian Countries (*p* values in parentheses)

Variable	N	Spearman				
		Price	EPS	BV	ROE	REPS
Panel A: Indonesia						
Price	338		.6164 (.0001)	.5685 (.0001)	.2255 (.0001)	.0662 (.2252)
EPS	338	.5741 (.0001)		.6915 (.0001)	.5066 (.0001)	.2846 (.0001)
BV	338	.4777 (.0001)	.6418 (.0001)		-.1406 (.0097)	-.3028 (.0001)
ROE	338	.3423 (.0001)	.6118 (.0001)	-.0130 (.8119)		.8904 (.0001)
REPS	338	.2498 (.0040)	.6262 (.0001)	-.1012 (.0631)	.7768 (.0001)	
Panel B: Korea						
Price	902		.5328 (.0001)	.6021 (.0001)	.3095 (.0001)	.1727 (.0012)
EPS	902	.6894 (.0001)		.5552 (.0001)	.8285 (.0001)	.6624 (.0001)
BV	902	.8177 (.0001)	.7438 (.0001)		.1374 (.0001)	-.0681 (.0408)
ROE	902	.1667 (.0001)	.4769 (.0001)	.0865 (.0093)		.7442 (.9190)
REPS	902	.3395 (.0001)	.8529 (.0001)	.2766 (.0001)	.5963 (.0001)	
Panel C: Malaysia						
Price	1,311		.6224 (.0001)	.5572 (.0001)	.3272 (.0001)	.4496 (.0001)
EPS	1,311	.4171 (.0001)		.5419 (.0001)	.7678 (.0001)	.8697 (.0001)
BV	1,311	.5031 (.0001)	.5552 (.0001)		.0160 (.5619)	.1774 (.0001)
ROE	1,311	.1093 (.0001)	.6042 (.0001)	.0117 (.6730)		.9252 (.0001)
REPS	1,311	.2564 (.0001)	.9093 (.0001)	.2102 (.0001)	.7218 (.0001)	
Panel D: Philippines						
PRICE	139		.8133 (.0001)	.8601 (.0001)	.1725 (.0423)	.1177 (.1676)
EPS	139	.7593 (.0001)		.7726 (.0001)	.4577 (.0001)	.3776 (.0001)
BV	139	.7906 (.0001)	.7790 (.0001)		-.0654 (.4441)	-.0715 (.4027)
ROE	139	.0169 (.8439)	.2416 (.0042)	-.1081 (.2052)		.8089 (.0001)
REPS	139	.0727 (.3949)	.4301 (.0001)	-.1866 (.0278)	.4931 (.0001)	
Panel E: Taiwan						
Price	369		.5043 (.0001)	.3056 (.0001)	.4399 (.0001)	.4431 (.0001)
EPS	369	.3618 (.0001)		.2487 (.0001)	.9499 (.0001)	.9291 (.0001)
BV	369	.2639 (.0001)	.2422 (.0001)		-.0010 (.9853)	-.0390 (.4548)
ROE	369	.3048 (.0001)	.9353 (.0001)	.0276 (.5972)		.9804 (.0001)
REPS	369	.3116 (.0001)	.9609 (.0001)	-.0151 (.7731)	.9909 (.0001)	
Panel F: Thailand						
Price	596		.7308 (.0001)	.5639 (.0001)	.6144 (.0001)	.5523 (.0001)
EPS	596	.6284 (.0001)		.7144 (.0001)	.8625 (.0001)	.7757 (.0001)
BV	596	.5145 (.0013)	.8121 (.0001)		.3443 (.0001)	.2411 (.0001)
ROE	596	.4415 (.0001)	.5912 (.0001)	.2494 (.0001)		.9362 (.0001)
REPS	596	.5166 (.0001)	.8068 (.0001)	.3405 (.0001)	.7237 (.0001)	

Price=Stock price at the end of year *t*. EPS=Earnings per share for year *t*. BVPS=Book value of shareholders' equity at the end of year *t*. ROE=Return on equity=EPS_{*t*}/((BVPS_{*t*}+BVPS_{*t-1*})/2). REPS=Residual (abnormal) earnings per share=EPS_{*t*}-*r**((BVPS_{*t*}+BVPS_{*t-1*})/2) where *r* is the country average lending rate in year *t* taken from the International Financial Statistics Yearbook.

(over 5 and 2 years) in Indonesia and the Philippines. For comparison, King and Langli (1998) find ROE over the 1980s and 1990s to be about 6 percent in Germany, 10 percent in Norway, and 13 percent in the UK. In the US, this measure has averaged around 13

percent over the last 20 years. Prior research has speculated that such differences across countries may reflect differences in conservatism of accounting methods. As noted above, for example, Taiwan does not record either goodwill asset revaluations (most conservative) while both are recognized in the Philippines (least conservative).

Table 7 reports the pair-wise correlation between stock price and accounting variables for all countries. For all countries except Korea the rank (Spearman) correlations are greater than the product-moment (Pearson) correlations. However, the patterns and significance of the parametric (Spearman) and non-parametric (Pearson) correlations are similar. Stock prices are strongly correlated with BVPS and with EPS for all countries. The pair-wise correlations between price and EPS are approximately the same as between price and BVPS. The correlation (Pearson) between BVPS and EPS is high in Thailand (.81), the Philippines (.78), and Korea (.74), and relatively low for Taiwan (.24). If EPS is used as a proxy for residual earnings, the high correlation between BVPS and EPS (they are related by size) may make it difficult to partition value relevance between book value and earnings. However, the pair-wise correlations between BVPS and REPS are far smaller, significant in some cases, insignificant in others, and sometimes negative. This is anticipated since there is no reason to expect residual (unexpected) per share earnings to be related to book value. One important reason for using REPS in the empirical analysis is to avoid the high correlation between BVPS and EPS.

TESTS AND ANALYSIS

Our analysis is based on contemporaneous cross-sectional regressions of accounting book values and residual earnings on stock prices (dependent variable). We analyze both the *relative* and the *incremental* explanatory power of book value and residual earnings using an approach applied previously in accounting by Biddle et al. (1995) and Collins et al. (1997).

Empirical specification of the residual earnings model requires estimates of book value, residual earnings, and the horizon for residual earnings. For residual earnings estimated to terminate at time T , the model would be:

$$\text{Price}_{it} = a_0 + a_1 \text{BVPS}_{it} + a_2 \text{RE}_{it+1} + a_3 \text{RE}_{it+2} + a_4 \text{RE}_{it+3} + \dots + a_k \text{RE}_{iT} + e_{it} \quad (1)$$

where Price_{it} is the price per share of firm i at the end of period t , BVPS_{it} is the book value per share of firm i at the end of period t , and RE_{it} is the residual earnings per share of firm i for year $t+k$.

The coefficient a_1 would have an expected value of 1.0 while the coefficients a_2 to a_4 would have expected values of $(1+r)^{-t}$. Finally, the expected value of coefficient a_k would be $(1/r) * (1+r)^{-T.3}$. Residual earnings horizons will differ cross-sectionally; therefore, parsimonious cross-sectional representations of Equation (1) will have only a few terms. For example Frankel and Lee (1999) use $T=2$ because analysts' forecasts used to predict future residual earnings were only available for 2 years.

Our first tests are concerned with the incremental explanatory power of book value and residual earnings. As in Collins et al. (1997) we compare the results of three regression equations to address the question of relative and incremental explanatory power. Equation (2) below provides the most parsimonious empirical specification of the residual earnings

model on a per share basis (the horizon is only one period). Current period residual earnings is the proxy for future expected residual earnings. Residual earnings are estimated by subtracting an estimate of normal (expected) earnings from reported earnings. Expected earnings is the product of the estimated rate of return (r) and book value. Like Frankel and Lee (1999), we derive the estimated rate of return from interest rates in the *International Financial Statistics Yearbook* published by the International Monetary Fund (1997). Frankel and Lee (1999), however, are able to calculate a risk-adjusted return by adding a risk premium to long-term government bond rates. Government bond rates are not available for four of the countries; therefore, we use commercial lending rates. Conceptually, this rate is the sum of a riskless rate and the average commercial lending risk premium. In the residual earnings model, book value and firm value are taken at time t while future abnormal earnings are for periods after time t . In our empirical analysis residual earnings (RE_t) are for the period ending at time t . Hence, as in Bernard (1994) and Collins et al. (1997), current earnings is a proxy for expected future earnings.

$$\text{Price}_{it} = b_0 + b_1\text{BVPS}_{it} + b_2\text{REPS}_{it} + e_{it} \quad (2)$$

where Price_{it} is the stock price per share of firm i at the end of year t , BVPS_{it} is the book value of shareholders' equity of firm i at the end of year t , REPS_{it} is the residual earnings per share, which is equal to $\text{EPS}_{it} - r * (\text{BVPS}_{t-1})^4$ (proxy for expected REPS in period $t+1$), EPS_{it} is the earnings per share of firm i for year t , and r is the country's average commercial lending rate in year t taken from the *International Financial Statistics Yearbook*.

Book values and earnings are, of course, unobservable until some weeks after the end of the fiscal year. This raises the question of the timing of the market value measure to be associated with the accounting variables. As discussed by Barth et al. (1996), choice of contemporaneous versus lagged market values is a trade-off. The advantage to using a lagged market price is that it may reasonably reflect the accounting results since sufficient time has passed for these results to be public information. However, lagged market values will include effects of information and events occurring after the end of the fiscal year. Collins et al. (1997), examining associations between market and accounting numbers for US firms, take prices 3 months after the end of the fiscal period. In cross-country studies, however, this is problematic since the time lag between fiscal year-ends and report dates can vary widely. For this reason, our tests examine the relation between accounting numbers (book value and residual EPS for a fiscal year) and stock prices at the end of the fiscal year. Later, we analyze the sensitivity of our results using stock prices lagged 0 to 6 months following the end of the fiscal year.

Equation (2) expresses price as a function of book value and residual earnings. Examining the relative and incremental explanatory power of book value and of residual earnings requires two additional equations expressing price as a function of book value alone, Equation (3), and residual earnings alone, Equation (4).⁵

$$\text{Price}_{it} = c_0 + c_1\text{BVPS}_{it} + e_{it} \quad (3)$$

$$\text{Price}_{it} = d_0 + d_1\text{REPS}_{it} + e_{it} \quad (4)$$

Following Theil (1971), we define the incremental explanatory power of the book value and residual earnings variables in terms of differences in the coefficient of determination (R^2). These differences are sometimes called the *semi-partial coefficient of determination* (Cohen and Cohen, 1975, pp. 79–84). They are a measure of the incremental explanatory power of one variable given the remaining independent variables.

Define the R^2 statistics from Equations (2), (3), and (4) as R_b^2 , R_r^2 , and $R_{b,r}^2$, respectively. Then the incremental explanatory power is defined as:

$$R_{b|r}^2 = R_{b,r}^2 - R_r^2$$

The incremental explanatory power of book value is the total explanatory power of book value and residual earnings less the explanatory power of residual earnings alone.

$$R_{r|b}^2 = R_{b,r}^2 - R_b^2$$

The incremental explanatory power of residual earnings is the total explanatory power of book value and residual earnings less the explanatory power of book value alone.

$$R_{com}^2 = R_{b,r}^2 - R_{b|r}^2 - R_{r|b}^2$$

The explanatory power common to book value and residual earnings is the total explanatory power of book value and residual earnings less the incremental explanatory power of book value and the incremental explanatory power of residual earnings.⁶

We can also assess the *relative* explanatory power of book value and residual earnings by comparing the conditional (incremental) power as shown above (Biddle et al., 1995).⁷ That is, we can also address the question of whether book values or residual earnings have greater explanatory power for each country.

Explanatory Power of BVPS and REPS Across the Six Countries

Table 8 reports summaries of regressions (2), (3), and (4) as well as incremental R^2 for each year with 30 or more observations and for all years together for the six countries. First, we focus on the coefficients and the significance of regressions (2), (3), and (4), and then we analyze the relative and incremental explanatory power.⁸

Coefficients on BVPS are positive for all countries. They are significant overall and for most years. BVPS coefficients are greater than 1.0 for Malaysia (2.75), the Philippines (2.17), Taiwan (1.26), and Thailand (1.41) in regression (2). BVPS coefficients are less than 1.0 for Indonesia (.82) and Korea (.89). Coefficients on REPS are positive and significant for all countries except the Philippines. Coefficients on REPS for regression (4) range from 1.26 for Malaysia to 10.90 for Thailand.⁹

We find significant differences in the value relevance of accounting across countries. The explanatory power of book value and residual earnings is quite high for Korea and the Philippines, near to what is found for Anglo-American markets. However, the explanatory power for Taiwan is well below that found for most other countries. Table 9 presents a

Table 8. Incremental and Relative Information Content of Book Values and Residual Earnings: Regressions of Book Value and Residual Earnings on Price by Year (*t*-statistics in parentheses)

$$\text{Price}_{it} = b_0 + b_1\text{BVPS}_t + b_2\text{REPS}_t + e_{it} \quad R_{b,r}^2$$

$$\text{Price}_{it} = c_0 + c_1\text{BVPS}_t + e_{it} \quad R_b^2$$

$$\text{Price}_{it} = d_0 + d_1\text{REPS}_t + e_{it} \quad R_r^2$$

where Price_{it} is the price per share of firm *i* at time *t*, BVPS_t is the book value per share of firm *i* at the end of period *t*, and REPS_t is the residual earnings per share of firm *i* for year *t*.

$R_{b|r}^2 = R_{b,r}^2 - R_r^2$ The incremental explanatory power of book value is the total explanatory power of book value and residual earnings less the explanatory power of residual earnings alone.
 $R_{r|b}^2 = R_{b,r}^2 - R_b^2$ The incremental explanatory power of residual earnings is the total explanatory power of book value and residual earnings less the explanatory power of book value alone.
 $R_{com}^2 = R_{b,r}^2 - R_{b|r}^2 - R_{r|b}^2$ The explanatory power common to book value and residual earnings is the total explanatory power of book value and residual earnings less the incremental explanatory power of book value and the incremental explanatory power of residual earnings alone.

Year	N	b_0	$b_1\text{BV}$	$b_2\text{REPS}$	$R_{b,r}^2$	$c_1\text{BV}$	R_b^2	$d_1\text{REPS}$	R_r^2	$R_{b r}^2$	$R_{r b}^2$	R_{com}^2
Panel A: Indonesia												
All	338	1,400 (7.83)	0.96 (10.90)	2.49 (6.57)	.308	0.90 (9.69)	.219	2.07 (4.73)	.062	.246	.089	-.027
1991	46	698 (2.12)	1.62 (7.38)	6.08 (3.82)	.559	1.16 (5.52)	.409	-0.34 (-0.17)	.001	.558	.150	-.149
1992	61	596 (1.82)	1.75 (8.80)	5.66 (8.82)	.564	1.32 (5.43)	.358	2.46 (1.80)	.052	.542	.236	-.184
1993	63	1,864 (6.19)	1.04 (6.54)	0.86 (1.78)	.419	0.99 (6.22)	.388	0.34 (0.55)	.005	.414	.031	-.026
1994	70	1,495 (3.41)	0.79 (3.98)	3.07 (3.53)	.332	0.90 (4.22)	.208	3.59 (3.78)	.173	.159	.124	.049
1995	80	1,526 (3.61)	0.63 (3.32)	3.41 (3.99)	.266	0.66 (3.13)	.114	3.50 (3.86)	.161	.105	.152	.009
Mean ^a	64	1,236	1.17	3.82	.434	1.01	.295	1.91	.078	.356	.139	-.060

(continued)

Table 8. (Continued)

Year	N	b_0	b_1 BV	b_2 REPS	$R_{b,r}^2$	c_1 BV	R_b^2	d_1 REPS	R_r^2	$R_{b,r}^2$	$R_{r,b}^2$	R_{com}^2
Panel B: Korea												
All	901	7.746 (9.48)	0.87 (40.07)	1.29 (6.27)	.683	0.91 (42.61)	.669	3.56 (10.83)	.115	.568	.014	.101
1988	48	15.983 (10.36)	0.21 (2.43)	1.94 (2.41)	.182	0.18 (1.96)	.077	1.62 (1.93)	.075	.107	.105	-.030
1989	61	19.043 (16.22)	0.31 (4.26)	1.44 (2.53)	.241	0.22 (3.32)	.157	0.25 (0.45)	.000	.241	.084	-.084
1990	67	13.791 (17.12)	0.24 (4.49)	0.89 (2.11)	.240	0.18 (3.87)	.187	-0.10 (-0.226)	.001	.239	.053	-.052
1991	82	9.826 (9.51)	0.27 (5.08)	0.73 (2.09)	.261	0.26 (4.75)	.220	0.50 (1.25)	.019	.242	.041	-.022
1992	106	9.383 (5.75)	0.50 (7.13)	1.99 (5.53)	.584	0.67 (9.42)	.461	3.13 (7.97)	.379	.205	.123	.256
1993	145	11.318 (4.75)	0.74 (9.49)	3.26 (4.60)	.820	1.05 (23.44)	.794	8.91 (18.64)	.709	.111	.026	.683
1994	180	13.979 (8.06)	0.81 (18.06)	1.61 (3.48)	.816	0.91 (26.96)	.803	7.27 (12.73)	.477	.339	.013	.464
1995	182	3.266 (2.25)	0.92 (28.72)	0.32 (1.02)	.843	0.91 (30.87)	.842	-3.22 (-4.81)	.115	.728	.001	.114
Mean ^a	109	12.074	0.51	1.52	.498	0.55	.442	2.92	.222	.276	.056	.166
Panel C: Malaysia												
All	1,311	0.51 (2.00)	2.53 (19.54)	5.07 (6.55)	.277	2.71 (21.06)	.253	8.25 (9.60)	.067	.210	.024	.043
1987	42	0.66 (1.77)	1.38 (4.08)	2.57 (2.59)	.300	0.82 (2.97)	.180	-0.04 (-0.04)	.000	.300	.120	-.120
1988	50	0.59 (1.89)	1.24 (4.88)	2.33 (3.00)	.391	1.18 (4.20)	.269	1.90 (2.08)	.083	.308	.122	-.039
1989	59	1.76 (4.54)	0.75 (2.65)	4.28 (3.78)	.322	0.98 (3.16)	.149	4.89 (4.21)	.237	.085	.173	.064
1990	67	1.74 (4.27)	0.85 (2.75)	6.00 (4.71)	.381	1.24 (3.59)	.166	6.92 (5.37)	.307	.074	.215	.092
1991	102	0.92 (3.69)	0.99 (6.35)	9.33 (9.96)	.637	1.32 (6.13)	.273	10.58 (9.78)	.489	.148	.364	.125
1992	169	0.16 (0.66)	1.72 (12.57)	8.30 (8.36)	.532	1.45 (9.17)	.335	5.32 (3.96)	.086	.446	.197	-.111
1993	172	-1.11 (1.30)	4.31 (9.70)	5.09 (1.62)	.371	4.37 (9.80)	.361	7.30 (1.88)	.020	.351	.010	.010
1994	183	0.86 (1.04)	3.03 (7.84)	2.41 (0.91)	.264	3.07 (7.98)	.260	4.58 (1.50)	.012	.252	.004	.008
1995	258	0.80 (1.33)	2.38 (8.77)	3.25 (1.90)	.263	2.48 (9.30)	.253	0.64 (3.30)	.041	.222	.010	.031
1996	201	4.21 (4.02)	1.37 (5.21)	7.64 (3.33)	.157	1.97 (4.95)	.110	10.73 (5.04)	.113	.044	.047	.066
Mean ^a	130	1.06	1.80	5.12	.362	1.89	.236	5.28	.139	.223	.126	.013

Panel D: Philippines												
All	39	2.44 (1.32)	2.20 (16.75)	5.49 (4.60)	.680	2.08 (1.30)	.625	1.74 (0.85)	.005	.675	.055	-.050
1994	31	0.45 (0.15)	2.92 (14.63)	13.76 (6.67)	.885	2.41 (8.27)	.702	2.27 (0.41)	.010	.875	.183	-.173
1995	49	-0.23 (-0.16)	2.58 (22.99)	18.72 (10.09)	.921	1.89 (10.88)	.716	-3.37 (-0.68)	.010	.911	.205	-.195
Mean ^a	40	0.11	2.75	16.24	.903	2.15	.709	-0.55	.010	.893	.194	-.184
Panel E: Taiwan												
All	369	15.57 (5.43)	1.26 (5.64)	3.34 (6.63)	.169	1.24 (5.24)	.070	3.30 (6.28)	.097	.072	.099	-.002
1993	42	9.30 (0.84)	2.20 (2.38)	1.32 (0.65)	.135	2.19 (2.40)	.126	1.30 (0.60)	.009	.126	.009	.000
1994	98	15.39 (3.82)	1.68 (5.08)	3.63 (3.79)	.272	1.52 (4.36)	.164	3.03 (2.84)	.077	.195	.108	-.031
1995	179	9.35 (3.43)	1.35 (6.63)	2.19 (5.21)	.300	1.41 (6.47)	.191	2.35 (5.02)	.125	.175	.109	.016
Mean ^a	106	11.35	1.74	2.38	.236	1.71	.160	2.23	.070	.166	.076	-.006
Panel F: Thailand												
All	596	51.28 (9.71)	1.28 (11.29)	7.76 (11.38)	.397	1.50 (14.63)	.265	10.37 (14.70)	.267	.130	.132	.135
1991	40	18.63 (2.25)	1.81 (11.06)	2.84 (3.49)	.848	2.06 (12.24)	.798	6.67 (4.48)	.345	.503	.050	.295
1992	74	27.59 (3.45)	1.68 (10.53)	5.55 (4.92)	.727	1.93 (11.15)	.635	9.42 (5.55)	.300	.427	.092	.208
1993	130	102.78 (6.72)	0.57 (1.91)	12.64 (5.39)	.300	1.33 (4.55)	.139	14.74 (7.05)	.280	.020	.161	.119
1994	166	47.66 (5.60)	1.10 (6.80)	9.18 (8.39)	.512	1.53 (8.39)	.300	11.56 (9.88)	.373	.139	.212	.161
1995	175	38.21 (2.80)	1.12 (6.64)	7.14 (5.65)	.369	1.38 (7.62)	.251	9.33 (6.91)	.216	.153	.118	.098
Mean ^a	117	46.97	1.26	7.47	.551	1.65	.425	10.34	.303	.248	.126	.177

^aThe mean coefficient is the average of yearly regression coefficients, and the *t*-statistic is the average coefficient divided by its time-series standard error. The mean R^2 is the average of yearly R^2 .

Table 9. Explanatory Power of Book Value and Residual Earnings

<i>Country</i>	R^2 all firm-years	<i>Country</i>	<i>Mean yearly R^2</i>	<i>Number of years</i>
Korea	.683	Philippines	.903	2
Philippines	.680	Thailand	.551	5
Thailand	.397	Korea	.498	8
Indonesia	.308	Indonesia	.434	5
Malaysia	.277	Malaysia	.362	10
Taiwan	.169	Taiwan	.236	3

ranking from the highest to lowest explanatory power for the samples pooled over all years and for the yearly average.

The mean yearly R^2 are greater than the pooled firm-years for all countries except Korea. Fitting the model for each year allows for yearly variation in the relation and results in a better fit than pooled firm-years. Table 8 reveals considerable year to year variation in the coefficients.

The following initial conclusions seem warranted. First, coefficients on book value and earnings are not greatly different from those found for European and American markets. Second, there is a high level of cross-country variation in explanatory power of accounting earnings and book values for stock prices. The six Asian countries in this study differ more than European and North American countries in prior studies. Third, earlier in this article we predicted, based on accounting differences, that accounting values in the Philippines would have high explanatory power for firm value but low explanatory power in Taiwan. Both of these predictions are substantiated. However, contrary to our predictions Korean accounting values have high explanatory power. This appears anomalous given the reliance of accounting practice on tax law in Korea.

Incremental Value Relevance of BVPS and REPS

Next, we examine the incremental explanatory power of BVPS beyond that for REPS, $R_{b|r}^2$, and the incremental explanatory power of REPS beyond that of BVPS, $R_{r|b}^2$. Relative explanatory power can be addressed by comparing $R_{b|r}^2$ and $R_{r|b}^2$ to each other (Biddle et al., 1995). Table 8 reports these results for each year and for all years together. Fig. 1 shows the patterns across time. Focusing on the incremental explanatory power of BVPS, $R_{b|r}^2$, we find the incremental power of BVPS ranges widely across the six countries, from a low of .070 in Taiwan to a high of .669 for Korea. Except for Taiwan, BVPSs have higher explanatory power than in prior studies. Prior studies (Harris et al., 1994; Collins et al., 1997; King and Langli, 1998) have used EPS rather than REPS to measure abnormal future earnings. EPS is typically highly correlated with BVPS and hence, the incremental explanatory power of book value is reduced. REPS is not highly correlated with BVPS and as a consequence BVPS has relatively more explanatory power. Table 10 lists from highest to lowest the incremental explanatory power for BVPS for the samples pooled over all years and for yearly means.

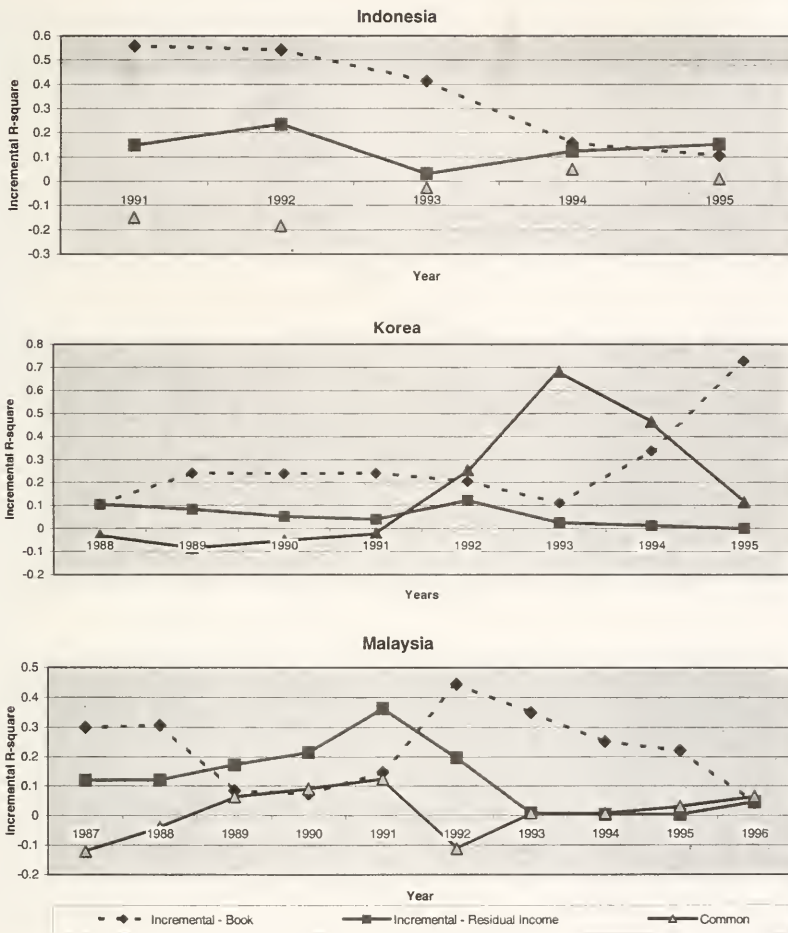


Figure 1. Incremental Explanatory Power of Book Value and Residual Earnings for Prices.

In the section of this article discussing the accounting diversity across the six countries, we predicted that the Philippines, Indonesia, and Malaysia would have high incremental explanatory power for book value with low explanatory power in Taiwan and Thailand. Our expectation that the explanatory power of book value would be highest in the Philippines and the lowest in Taiwan is supported. However, the incremental explanatory power of book value in Indonesia and Malaysia do not stand out as high.

Focusing on the incremental explanatory power of REPS, $R_{r|b}^2$, we find the incremental power of REPS is much lower than that for BVPS. Furthermore, $R_{r|b}^2$ appears more stable over time. Table 11 lists the highest to lowest incremental explanatory power for REPS for the samples pooled over all years.

Thailand ranks first (third) in incremental explanatory power for residual earnings for pooled firm-years (yearly average). The Philippines shows some evidence (yearly

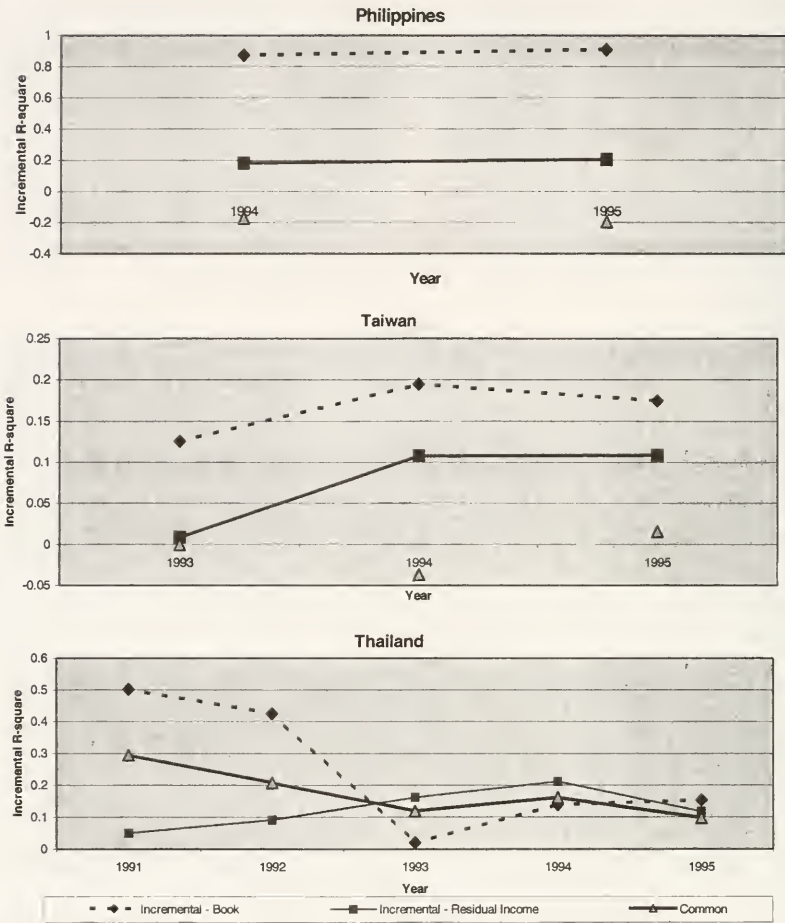


Figure 1. (continued)

average) of the hypothesized high incremental explanatory power. Residual earnings have little explanatory power for Korea. Since prior studies have examined EPS rather than REPS, these results are not strictly comparable. We also ran the regressions using EPS and find marginally lower incremental explanatory power for EPS than for REPS. However, the incremental power of BVPS was lower as well. Our results reflect the difficulty in making predictions about the explanatory power of residual earnings across countries.

Explanatory Power of BVPS and REPS Over Time

Following Collins et al. (1997) and King and Langli (1998), we examine changes across time in the explanatory power of book value and residual earnings. The incremental explanatory power of BVPS and REPS differ greatly over time and across countries. The

Table 10. Incremental Explanatory Power of BVPS

<i>Country</i>	$R_{b v}^2$ <i>all firm-years</i>	<i>Country</i>	<i>Mean yearly</i> $R_{b v}^2$	<i>Number of years</i>
Philippines	.653	Philippines	.893	2
Korea	.568	Indonesia	.356	5
Indonesia	.246	Korea	.277	8
Malaysia	.211	Thailand	.248	5
Thailand	.130	Malaysia	.223	10
Taiwan	.072	Taiwan	.165	3

Table 11. Incremental Explanatory Power of Residual Earnings

<i>Country</i>	$R_{r b}^2$ <i>all firm-years</i>	<i>Country</i>	<i>Mean yearly</i> $R_{r b}^2$	<i>Number of years</i>
Thailand	.132	Philippines	.194	2
Taiwan	.099	Indonesia	.139	5
Indonesia	.089	Thailand	.127	5
Philippines	.055	Malaysia	.126	10
Malaysia	.024	Taiwan	.075	3
Korea	.014	Korea	.056	8

time patterns revealed in the regressions are illustrated in Fig. 1. The time patterns show that the overall explanatory power is increasing for Korea, the Philippines, and Taiwan, and declining for Indonesia and Thailand and mixed for Malaysia. Similarly, the incremental explanatory power of BVPS is increasing for Korea, the Philippines, and Taiwan, decreasing for Indonesia and Thailand, and mixed for Malaysia. For the incremental explanatory power of residual earnings, results show increases in the Philippines, Taiwan, and Thailand, decreases for Korea, and mixed patterns for Indonesia and Malaysia.

Sensitivity to the Timing of Price

We examined the sensitivity of our results to the date at which the stock price is taken. At the end of the fiscal year, information in the financial reports including book values and earnings are not available to investors. Use of lagged stock prices would allow for that financial statement information to be impounded into price. On the other hand, later prices will include information concerning events subsequent to the fiscal year thereby confounding the relation between accounting and firm value. To test the sensitivity of the price date, we run the regressions for lags of 0 to 5 months. Table 12 reports the total and incremental explanatory power for BVPS and for REPS for these six price dates.¹⁰ Only Indonesia and Korea show higher R^2 s for prices lagged after fiscal year-end. Total explanatory power for Indonesian (Korean) firms is greatest when prices are measured 4 (2) months after the fiscal year-end. The differences in R^2 are not large, and the higher R^2 s do not affect the ordering of countries in Tables 9–11.

Table 12. The Information Content of Book Values and Residual Earnings: Regressions of Book Value and Residual Earnings on Lagged Prices

<i>Dependent variable</i>	<i>N</i>	<i>R</i> _{b,r} ²	<i>R</i> _b ²	<i>R</i> _r ²	<i>R</i> _{b r} ²	<i>R</i> _{r b} ²
Panel A: Indonesia						
Price at year-end	338	.308	.219	.062	.246	.089
Price after 1 month	284	.280	.181	.069	.211	.099
Price after 2 months	319	.296	.196	.075	.221	.100
Price after 3 months	319	.310	.212	.073	.237	.098
Price after 4 months	318	.366	.212	.115	.251	.154
Price after 5 months	322	.355	.194	.125	.230	.161
Panel B: Korea						
Price at year-end	902	.683	.669	.115	.568	.014
Price after 1 month	884	.729	.717	.114	.615	.012
Price after 2 months	884	.773	.754	.139	.634	.019
Price after 3 months	884	.764	.741	.150	.614	.023
Price after 4 months	884	.755	.744	.115	.640	.011
Price after 5 months	884	.751	.739	.117	.634	.012
Panel C: Malaysia						
Price at year-end	1,311	.277	.253	.066	.211	.023
Price after 1 month	1,310	.151	.133	.043	.108	.018
Price after 2 months	1,310	.159	.150	.033	.126	.009
Price after 3 months	1,310	.147	.133	.036	.111	.014
Price after 4 months	1,310	.135	.123	.032	.103	.012
Price after 5 months	1,310	.137	.122	.037	.100	.015
Panel D: Philippines						
Price at year-end	139	.680	.625	.005	.675	.055
Price after 1 month	139	.410	.354	.015	.395	.056
Price after 2 months	139	.438	.411	.002	.436	.027
Price after 3 months	139	.445	.435	.001	.444	.010
Price after 4 months	139	.420	.413	.001	.419	.007
Price after 5 months	139	.323	.308	.000	.323	.015
Panel E: Taiwan						
Price at year-end	369	.169	.070	.097	.072	.099
Price after 1 month	366	.138	.057	.078	.060	.081
Price after 2 months	366	.130	.057	.072	.058	.073
Price after 3 months	366	.108	.050	.057	.051	.058
Price after 4 months	366	.092	.059	.036	.056	.033
Price after 5 months	366	.091	.052	.037	.054	.039

The highest explanatory power is in italics. See Table 8 for definitions and regression models.

SUMMARY AND CONCLUSIONS

In this study, we examine the accounting systems in six Asian countries to assess whether they differ in their value relevance under the residual earnings model. The countries selected: Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand, differ in the conservatism of their accounting practices, as well as in their adherence to clean surplus

accounting. The study addresses two questions. First, are there systematic differences across countries in the value relevance of accounting numbers? Second, are there systematic differences in the incremental and relative contribution of book values and residual earnings to value across the countries related to accounting differences?

Our results indicate first, that accounting book value and residual earnings are positively and significantly related to current stock prices across all six countries consistent with King and Langli's (1998) findings for European countries and Bernard's (1994) results for US firms. Our results also show significant differences in the relation between accounting numbers and stock prices across the six countries and across time. We find some consistency between our predictions of explanatory power of accounting for firm value based on accounting practice in the six countries; however, the predictions are incomplete and some results are not consistent. While this study suggests that differences in the explanatory power of accounting are related to accounting differences across the countries, more evidence is needed. Second, when we focus on the relative and incremental explanatory power of book value and residual earnings, the empirical results again vary across countries more than for European and American markets in prior studies. Again, there are some tantalizing hints that accounting practice is related to these differences, but more evidence is needed.

The extent to which accounting differences are related to valuation differences is of concern in the debate on international accounting standards and practices. The body of research examining the value relevance of accounting includes North American (Bernard, 1994; Collins et al., 1997), European (Joos and Lang, 1994; King and Langli, 1998), and now Asian countries. The evidence seems clear that strongly conservative (biased) accounting is less value relevant. The evidence concerning violations of the CSR is less clear. Conceptually, violations of CSR that cause book values to be closer to market values, e.g., asset revaluation, increase the value relevance of book value. However, CSR violations that move book value away from market value, e.g., immediate write-offs of goodwill, will decrease the value relevance of book value. Evidence to date is broadly consistent with these expectations. Less clear are the predicted and actual effects of CSR violations on the value relevance of residual earnings.

The study makes two additional contributions. First, we compute incremental explanatory power for residual earnings (the appropriate value under the residual earnings model) rather than for earnings as in prior studies. Residual earnings have little correlation with book value and allow a better separation of the explanatory power of book value and earnings. Second, we investigate the effects of different price dates in the relation. We find that year-end stock prices are more highly correlated with accounting variables in most countries and are near to the highest correlation in all countries.

NOTES

1. The explanatory power of book value and residual earnings will not be affected if a bias is constant across firms and time. However, the accounting procedures examined are unlikely to be constant either across firms or across time.
2. Each of these accounting procedures will be relevant to only a subset of firms. Hence, the cross-sectional effect will be smaller than for accounting procedures affecting all or most firms.

3. The expected coefficients in Equation (1) can be seen from the equation for firm value with a finite horizon (for example, see Equation (5) in King and Langli, 1998).
4. We use *average* book value to calculate our proxy for abnormal earnings rather than *beginning* book value as defined by the residual earnings model. Since we use actual earnings as the proxy for expected future earnings, average book values represent the book values in place that generated those earnings. Regression results for residual earnings calculated from beginning book values (not reported) are essentially equal to, but have slightly less explanatory power than, the results reported in this study.
5. The coefficients b_2 and d_1 in Equations (2) and (4) are *not* equal to the a_2 coefficient in Equation (1). The earnings proxy used in Equations (2) and (4) is residual earnings for the current year rather than future expected residual earnings. The exact relationship in the coefficients in Equations (2) and (3) relative to that in Equation (1) is difficult to specify. However, it is easy to show that b_2 and d_1 must be smaller than a_2 .
6. Theil (1971, pp. 167–171) shows that where the independent variables are not orthogonal, the sign of the difference between total R^2 ($R_{f,r}^2$) and the sum of the incremental R^2 s ($R_{f|b}^2 + R_{b|r}^2$) is not determined. That is, R_{com}^2 may be either positive or negative.
7. Biddle et al. (1995) show that this procedure is equivalent to comparing the explanatory power of single regressions. In other words, whether book value or residual earnings has greater relative explanatory power can be determined either comparing the R^2 s from Equations (3) and (4) or by comparing the incremental R^2 s (i.e., $R_{b|r}^2$ to $R_{r|b}^2$).
8. To compare with prior research, all of the analyses in this article were repeated with EPS replacing REPS. EPS has greater explanatory power than REPS in most years for all countries. REPS has a lower (sometimes negative) correlation with book value than EPS. Consequently, book value has greater incremental explanatory power in the presence of REPS than with EPS. However, the general tenor of the results and the time-series patterns are quite similar.
9. Multicollinearity is not a problem in our regressions. None of the regressions containing both book value and residual earnings has variance inflation factors greater than 2. Heteroscedasticity in the error terms was detected, however, in the Indonesia and Malaysia regressions containing both book value and residual earnings. We report White's adjusted t -statistics for those two countries.
10. We do not have share price data for Thailand for months beyond year-end, so Table 12 covers only five countries.

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The Impact of Adopting International Accounting Standards on the Harmonization of Accounting Practices

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Key Words: International accounting standards; Comparability; Harmonization

Abstract: Over the past few decades numerous organizations have been actively participating in the efforts to improve the comparability of financial reporting. Many studies have discussed the benefits and drawbacks of comparability. This study investigated the affect on the harmonization, or comparability, of accounting practices when a sample of companies choose to use international accounting standards (IASs) when preparing financial reports.

This study analyzed trends in the *I* index, a measure of concentration for the use of a particular accounting practice introduced by van der Tas, to determine if the choice of accounting methods by a sample of Swiss companies became more aligned with a sample of companies from three other countries. The study included a control sample of Swiss companies that did not switch from reporting using local Swiss standards during the same time period, 1988 through 1995. Four accounting practices were included; depreciation, inventory, financial statement cost basis, and consolidation practices. The practices used were compared with a sample of companies from three countries; Japan, the UK, and the US.

The results indicated that across the 8-year period, the majority of the *I* indices comparisons were positive and statistically significant. However, the results did not support that these increases were due primarily to the adoption of IASs.

The expansion of international trade and the accessibility of foreign stock and debt markets have been an impetus in increasing the debate of whether or not there needs to be a global set of accounting standards. As companies compete globally for scarce resources, investors, and creditors, as well as multinational companies, are required to bear the cost of reconciling financial statements prepared using national standards. It has been argued that a common set of practices will provide a “level playing field” for all companies worldwide.

Efforts have been made by a number of organizations¹ to reduce the differences between accounting systems. The coordination of efforts, to compile an international set of

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standards. was formalized in 1973 by the International Accounting Standards Committee (IASC). Their objective is to “work generally for the improvement and harmonization of regulations, accounting standards, and procedures relating to the presentation of financial statements” (IASC, 1995, p. 29). The members believe that with the adoption of international accounting standards (IASs) “the quality of financial statements will be improved and there will be an increasing degree of comparability” (IASC, 1995).

As Epstein and Mirza (1997) discuss, the IASC’s progress can be seen as taking place within three phases, (1) 1973–1988, development of a common body of standards; (2) 1989–1995, the comparability/improvements project; and (3) 1995–current, the core standards project. The early development years were devoted to establishing and codifying a set of international standards. The comparability project was the result of criticism regarding the numerous alternatives allowed by the IASC standards. The comparability project resulted in the revision of 10 standards. The core standards project has been encouraged by the IOSCO. The efforts of this program focus on the development of high-quality standards, which could be used for cross-border reporting.

With two primary objectives, (1) increase the quality of standards and (2) increase comparability, there are two areas to study. Other articles will address the question of quality (see Murphy and White, 1999). The purpose of this article is to determine whether or not the degree of comparability among companies from different countries has increased with the use of IASs. Some prior studies have examined whether accounting standards at a country level are in compliance with international standards. Other studies have examined the degree of harmony, or comparability, of the accounting practices utilized by companies from different countries. No other articles have been identified that examine the effect of companies’ adoption of IASs on the level of harmonization among companies. The research question addressed is:

Has harmonization of accounting practices occurred as companies have adopted IASs?

Briefly, harmonization is concerned with reducing the diversity that exists between accounting practices in order to improve the comparability of financial reports prepared by companies from different countries. Harmonization occurs as more companies choose to prepare financial statements using the same accounting practice. The terms increased comparability and harmonization will be used interchangeably.

This article should provide data that will aid the IASC in determining the impact of their efforts towards the comparability of financial reporting.

LITERATURE REVIEW

Research on harmonization can be directed at either a country level or company level. Studies that compare the accounting systems of two or more countries have done so using a variety of techniques. One approach has been a purely descriptive comparison of the standards (e.g., pensions (Needles et al., 1991), foreign currency translation (Mehta and Thapa, 1991), software costs (Scarborough and Sakurai, 1993), leases (Vergoosen, 1992), and segment reporting (Ahadiat and Stewart, 1992)). This method provides for a discussion of the similarities and differences in the current standards. Studies also document how

standards are set within a country or countries. For example, Gorelik (1994) compares Canada, the UK, and the US to determine if current standards are becoming more aligned with each other.

Another approach used to research country harmonization has used factor analysis. This technique groups or clusters countries based on the similarities of the accounting practices that comprise the countries' national accounting systems. Frank (1979), Nair and Frank (1980, 1981), McKinnon and Janell (1984), Doupnik and Taylor (1985), Doupnik (1987), Salter et al. (1994), and Rahman et al. (1996), each evaluated the commonalities and deviations among accounting standards allowed by various countries. Most of these studies used factor analysis to cluster countries based on the similarities of the accounting practices they allow.

Research comparing the harmonization of practices used by companies from different countries has been limited (Evans and Taylor, 1982; van der Tas, 1988; Emenyonu and Gray, 1992; Herrmann and Thomas, 1995; Emenyonu and Gray, 1996). These studies have used the annual reports from companies headquartered in different countries to determine the level of harmony between various accounting practices.

Evans and Taylor specifically addressed the compliance of companies with five IASC standards. They used annual reports from the UK, US, Japan, France, and West Germany. Nine or ten companies per country were included in the sample. The reports covered the years 1975–1980. The analysis consisted of computing the percent of compliance with each IASC standard by year. No statistical tests were performed to determine if there were any significant changes in compliance between years.

Evans and Taylor reported that the percent of compliance by year did not appear to change for most of the standards investigated. This led the authors to imply that no harmonization has occurred. However, it may not imply a lack of harmony. For many of the standards companies were in compliance prior to the issuance of the statement. For others, the level of compliance depended on the country. Some countries' companies' compliance increased while other countries' companies' compliance decreased. Evans and Taylor made no comment regarding what influenced the changes in compliance. That is, whether it was a country specific standard or the IASC standard. They concluded that the IASC standards have had little impact on the use of accounting practices.

van der Tas (1988) introduced the use indices, which he adapted from industrial economic applications, as an operational measure of harmony. These indices measure the degree of concentration or consensus around a particular practice. The H index may be used to determine the level of concentration, within a country, for a particular accounting method. An index of one indicates pure monopoly or in the case of accounting practices uniformity, all companies choose the same method. This index is calculated as follows:

$$H = \sum_{i=1}^n p_i^2$$

where p_i is the relative frequency of accounting method i and n is the number of alternative accounting methods.

The relative frequency of use for a method is the percent of companies within a country (sample) using that practice. The index will increase when there is more use for one or a

limited number of alternatives. This occurs because high frequencies have more weight in the calculation than low frequencies. As an example, assume two methods are acceptable for a certain transaction. If 80 percent of the companies select method A and 20 percent apply method B, the H index will equal 0.6800 or $(0.80^2 + 0.20^2 = 0.6800)$.

van der Tas modified the H index to measure the concentration of use for companies from more than one country. The I index, measures the level of comparability for accounting practices used by companies from across countries. For two countries this index is calculated as follows:

$$I = \sum_{i=1}^n (f_{i1}f_{i2})$$

where f_i is the relative application frequency of method i in country 1 (or 2) and n is the number of alternative accounting methods.

As an example of this calculation, assume two countries and two accounting methods. If 80 percent of the companies in country 1 use method A and 20 percent use method B, and if 70 percent of the companies in country 2 use method A and 30 percent use method B, the I index will equal 0.6200 $[(0.80 \times 0.70) + (0.20 \times 0.30) = 0.6200]$.

To compute the level of concentration between more than two countries the formula is adjusted further as follows:

$$I = \left[\sum_{i=1}^n (f_{i1}f_{i2} \dots f_{im}) \right]^{1/(m-1)}$$

where f_i is the relative frequency of method i in country 1 to country m , n is the number of alternative accounting methods, and m is the number of countries.

van der Tas illustrated how these indices could be used to indicate trends in companies' use of accounting practices. One example he presented used *Accounting Trends and Techniques*, published by the American Institute of Certified Public Accountants. van der Tas calculated the H index for investment tax credit, deferral or flow-through method. Graphing the H index by year, he presented a discussion of how the index increased (more companies began using the flow through method, between 1965 and 1984).

Since van der Tas' article, several studies have used these indices to determine the level of harmony at a particular point in time, Emenyonu and Gray (1992, 1996) and Herrmann and Thomas (1995). Overall, their results have indicated that the level of harmony, based on the I index, differs depending on the accounting practice being analyzed. Emenyonu and Gray (1996) demonstrate the usefulness of examining the I index at two points in time.

Tay and Parker (1990) in a review of harmonization studies, stated that the comparison of accounting practices and monopoly industries has "intuitive appeal." They maintain that the indices are a useful method of tracing changes in harmony over time. One drawback, which Tay and Parker commented on, is that statistical tests of significance have not been developed to determine when an index indicates that harmony exists. That is, does the H or I index have to equal one to indicate that harmony has been achieved. Is an index of 0.9 equivalent to 1?

Harmony has been defined by Tay and Parker (1990, p. 73) as

a state indicated by a clustering of companies around one or a few available methods . . . any point on the continuum between the two states of total diversity and uniformity, excluding these two extremes.

If harmony is defined as a consensus among a few methods then neither the *H* index nor *I* index need to equal one to indicate harmony. While the index alone may not indicate harmony, analysis of the trend in the indices should provide evidence of harmonization.

Harmonization has been defined in previous studies as:

the coordination of pre-existing rules of a different and sometimes conflicting nature (Van Hulle, 1989),

a process of increasing the comparability of accounting practices by setting bounds to their degree of variation (Nobes, 1991),

(a process) is a movement away from total diversity of practice (Tay and Parker, 1990).

As these definitions indicate harmonization is a process. Harmony is a state, which will also be referred to as a level. When the degree of concentration for an accounting method increases the state of harmony increases and harmonization has occurred. The term disharmonization may be used to refer to decreases in the level of harmony over time.

Using van der Tas' indices, inter-country harmonization increases when the choices made between alternative methods become concentrated. The *I* index, as a measure of concentration, will indicate if there is a preference among companies from two or more countries for a particular accounting method. Changes and trends in the *I* index may be evaluated over time to determine if harmonization has occurred. Greater concentration for an accounting method will result in an increasing *I* index, which means that harmonization has occurred. Statistical methods for determining trends can then be utilized to determine if the trend is positive over time. None of the previous studies of accounting harmony have evaluated the consecutive year-to-year level of harmony using data of actual accounting practices used by companies. A consecutive analysis of specific measurement practices will identify the direction and progress of harmonization as a process.

METHODOLOGY

Data Sample and Selection

Data was obtained from the Worldscope database. The February 1997 release was used to gather the sample data. The data contained in the records consist of historical and current financial data, ratios, company profiles, stock price information, and accounting practices. The accounting practices section contains data on 33 practices over a 10-year period. For example, the database includes variables such as the accounting method used for depreciation, goodwill, research and development, and inventories.

H Index Trends

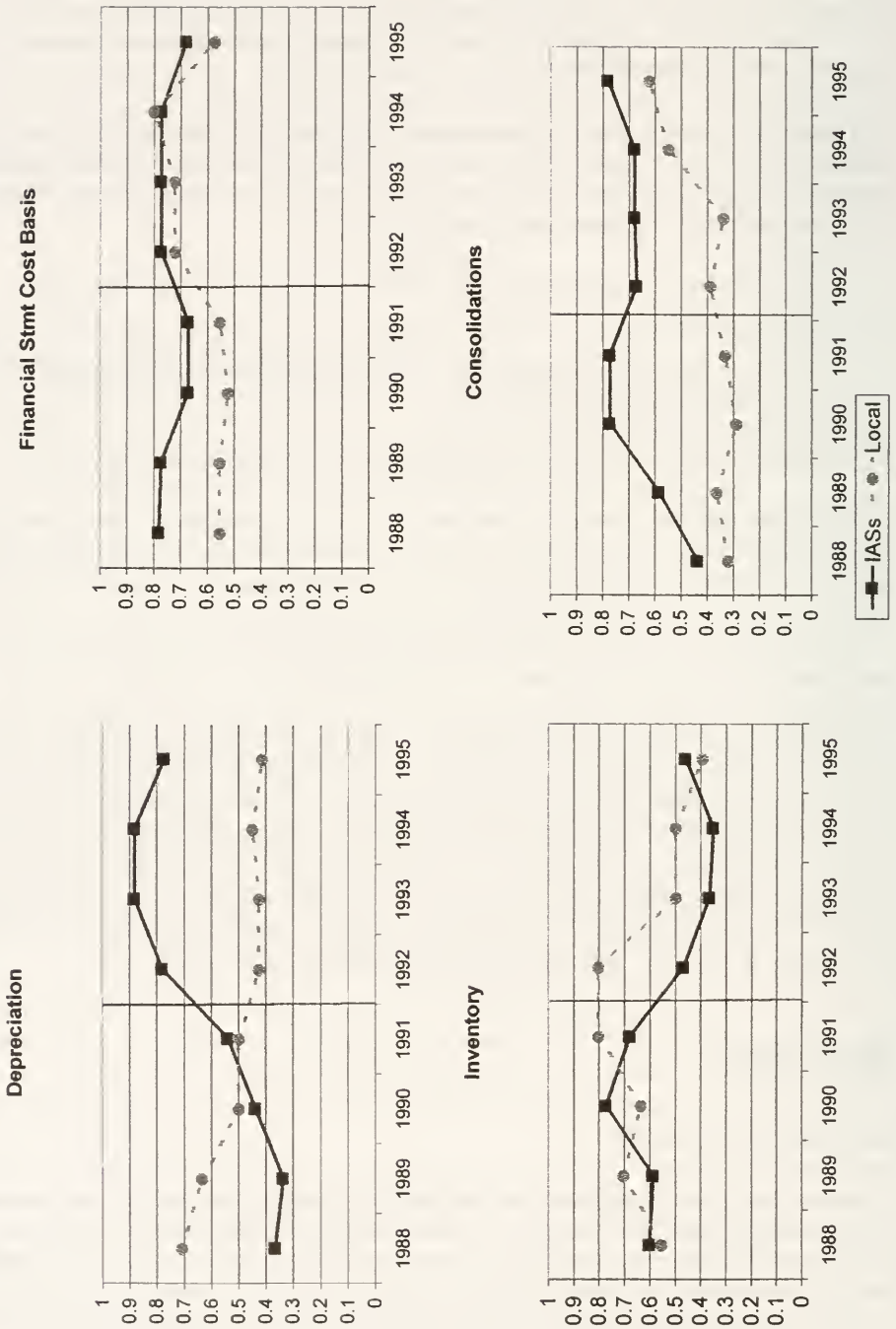


Figure 1

Table 1. Comparison of *H* Indices Spearman Correlation Results

	<i>Index 1988</i>	<i>Index 1995</i>	<i>Correlation</i>	<i>p value</i>
Depreciation				
Swiss IASs	0.36719	0.77344	.90529	.0020***
Swiss local	0.70988	0.41358	-.88330	.0036***
Inventory				
Swiss IASs	0.60156	0.46094	-.69937	.0535 *
Swiss local	0.55556	0.39506	-.49661	.2106
Financial statements				
Swiss IASs	0.78125	0.67969	-.17038	.6867
Swiss local	0.55556	0.57407	.58847	.1249
Consolidations				
Swiss IASs	0.58594	0.78125	.62375	.0984*
Swiss local	0.36420	0.62346	.79192	.0192**

* Significance level: $p < .10$.** Significance level: $p < .05$.*** Significance level: $p < .01$.

The set of accounting procedures that form national accounting systems present a vast array of potential practices that could be included in the study. In order to test for harmony the accounting procedures selected had to provide a subset of methods that were common among each of the countries included in the study. Inclusion of an accounting practice, which did not consist of a subset of common practices, would bias the results toward finding total diversity and/or no harmonization. Each of the following procedures selected met these criteria: depreciation, inventory cost method, financial statement cost basis, and consolidation of investments greater than 50 percent.

In order to determine if the adoption of IASs has increased the level of harmony it was important to gather data before as well as after the change in standards. In order to perform the statistical tests it is important to have as many pre- and post-adoption years as possible. As mentioned above, the Worldscope database provides historical information for a 10-year period, although in some cases the information contained does not cover the entire period. Using an adoption date of 1992 provided pre-change data to be collected from 1988 to 1991 to provide an indication of practices used when reporting under Swiss accounting practices. This also provided a 4-year sample of accounting practices used on and after the adoption of IASs. Complete data was available for 16 Swiss companies who adopted IASs in 1992 and had a fiscal year-end of 1995.

A control sample of Swiss companies using local (Swiss) accounting standards was used in order to determine if the change in harmony among the Swiss IASs companies was a result of the change to IASs. Complete data was available for 18 Swiss companies who used local standards throughout the time period of interest. A random sample of 20 US companies, 25 UK companies, and 25 Japanese companies were also gathered. These were used to determine if the adoption of IASs increased the level of international harmony.

Appendix A (Table A1) lists the companies included in each sample along with the SIC codes, average assets, and average sales. Assets and sales reported are averaged over the

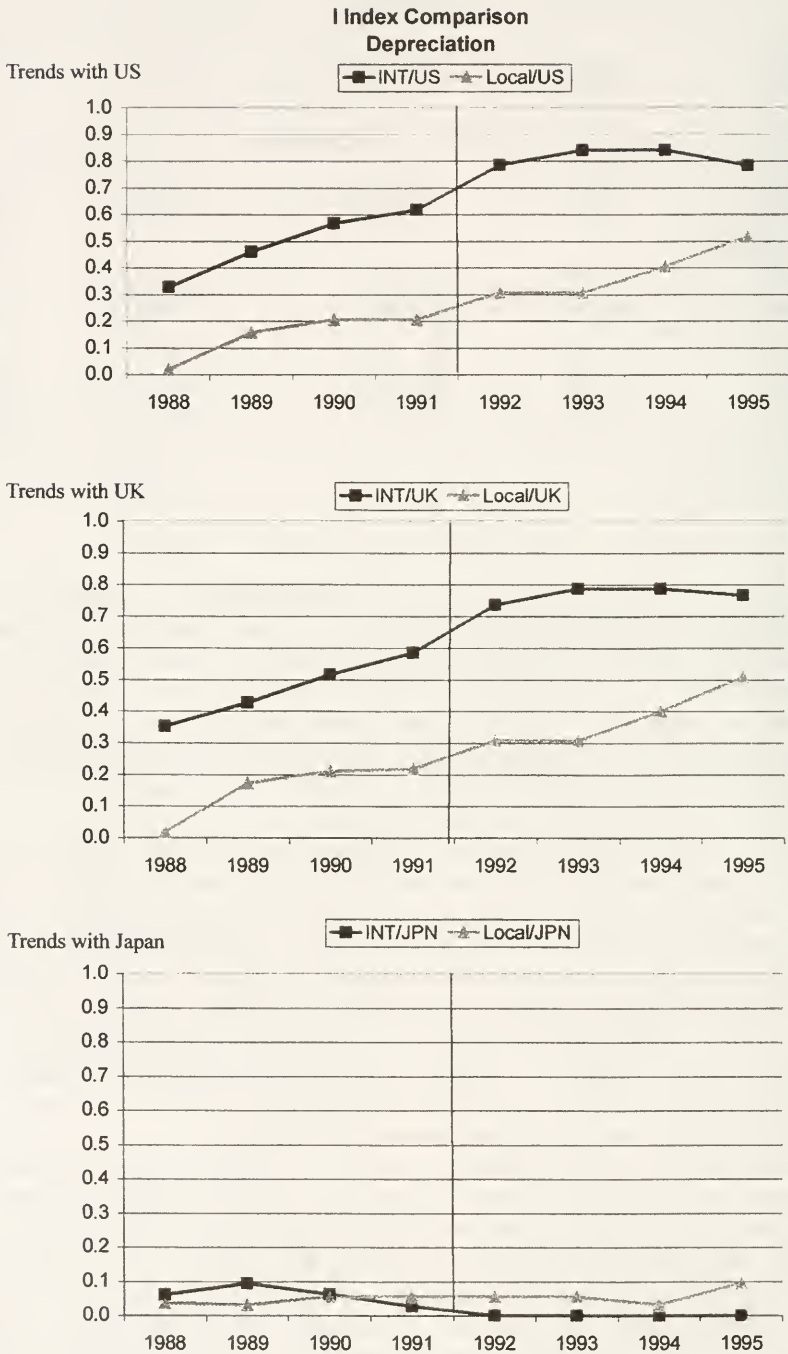


Figure 2

Table 2. Depreciation / Indices

	<i>Index 1988</i>	<i>Index 1995</i>	<i>Correlation</i>	<i>p value</i>
Swiss IAS and US	0.32710	0.78595	.92710	.0009***
Swiss local and US	0.01814	0.51523	.97223	.0001***
Swiss IAS and UK	0.35301	0.76849	.94984	.0003***
Swiss local and UK	0.01690	0.50745	.96800	.0001***
Swiss IAS and Japan	0.06098	0.00200	-.86714	.0053***
Swiss local and Japan	0.03669	0.09388	.58563	.1272
Swiss IAS and all three	0.10930	0.08867	-.69983	.05330*
Swiss local and all three	0.08543	0.11521	.66135	.0741

* Significance level: $p < .10$

*** Significance level: $p < .01$.

fiscal years 1993 to 1995. Averages are reported since the study examines accounting practices used over an 8-year period. Although the accounting practices examined cover an 8-year period, Worldscope does not provide financial data for more than a 5-year period. A comparison of the companies using the 5-year financial statistics is hampered since the data are reported in the home country currency. Worldscope does provide 3 years of some financial data in US dollars. This is the information that was used for the descriptive statistics.

Table A2 in Appendix A summarizes the descriptive statistics for the sample. The majority of the sample companies were listed on a major stock exchange within their home country. Only one of the companies, a Swiss company using IASs, in the sample was listed on an exchange outside of their home country. The two-digit SIC codes cover 19 different industry categories. Each country sample includes companies from at least 7 and up to 11 different industry classifications.

Appendix B includes Tables B1–4 that summarize the accounting practices used by each sample of companies.

Hypotheses

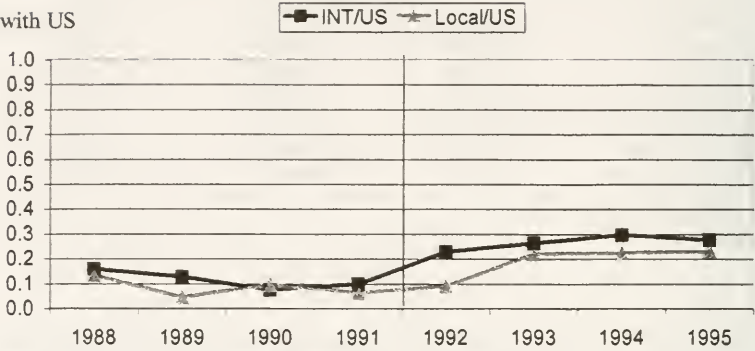
Two series of tests will be utilized to determine if the adoption of IASs by companies in Switzerland has increased harmonization. The H index, a measure of the degree of concentration for the use of a particular accounting practice, will be calculated over the 8-year period for each sample. Hypothesis 1 will examine whether or not the level of comparability among the sample group of Swiss companies has changed. As discussed this period includes 4 years of using local standards and 4 years of using IASs.

H₁: There is no association between the year and the level harmony, as measured by the H index, for the 8-year period 1988–1995.

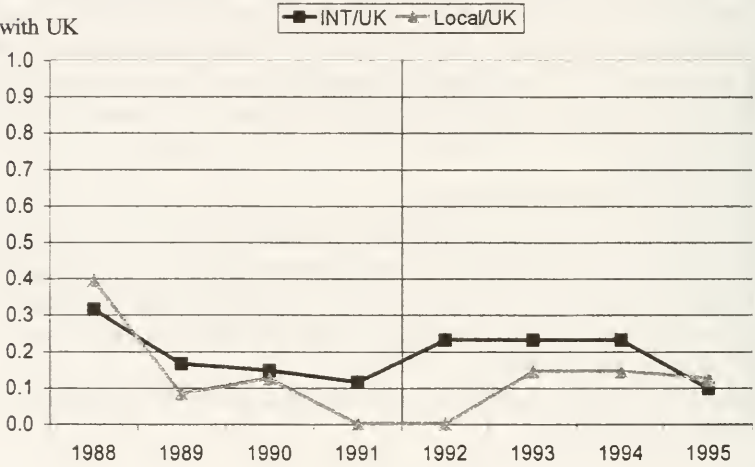
Hypothesis 1 will be tested using the Spearman correlation coefficient. This statistic may be used to test for trend between a bivariate sample of (X_i, Y_i) pairs. For this study X_i is the fiscal year-end and Y_i is the H index. Rejection of Hypothesis 1 will imply that the level of harmony between companies has changed. An increasing trend will indicate that

I Index Comparison Inventory

Trends with US



Trends with UK



Trends with Japan

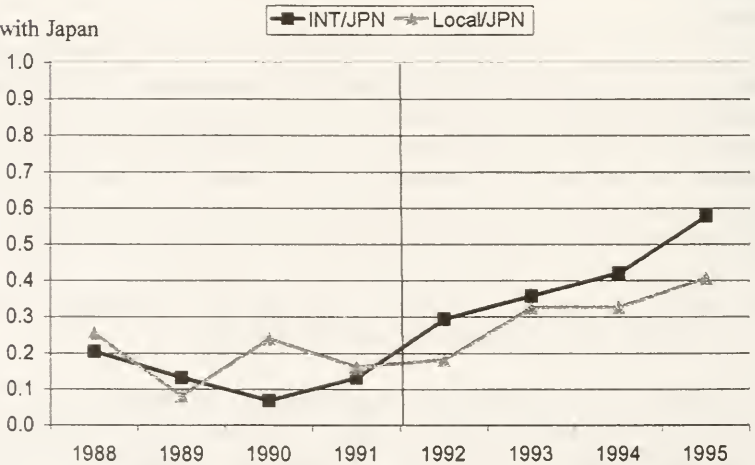


Figure 3

Table 3. Inventory / Indices

	<i>Index 1988</i>	<i>Index 1995</i>	<i>Correlation</i>	<i>p value</i>
Swiss IAS and US	0.15880	0.27840	.79992	.0171**
Swiss local and US	0.13129	0.22980	.75486	.0304**
Swiss IAS and UK	0.31544	0.09980	-.32195	.4368
Swiss local and UK	0.39450	0.12475	-.36042	.3805
Swiss IAS and Japan	0.20340	0.57864	.86009	.0061***
Swiss local and Japan	0.25435	0.40412	.70794	.0494**
Swiss IAS and all three	0.38932	0.13124	-.79429	.0185**
Swiss local and all three	0.41939	0.14013	-.64660	.0832*

* Significance level: $p < .10$.

** Significance level: $p < .05$.

*** Significance level: $p < .01$.

harmonization has occurred. A decreasing trend will indicate that disharmonization, movement toward total diversity has occurred.

The sample of Swiss companies' using international standards will also be compared with a sample of companies, from the US, UK, and Japan, using their domestic accounting standards. The *I* index, a measure of concentration for the use of accounting practices between more than one sample of companies, will be used to determine if the use of international standards increases the comparability with local standards of these other countries.

H₂: There is no association between the year and the level international harmony, as measured by the *I* index, for the 8-year period 1988–1995.

RESULTS

Hypothesis 1

The *H* index was calculated for each sample of Swiss companies; Swiss IASs and the Swiss control sample, for the 8-year period. The results are displayed graphically in Fig. 1. The numerical results of the Spearman correlation tests are summarized in Table 1.

Hypothesis 1 addressed whether or not the comparability within the sample of companies adopting IASs has harmonized. The results for depreciation indicate that the adoption of IASs has increased the level of harmony for this sample of companies. The depreciation *H* index had a statistically significant positive correlation over the 8-year period. The control sample had a statistically significant negative correlation, indicating less agreement for depreciation method used. For this accounting practice it can be concluded that the adoption of IASs has increased the level of harmony among the sample companies.

This is not the case with any of the other accounting practices examined. Inventory experienced the opposite affect that is disharmonization occurred. The *H* index had a

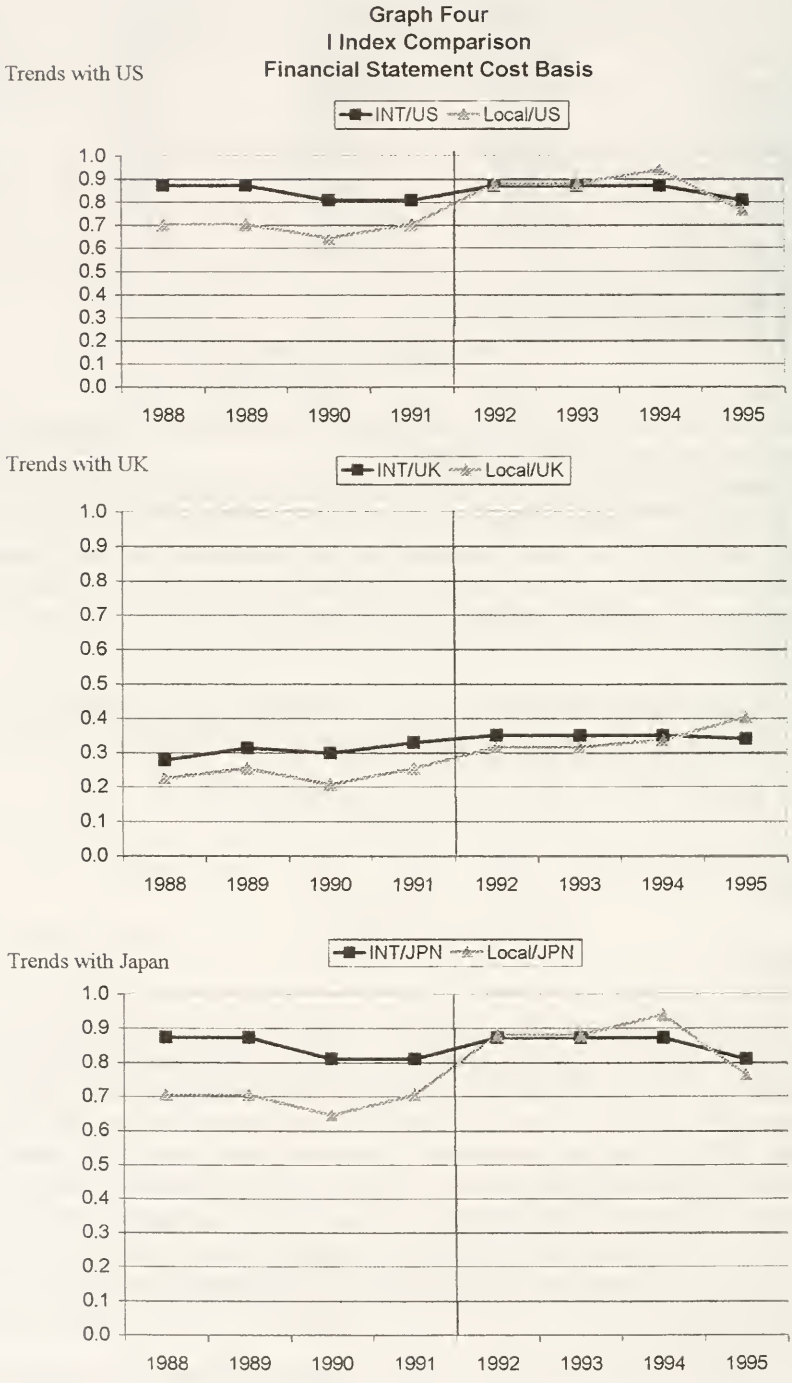


Figure 4

Table 4. Financial Statement Cost Basis / Indices

	<i>Index 1988</i>	<i>Index 1995</i>	<i>Correlation</i>	<i>p value</i>
Swiss IAS and US	0.87313	0.81087	-.16776	.6913
Swiss local and US	0.70418	0.76318	.66891	.0697*
Swiss IAS and UK	0.27949	0.34313	.85851	.0064***
Swiss local and UK	0.22554	0.40271	.91308	.0015***
Swiss IAS and Japan	0.87313	0.81087	-.16776	.6913
Swiss local and Japan	0.70418	0.76318	.66891	.0697*
Swiss IAS and all three	0.65285	0.63690	.04855	.9091
Swiss local and all three	0.60769	0.62414	.57394	.1368

* Significance level: $p < .10$.

*** Significance level: $p < .01$.

statistically negative association with year. This was not the case for the control group. The *H* index for the control group decreased however the changes were not statistically significant. The changes in the index were primarily created as the companies went from not disclosing the inventory method used to disclosing the method used. Therefore, while the trend in the index is negative the sample did increase disclosure of this practice.

The *H* index for financial statement cost basis, for either group, did not change significantly. The majority of the company's report using historical cost, while a few companies have begun using price level adjustments.

For consolidation, both samples had statistically significant increases in the *H* index as the majority of the company's began to consolidate all subsidiaries. Therefore, the positive increase in the level of harmony cannot be attributed solely to the adoption of IASs.

In summary, tests for Hypothesis 1 indicate that harmonization did occur among depreciation methods utilized, but disharmonization resulted as more companies began to disclose inventory practices. The adoption of IASs did not result in any changes to the level of harmony for financial statement cost basis nor could it be determined that it is the only factor that created the positive trend for consolidation methods used.

Hypothesis 2

Hypothesis 2 examines whether or not the level of international harmony, the *I* index, for the sample of Swiss companies has increased when compared with a sample of companies from the US, the UK, and Japan.

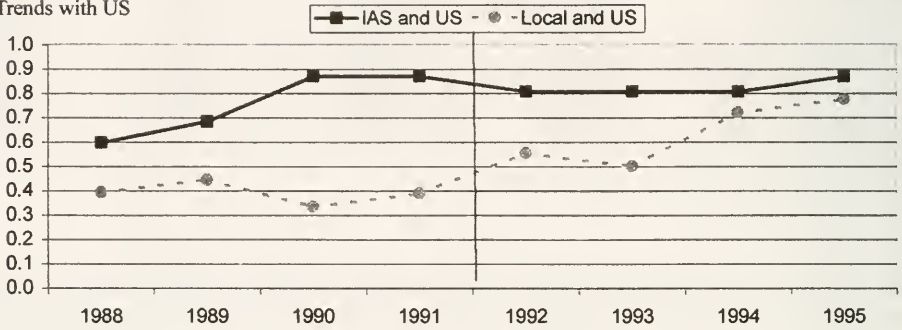
Depreciation

The trend in the *I* indices are displayed in Fig. 2. The results of the Spearman correlations are summarized in Table 2.

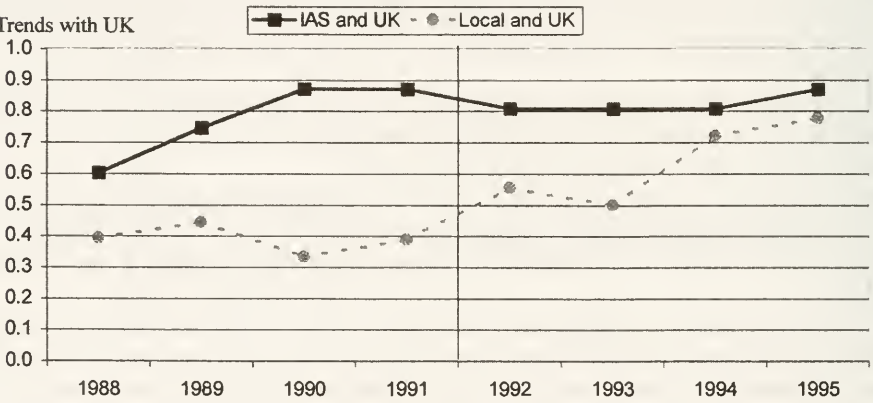
There is no indication that just the adoption of IASs has increased the comparability of depreciation methods used by the Swiss samples and the sample of companies from

I Index Comparison Consolidation

Trends with US



Trends with UK



Trends with Japan

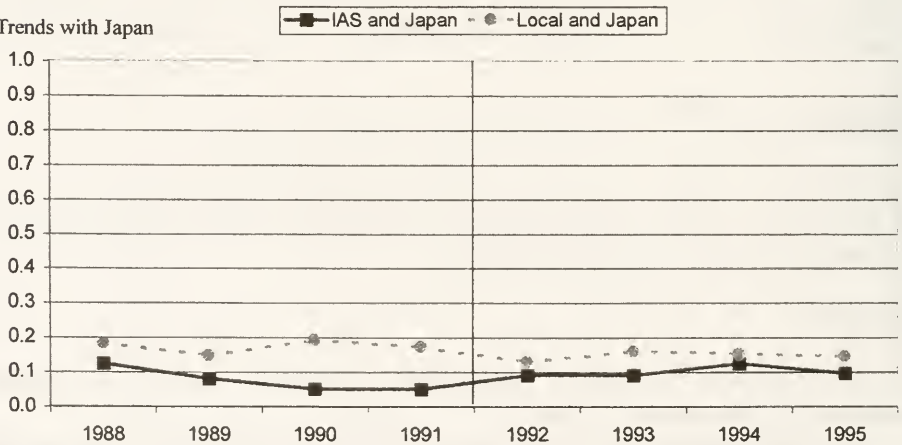


Figure 5

Table 5. Consolidation / Indices

	<i>Index 1988</i>	<i>Index 1995</i>	<i>Correlation</i>	<i>p value</i>
Swiss IAS and US	0.59760	0.87150	.67222	.0678*
Swiss local and US	0.39389	0.77567	.85634	.0066***
Swiss IAS and UK	0.60258	0.87150	.62641	.0966*
Swiss local and UK	0.39278	0.77567	.85711	.0065***
Swiss IAS and Japan	0.12579	0.09936	.21231	.6137
Swiss local and Japan	0.18300	0.14600	-.52685	.1797
Swiss IAS and all three	0.08663	0.40943	.85939	.0062***
Swiss local and all three	0.08828	0.39381	.86056	.0061***

* Significance level: $p < .10$.

*** Significance level: $p < .01$.

the other three countries. Both Swiss samples' *I* indices had statistically significant increases when compared to the sample of US and UK companies. There is a statistically significant decrease in the level of the *I* index between the Swiss IASs sample and the Japanese sample. The Japanese companies typically choose accelerated or mixed depreciation methods, while the majority of the companies in the other countries use straight-line. Therefore, as some of the Swiss IASs group shifted from using mixed to straight-line depreciation the *I* index between the Swiss IAS and Japanese companies decreased.

Inventory

Fig. 3 illustrates the changes in the indices for inventory over the time period examined, while Table 3 summarizes the results of the Spearman correlations.

As mentioned in the discussion of Hypothesis 1, in 1988 the majority of the Swiss companies did not disclose inventory practices. Over this time period more of the IASs sample began to disclose while only some of the Swiss control sample disclose (the majority of the control sample still do not disclose inventory practices). Since there are many acceptable inventory methods, it is not uncommon to find limited agreement among the companies or countries. The majority of the US companies choose FIFO, the majority of the Japanese use mixed and the UK companies typically do not disclose. The *I* indices with the US and Japanese samples for both the IASs and control groups had a statistically significant positive correlation. Therefore, while harmonization had occurred, it cannot be concluded that the IAS adoption improved the comparability. Neither group had a statistically significant correlation with the UK sample.

Financial Statement Cost Basis

The majority of the companies in both Swiss samples report their financial statements using historical cost. This is the same method required in the US and Japan. In 1988, more of the control group did not disclose the method used. As the Swiss companies either (1) began to disclose or (2) began to use price level adjustments, the *I* index decreased

Table 6. Summary of Overall Results*Hypothesis 1: Level of comparability within sample*

Depreciation	IASs: harmonization
Inventory	IASs: disharmonization
Financial statement cost basis	no significant changes
Consolidation	both: harmonization

Hypothesis 2: Level of comparability with companies from other countries

	US	UK	Japan
Depreciation	both: harmonization	both: harmonization	IASs: disharmonization
Inventory	both: harmonization	no significant changes	both: harmonization
Financial statement cost basis	control: harmonization	both: harmonization	control: harmonization
Consolidation	both: harmonization	both: harmonization	no significant changes

slightly, but the trend for the Swiss IASs sample was not statistically significant. On the other hand, the local Swiss companies began to report the use of historical cost, until 1995 when four of the companies shifted to using price level adjustments. The use of historical cost was consistent with the US and Japanese companies and there was a statistically positive correlation.

The statistically positive correlation with both Swiss samples and the UK resulted as more of the Swiss companies disclosed the practices they used. The majority of the UK companies make price level adjustments, however, some of the sample use historical cost. Therefore, there is increasing comparability with the UK companies even as the Swiss use historical cost. The shift in 1995 increases the control sample's *I* index higher than the Swiss IASs sample in that year. Since both of these samples had statistically significant correlations it is not possible to conclude that the result was due to the adoption of the IASs.

The indices are displayed graphically in Fig. 4. Table 4 summarizes the results of the Spearman correlation.

Consolidation

The *I* indices trends are illustrated in Fig. 5 and the results of the Spearman correlations are reported in Table 5.

Both the IAS sample and the control sample *I* indices had statistically significant positive correlations when compared with the US and UK samples. In 1988, the majority of the IASs sample consolidated all subsidiaries, while the Swiss control group methods were fairly dispersed, no one method dominated, although most either consolidated all or provided no consolidations. Companies from both samples increased the practice of consolidating all subsidiaries, which is the required practice for the US and UK companies. As Fig. 5 depicts, both indices increased; however, the Swiss control sample's *I* index is about as high as the Swiss IAS index in 1995. The Japanese companies use a variety of practices, the majority consolidate all, however some only consolidate significant subsidiaries using either the equity or cost methods.

The *I* index decreased over the time period examined as the Swiss samples began to consolidate all subsidiaries. The negative trend was not statistically significant.

SUMMARY AND CONCLUSION

This study examined the impact of using IASs on the comparability of four accounting practices. Overall, there was little evidence that the adoption of IASs was the primary factor in increasing the level of harmony. Table 6 summarizes the results of the hypotheses for each accounting practice. While a majority of the tests indicate that harmonization has occurred, it could not be determined that these changes were the result of using IASs.

When compared within the country (*H* index), the Swiss sample that adopted IASs did have harmonization for depreciation method. However, there was a loss of comparability, disharmonization, for inventory practices. Prior to the comparability project the IASC efforts were directed at establishing standards and disclosure practices. From 1988 to 1995, the IASC sample of companies moved from not disclosing inventory practices to all companies disclosing. Thus, when inventory practices is listed there is less agreement, however it could be argued that comparability has been increased because more information is available to the user of financial statements.

The comparisons with companies from different countries indicate that the Swiss companies have increased the level of harmony over the time period examined. Seven of the twelve comparisons indicated a statistically significant positive increase in the *I* indices between both Swiss samples and the other countries' samples. Overall, this is a positive indication that company reporting is becoming more comparable. However, the results do not support the hypothesis that this was due solely from the adoption of IASs.

One possible limitation might be that some of the Swiss control companies may have adopted IASs after 1995. The sampling methodology only examined the accounting practices applied during the 8-year period. The samples selected had fiscal year-ends of 1995, which was the most current available on the February 1997 Worldscope release. No follow up was conducted to determine if any of the control groups switched to IASs after 1995. As many of the indices' graphs indicate the changes do not specifically occur in the year of adoption. If this were the case, a trend line would shift in 1992 only. However, many of the lines appear to be increasing, or decreasing, prior to the year of adopting IASs. It could be that in anticipation of adopting the IASs the companies begin to disclose practices or choose methods that were in compliance with the IASs.

Another possibility is that the control group, while not adopting the IASs, is aware of a need to provide users of financial statements with relevant information. Therefore, the control sample might be consciously choosing methods and increasing disclosure to become more comparable with companies from other countries. This would be what van der Tas (1988) refers to as spontaneous harmonization. An increase in the level of harmony that is not created by the issuance of new standards or controls, rather it is created by the choices companies make. In either case, the results indicate that financial reporting practices of the Swiss companies have become more aligned with companies from Japan, the UK, and the US.

APPENDIX A

Table A1. List of Sample Companies by Country

<i>Company name</i>	<i>SIC code</i>	<i>Average assets</i>	<i>Average sales</i>
Swiss using IASs			
Daetwyler Holding	5065	620,151	542,384
Danzas Holding	4499	1,930,694	3,285,741
Holderbank Financiere Glarus	3241	10,303,199	6,600,943
Immuno International	2836	738,229	482,739
Jelmoli Holding	5311	1,091,949	1,287,674
Keramik Holding Laufen	3253	1,003,187	581,575
Oerlikon-Buehrle Holding	3563	4,025,102	2,593,053
Sandoz	2834	15,418,200	11,837,040
Sihl-Zuercher Papierfabrik	2621	435,039	455,991
Sika Finanz	3241	846,514	1,016,760
Sukzer	1542	5,281,471	4,691,018
Ascom Holding	4810	2,060,470	2,337,360
Tecan	3826	41,917	59,373
Zschokke Holding	1531	676,282	674,207
Biber Holding	2621	988,808	546,025
Bossard Holding	5084	172,344	190,803
Swiss using local			
UMS Schweiz. Metallwerke Holding	3341	341,360	262,149
Vetropack Holding	3221	407,735	298,291
Vontobel Holding	6021	1,334,109	183,181
Bell	2011	358,636	739,343
Bobst	3555	1,111,762	804,182
Accumulatoren-Fabrik Oerlikon	3691	84,465	66,171
Bucher Holding	3523	749,696	673,607
Feldschloesschen-Huerlimann Holding	2082	1,360,503	654,144
Agie Charmilles Holding	3541	237,961	210,049
H.A. Schlatter	3548	143,377	124,191
Huegli Holding	2099	122,943	126,378
Huerlimann Holding	2080	600,818	154,754
Industrieholding Cham	2621	405,520	359,522
Orell Fuessli Graphische Betriebe	2759	109,515	78,740
Perrot Duval Holding	3621	35,644	45,571
Schindler Holding	3534	2,775,228	3,576,843
Scintilla	3541	403,575	621,314
Sibra Holding	2082	387,978	172,712
US			
Ben and Jerry's Homemade	2024	119,243	148,154
Amgen	2836	2,064,157	1,653,882
Allied Research	3483	121,743	94,238
Adaptec	3577	480,223	499,262
Augat	3670	360,437	495,281
Bairnco	3670	102,983	143,662
Burr-Brown	3674	179,106	210,645
Aero Systems Engineering	3724	24,157	26,380
Arvin Industries	3714	1,264,833	1,981,867

(continued)

Table A1. (Continued)

<i>Company name</i>	<i>SIC code</i>	<i>Average assets</i>	<i>Average sales</i>
Boeing	3721	21,296,667	22,292,333
American Power Conversion	3823	256,907	381,285
Culp	2221	190,530	301,581
Cincinnati Milacron	3541	904,767	1,291,933
Deere and Company	3523	11,993,067	9,024,600
EA Industries	3570	34,077	44,549
Cobra Electronics	3663	48,361	90,472
Computer Products	3620	114,245	156,656
DSC Communications	3660	1,344,743	1,051,972
Daniel Industries	3820	176,624	184,192
Everest & Jennings International	3842	55,771	82,841
UK			
Greene King	2082	554,279	239,981
British Aerospace	3721	12,814,325	11,284,891
A. Cohen & Co.	3339	54,003	132,885
Chemring Group	3728	69,879	85,111
CML Microsystems	3670	38,885	28,822
Cookson Group	3548	1,842,355	2,219,847
Crown Eyeglass	3851	5,687	11,874
Folkes Group	3312	77,279	61,335
G.M. Firth (Holdings)	3310	22,075	33,636
Domino Printing Sciences	3577	124,419	144,932
Hepworth	3297	812,069	1,082,277
Ibstock	3251	564,557	331,201
Kalon Group	2851	276,922	345,902
Laporte	2891	1,424,657	1,461,510
RMC Group	3273	4,549,648	5,589,262
Norman Hay	3470	18,590	45,335
Metaltech International	3699	176,226	153,315
Pifco Holdings	3634	45,616	59,723
Sims Food Group	2011	106,909	414,236
Readicut International	2273	264,447	346,050
Somic	2231	5,961	6,513
Sunleigh	3949	16,870	39,809
Allied Colloids Group	2819	505,874	554,376
Avon Rubber	2820	315,129	485,920
Bilston & Battersea Enamels	3479	5,100	8,569
Japan			
Aichi Steel Works	3312	1,797,315	1,193,568
Akebono Brake Industry	3714	1,212,760	1,176,741
Banyu Pharmaceutical	2834	2,265,499	1,301,171
Calsonic	3714	1,561,533	2,437,658
Hayashikane Sangyo	2010	482,254	851,682
Fuji Spinning	2280	817,472	817,646
Descente	2329	715,825	1,041,288
Dainippon Ink & Chemicals	2893	10,698,556	8,725,279
Daido Concrete	3272	233,428	243,621
Daiwa Heavy Industry	3431	62,288	69,897

(continued)

Table A1. (Continued)

<i>Company name</i>	<i>SIC code</i>	<i>Average assets</i>	<i>Average sales</i>
Fanuc	3569	5,220,119	1,478,344
Fujitec	3534	1,070,378	657,549
Hitachi Chemical	3670	3,925,769	4,968,340
Fuji Heavy Industries	3711	7,458,370	10,895,704
Hoko Fishing	2092	485,813	1,001,215
Kagome	2086	897,188	1,131,550
Kansai Paint	2851	1,880,215	1,824,799
Kurimoto	3321	2,106,574	1,607,808
Lion	2841	2,697,747	3,166,648
Ishikawajima-harima Heavy Industries	3530	13,915,060	10,824,032
Hosiden	3678	1,143,805	1,036,910
Ichikoh Industries	3647	884,358	1,177,343
KOA	3676	358,640	389,312
Kokusai Electric	3674	1,231,918	1,536,320
Kingugawa Rubber Industrial	3714	551,977	668,064

Table A2. Descriptive Statistics

	<i>IASC</i>	<i>Swiss</i>	<i>US</i>	<i>UK</i>	<i>Japan</i>	<i>Full sample</i>
Average asset 1993-1995 [USD 000's]						
Average	2,852,097	609,490	2,056,632	987,670	2,546,995	1,789,458
Maximum	15,418,200	2,775,228	21,296,667	12,814,325	13,915,060	21,296,667
Minimum	41,917	35,644	24,157	5,100	62,288	5,100
Median	995,997	395,776	184,818	124,419	1,212,760	528,926
Average sales 1993-1995 [USD 000's]						
Average	2,323,918	508,397	2,007,789	1,006,693	2,408,900	1,652,687
Maximum	11,837,040	3,576,843	22,292,333	11,284,891	10,895,704	22,292,333
Minimum	59,373	45,571	26,380	6,513	69,897	6,513
Median	845,484	236,099	256,113	153,315	1,177,343	520,823

APPENDIX B. SUMMARY OF ACCOUNTING PRACTICES USED

Table B1. Depreciation Methods Used

	<i>Swiss IAS</i>	<i>Swiss local</i>	<i>US</i>	<i>UK</i>	<i>Japanese</i>
1988					
ACCL	0	0	1	0	17
Mixed	3	2	3	3	8
Mixed with excess	0	15	0	0	0
ND	7	1	0	1	0
Straight line	6	0	16	21	0
Total	16	18	20	25	25

(continued)

Table B1. (Continued)

	<i>Swiss IAS</i>	<i>Swiss local</i>	<i>US</i>	<i>UK</i>	<i>Japanese</i>
1995					
ACCL	0	0	0	0	11
Mixed	0	3	2	3	14
Mixed with excess	0	0	0	0	0
ND	1	5	0	0	0
Straight line	14	10	18	22	0
Straight line with excess	1	0	0	0	0
Total	16	18	20	25	25

Table B2. Inventory Methods Used

	<i>Swiss IAS</i>	<i>Swiss local</i>	<i>US</i>	<i>UK</i>	<i>Japanese</i>
1988					
Average	0	0	1	0	7
FIFO	1	0	11	4	0
LIFO	0	0	1	0	0
Mixed	3	3	7	5	17
Current	0	1	0	3	0
Other	0	0	0	1	0
NA	0	1	0	0	0
ND	12	13	0	12	1
Total	16	18	20	25	25
1995					
Average	0	0	3	0	8
FIFO	1	1	11	6	1
LIFO	0	1	1	0	0
Mixed	9	5	5	0	16
Current	0	0	0	0	0
Other	0	1	0	0	0
NA	6	0	0	0	0
ND	0	10	0	19	0
Total	16	18	20	25	25

Table B3. Financial Statement Cost Basis Methods Used

	<i>Swiss IAS</i>	<i>Swiss local</i>	<i>US</i>	<i>UK</i>	<i>Japanese</i>
1988					
HPLA	0	0	0	8	0
HC	14	12	20	17	25
CC with s HC	0	0	0	0	0
ND	2	6	0	0	0
Total	16	18	20	25	25
1995					
HPLA	2	4	0	17	0
HC	13	13	20	8	25

(continued)

Table B3. (Continued)

	<i>Swiss IAS</i>	<i>Swiss local</i>	<i>US</i>	<i>UK</i>	<i>Japanese</i>
CC with s HC	1	0	0	0	0
ND	0	1	0	0	0
Total	16	18	20	25	25

HPLA=Historical Cost with Price Level Adjustments; HC=Historical Cost; CC with sHC=Current Cost with supplemental Historical Cost; ND=Not Disclosed.

Table B4. Consolidation Methods Used

	<i>Swiss IAS</i>	<i>Swiss local</i>	<i>US</i>	<i>UK</i>	<i>Japanese</i>
1988					
All	10	7	19	24	17
Cons. Sig. w eq	2	2	0	0	5
Cons. Sig. E cost	2	0	0	0	2
Domestic only	0	1	0	0	0
No cons.	2	7	0	0	1
Cons. Ex/financial	0	0	1	0	0
NA	0	1	0	1	0
Total	16	18	20	25	25
1995					
All	14	14	20	25	2
Cons. Sig. w eq	2	1	0	0	6
Cons. Sig. E cost	0	2	0	0	15
Domestic only	0	0	0	0	0
No cons.	0	1	0	0	2
Cons. Ex/financial	0	0	0	0	0
NA	0	0	0	0	0
Total	16	18	20	25	25

Cons. Sig. w eq=consolidate significant with equity method; Cons. Sig. Ecost=consolidate significant with cost method; No cons.=no consolidation; Cons. Ex/financial=consolidate all except financial subsidiaries; NA=not applicable

NOTES

1. For example, the International Organization of Securities Commission (IOSCO), the European Economic Community (EEC), the Association of Southeast Asian Nations (ASEAN), the African Accounting Council, as well as other national organizations.

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Impact of Culture, Market Forces, and Legal System on Financial Disclosures

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Key Words: Financial disclosures; Culture; Legal systems; Multinationals

Abstract: This study examines the impact of legal systems (LSs) on financial disclosures by firms from different countries. The results indicate that firms from common law countries are associated with higher financial disclosures compared to firms from code law countries. The findings also reveal that cultural values have an insignificant impact on financial disclosures by firms from common law countries, and the results on firms from code law countries provide mixed signals. The results for multinationals are similar to the results for the total sample. The cultural values have no impact on financial disclosures of multinationals from common law countries, and there are mixed signals for multinationals from code law countries.

Influence of cultural environment on accounting standards and practices has been examined by several studies (e.g., Jaggi, 1975; Gray, 1988; Perera, 1989; Douppnik and Salter, 1995; Zarzeski, 1996). In 1988, Gray (1988) developed hypotheses on the association between accounting sub-cultural values and cultural dimensions developed by Hofstede (1980). He hypothesized that financial disclosures in different countries would be influenced negatively by cultural dimensions of uncertainty avoidance (UA) and power distance (PD) and positively by individualism (IND) and masculinity (MAS). Zarzeski (1996), who recently empirically tested the impact of cultural values on financial disclosures by firms from seven industrialized countries, however, argued that in addition to cultural values, market forces would also have a significant impact on financial disclosures, and her findings supported her argument. Additionally, her findings reveal that the impact of cultural values on financial disclosures by international firms is insignificant, suggesting that cultural values may not be relevant for financial disclosures by firms operating across national boundaries.

In addition to cultural values, Gray's (1988) model also suggests that institutional factors, such as legal systems (LSs), will have an influence on the development of

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accounting systems (including standards, practices, and financial disclosures). Recently, findings of studies on the development of capital markets have provided evidence supporting the significant role of LS (common vs. code law) on the development of corporate ownership, corporate capital structure, and capital markets (e.g., La Porta and Lopez-de-Silanes, 1998; La Porta et al., 1996). These findings suggest that a country's LS can be expected to have a strong impact on financial disclosures. Prior studies have indicated that financial disclosures are strongly influenced by corporate ownership, corporate capital structure and capital markets (e.g., Adhikari and Tondkar, 1992; Zarzeski, 1996; Salter, 1998). Since LSs are influenced by cultural values, it can be argued that the impact of cultural values on financial disclosures will be reflected through the country's LS and their direct impact on financial disclosures would be minimal.

In this study, we empirically test whether there are differences in corporate financial disclosures in common and code law countries, and we also evaluate whether the impact of cultural values on financial disclosures differs in these countries. Additionally, we examine the impact of cultural values on financial disclosures of multinationals from common and code law countries.

The study is based on 401 firms from six countries, belonging to common and code law countries. Financial disclosures are measured in terms of a disclosure index developed by the Center for International Financial Analysis and Research (CIFAR) (1993). In addition to variables of LS, cultural values, and multi-nationality, the following variables are included in the analysis: firm size, debt ratio, and market capitalization as a percentage of Gross Domestic Product (GDP)¹ (for impact of these factors on accounting systems, refer to Adhikari and Tondkar, 1992; Zarzeski, 1996; Salter, 1998).

The results indicate that firms from common law countries are associated with higher financial disclosures compared to firms from code law countries. The results also show that the impact of cultural values on financial disclosures in common law countries is insignificant, and there are mixed signals for code law countries. The association between cultural values and financial disclosures by multinationals from common law countries is found to be insignificant. Overall, the findings show that financial disclosures by firms from common laws countries are significantly higher compared to firms from code law countries, and that the direct impact of cultural values on financial disclosures by firms from common law countries is insignificant.

The remainder of the article is organized as follows: Part 2 presents an international financial disclosure model to explain the linkage between financial disclosures and different variables. The impact of cultural values and LSs on financial disclosures and hypotheses for the study are also discussed in this part. Part 3 presents research methodology used in this study. Results are discussed in Part 4 and Part 5 contains discussion of results and concluding remarks.

CULTURAL VARIABLES, LEGAL SYSTEMS, AND ACCOUNTING

A Model for International Financial Disclosures

The main focus of this study is to examine the impact of LSs and cultural variables on financial disclosures of firms from different countries. This impact is examined by

considering interaction among important variables relevant to financial disclosures. A model on international financial disclosures (Fig. 1) demonstrates the linkage between financial disclosures and different variables.

The model shows that socio-political and economic environments of a country influence financial disclosures through intervening variables (see for example, Cooke and Wallace, 1990; Riahi-Belkaoui, 1995, 1997; Salter, 1998; Salter and Niswander, 1995). Several institutions in a society are the outgrowth of a socio-political environment, and these institutions include LSs, family groups, social groups, educational groups, etc. Because the social institution of a LS is considered to be the most relevant for business activities (e.g., La Porta et al., 1996), we focus only on this institution in our model. Though the direct impact of cultural values on accounting systems and procedures has been extensively evaluated in the literature, the impact of LSs on accounting systems and procedures, including financial disclosures, has not yet received the attention it deserves. First, we briefly discuss the association between cultural values and accounting systems and procedures (including financial disclosures), and then we examine how a LS influences financial disclosures.

Culture Values and Accounting

Several studies have explained the impact of cultural environments on accounting systems and financial disclosures (e.g., Jaggi, 1975; Gray, 1988; Perera, 1989). Jaggi (1975) argued that the cultural environments of a country would have a strong influence on financial disclosures by firms in that country. Gray (1988) developed a model to explain the association between Hofstede's (1980) cultural dimensions and accounting sub-culture values, and developed hypotheses on their association. Gray's (1988) model made an important contribution to explain the impact of Hofstede's (1980) cultural values on the measurement and disclosure dimensions of accounting systems in different countries. This model has been used by several research studies to examine international accounting issues (e.g., Perera, 1989; Douplik and Salter, 1995; Salter and Niswander, 1995; Zarzeski, 1996).

Gray (1988, p. 11) hypothesizes that "the higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism and masculinity, then the more likely it is to rank highly in terms of secrecy." The cultural dimension of UA, which indicates the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, is associated with lower disclosure of financial information. The cultural dimension of PD, which relates to acceptance of institutional and organizational authority by individuals, suggests that high PD societies are secretive and do not encourage information sharing, which means there is a negative association between PD and financial disclosures.

The cultural dimension of IND encourages competitive environments, which suggests that these societies would be less secretive. Thus, there would an expectation of a positive association between IND and financial disclosures. The cultural dimension of MAS refers to societal preference for assertiveness, high achievement, and financial success, which means that business institutions would be much stronger in these societies, and individuals will value the achievement of goals. Thus, there will be a positive association between

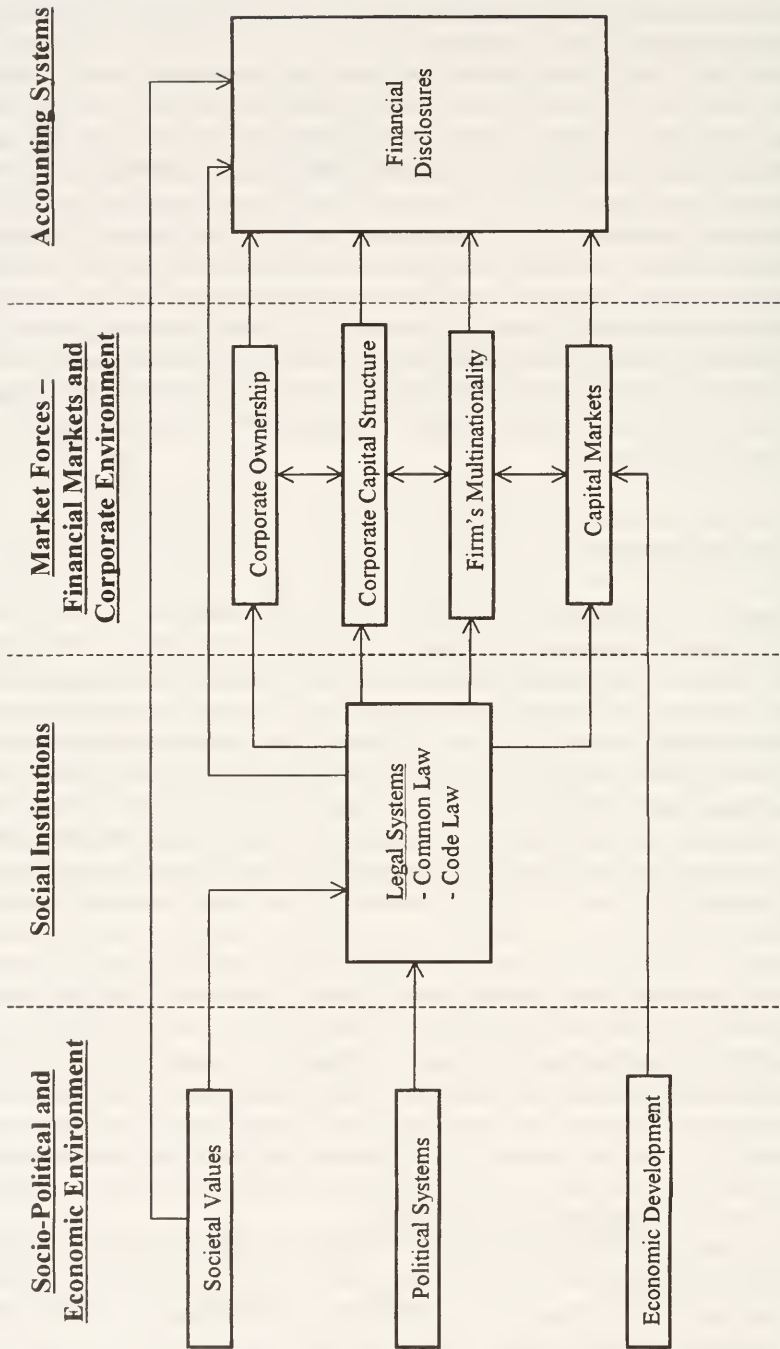


Figure 1. International Financial Disclosure Model.

MAS and financial disclosures. Gray (1988), however, considers the link between MAS and financial disclosures to be less important.

Following Gray's hypotheses, Perera (1989) argued that accounting standards based on cultural environments of Anglo-American countries would encounter problems of relevance in countries with different cultural environments. Salter and Niswander (1995, p. 394) empirically tested the impact of cultural values on accounting practices across different countries. Their findings indicate that Gray's model has a significant explanatory power, and they contend that "Gray appears to have provided a workable theory to explain cross-national differences in accounting structure and practice, which is particularly strong in explaining differential financial reporting practices." Douppnik and Salter (1995) examined whether cultural values would explain the differences in accounting systems of different countries. Their findings show that cultural values, along with other factors, play an important role in identifying the clusters of countries with similar types of accounting systems.

Recently, Zarzeski (1996) examined the impact of cultural values on financial disclosures of seven industrialized countries. She argued that in addition to cultural factors, the market forces also would influence financial disclosures. She included the variables of firm size, debt ratio, and a firm's relative foreign sales in the market forces. Her findings indicate that market forces along with three cultural dimensions (excluding PD) have a significant impact on financial disclosures. Her findings on financial disclosures by international firms, classified on the basis of their total foreign sales, reveal that the impact of cultural values is weak. Thus, she concludes that cultural values do not play a significant part in disclosure of financial information by international firms.

Zarzeski's (1996) study is the only important empirical study on the association between financial disclosures and cultural values. Her findings show that three cultural values influence financial disclosures as hypothesized by Gray (1988), but the impact of market forces is equally important for financial disclosures. In this study, we argue that cultural values may not have any direct impact on financial disclosures. Instead, their impact is reflected through the LS of the country. The International Financial Disclosures Model (Fig. 1) depicts the linkage of cultural values through LSs to financial disclosures. We also argue that the impact of cultural values would differ with the country's LS. These arguments are further explained in the next section on the Impact of LS on Financial Disclosures.

Legal Systems and Financial Disclosures

Nature of Legal Systems

Even though laws of no two nations are alike, there are similarities in certain critical aspects between LSs of some countries. Legal experts have used these similarities to classify national LSs into two major families of law. On the basis of a number of criteria, LSs of different countries have been broadly classified into civil and common law systems (for a discussion of criteria used in the classification of law systems, refer to Glendon et al., 1992; La Porta et al., 1996). The civil law countries have also been referred to as code law countries (for example, see Ball, 1998; Ball et al., 1998). We use the code law terminology in this article.

The code law, which originated in Roman law, is also known as the Romano-Germanic law. This law is based on statutes and comprehensive codes and it relies heavily on the opinions of legal scholars (Merryman, 1969). The code law countries have further been classified into three common families of code law: French-origin, German-origin, and Scandinavian-origin (for differences in these three families of law, refer to La Porta et al., 1996). The French Commercial Code, which originated under Napoleon, first spread to some European countries, and later it influenced some Asian and Sub-Saharan African and other French colonies. The German Commercial Code, which was written under Bismarck after the unification of Germany, influenced the LSs of Austria, Switzerland, Japan, Korea, and other countries. Though the Scandinavian law is usually viewed as a part of the code law tradition, the Roman influence on the Scandinavian LS is not very strong. In fact, the Scandinavian law system is considered to be closer to common law in some respects (La Porta et al., 1996).

The common law tradition started with the law of England and it includes laws that have been modeled on the basis of English law. The common law, as opposed to code law, is formed by the judges' decisions on specific disputes. Precedents from these judicial decisions thus provide the basis for this law. The United Kingdom and old British colonies, including the United States, Canada, Australia, India, etc., belong to common law countries.

Differences in the nature of common and code laws have been highlighted by Zweigert and Kotz (1987) in the following words (quotation from La Porta et al., 1996, p. 10): "The tradition of the English Common Law has been one of gradual development from decision to decision: historically speaking, it is case law, not enacted law. On the Continent, the development since the reception of Roman law has been quite different, from the interpretation of the Justinian's *Corpus Iuris* to the codification, nation by nation, of abstract rules. So common law comes from the court, Continental Law from the study; the great jurists of England were judges, on the Continent Professors."

Impact of Legal Systems on Financial Disclosures

LSs can either directly or indirectly influence financial disclosures. A typical example of direct influence is the development of Companies Acts or accounting regulations, which prescribe general requirements for measurement and disclosure of accounting information. The measurement and disclosure policies can also be influenced through tax laws, especially in code law countries.

The LSs also influence financial disclosures indirectly through legal protection rights provided to investors and creditors, which have been examined by La Porta et al. (1996, p. 32). They argue that "when investors have relatively few legal rights, then managers can be induced to return the money to these investors if one, or a very small number of investors own the majority of shares." On the other hand, a strong legal protection provided to investors would encourage small investors to enter the stock market, and consequently, there will be a wider dispersion of ownership in these countries. Their analysis reveals that "relatively speaking, common law countries protect investors the most, and French civil law countries protect them the least. German civil law countries are in the middle, though probably closer to the civil law group (p. 27)". Their empirical findings support their argument that strong legal protection provided to investors by

common law countries has resulted in a greater dispersion of corporate ownership in these countries. Additionally, they conclude that the common law countries also offer better legal protection to creditors. They argue that with better protection for creditors, firms in common law countries have better borrowing capabilities, and thus have higher debt financing.

Given a strong impact of LSs on corporate ownership and debt financing, as evidenced by the La Porta et al.'s (1996) findings, we argue that the LS also has a significant influence on financial disclosures. Because investors' and debt holders' information needs to play an important role in financial disclosures, a widely dispersed ownership and a high level of debt financing in common law countries would place heavy demand on firms for detailed financial disclosures. Moreover, the management of firms with a wide dispersion of ownership would also be more inclined to make more financial disclosures to meet information needs of diverse groups of investors. Similarly, firms with high debt financing would disclose more information to enable debt holders to monitor the observance of debt covenants. Furthermore, Ball et al. (1998) argue that information asymmetry in common law countries is likely to be resolved by timely public disclosure compared to code law countries where asymmetry is likely to be resolved by private communication between managers and agents of suppliers of labor and capital. In code law countries, firms tend to be conducted by a small number of agents and there is close relationship between agents and principals, which does not encourage disclosure of public information.

The findings of prior accounting studies also provide evidence to support the impact of LSs on the development of accounting systems and accounting rules in different countries. Meek and Saudagaran (1990), who examined the legislative process for formulation of accounting rules, argued that different LSs have different types of impact on formulation of accounting rules. They argued that in code law countries, the laws stipulate minimum requirements, and accounting rules tend to be highly prescriptive and procedural. In common law countries, on the other hand, the law establishes limits and professional judgment is required within these limits. Salter and Douppnik (1992) examined the impact of LSs on the development of accounting systems in different countries, and they hypothesized that the differences in the LSs of different countries would explain the differences in the development of accounting systems. Their results at a two-cluster level analysis indicated that the LS family correctly classified the classes of accounting system (micro or macro) for 45 out of 50 countries, i.e., with a hit ratio of 90 percent. The results of their nine-cluster analysis also indicated that the LS was a significant predictor of accounting clusters. Based on the above discussion, we test the following hypothesis:

- H1:** The level of financial disclosures by firms in common law countries is higher than that in code law countries.

Impact of Legal Systems on the Association between Cultural Values and Financial Disclosures

The second important question addressed by this article relates to direct impact of cultural values on financial disclosures in common and code law countries. We would

examine whether the association between cultural values and financial disclosures would be the same for firms from common and code law countries. As shown in the model, cultural values influence the development of a country's LS, which in turn influences the firms' ownership structure, capital structure, and development of capital markets in the country (e.g., La Porta and Lopez-de-Silanes, 1998). Because of differences in the ownership and capital structures and development of capital markets, the information needs of financial statements users would also differ in common and code law countries.

It has been argued that contracting in common law countries is done in open public markets "at arm's length" (La Porta and Lopez-de-Silanes, 1998), and this creates a higher demand for publicly disclosed information so that the market participants have sufficient information for optimal investment decisions. A greater demand for financial information would encourage greater disclosures by firms in common law countries. Thus, financial disclosures in common law countries will be more influenced by information demand rather by cultural values.

On the other hand, because of ownership concentration in the hands of fewer individuals and/or institutions in code law countries, owners would have direct access to information, and demand for publicly disclosed financial information would not be very strong in these countries. The absence of strong demand is not likely to encourage management to disclose detailed financial information publicly. Thus, financial disclosures in code law countries are not influenced by information demand. Instead, they depend upon the management's attitude toward disclosures, which may be influenced by the country's, cultural values, as suggested by Gray's (1988) model.

Based on the above discussion, we expect cultural values to have an insignificant impact on financial disclosures in common law countries. On the other hand, cultural values may influence financial disclosures in code law countries to some extent. The following tests this expectation:

- H2:** Influences of cultural values on financial disclosures by firms will be significantly less in common law countries compared to code law countries.

Other Variables in the Model

In addition to cultural values and LSs, financial disclosures are influenced by several other factors, as reported in the findings of prior studies. The impact of these factors on financial disclosures is briefly explained below.

Firm Size

Prior studies have indicated that the firm size has a strong influence on financial disclosures (Chow and Wong-Boren, 1987; Cooke, 1989, 1992; Lang and Lundholm, 1993; Wallace and Naser, 1995; Zarzeski, 1996; Low, 1998). It has been argued that large firms compared to small firms will be more motivated to provide higher financial disclosures because of the following reasons. First, large firms are likely to have a broad-based ownership, which would require more comprehensive and

detailed disclosures to meet the information needs of diverse groups of investors. Second, large firms are generally well established and they can afford to provide detailed comprehensive information without the fear of their information being misinterpreted that could result in negative investor reaction. Thus, based on evidence provided by prior studies, we expect the association between firm size and financial disclosures to be positive.

Debt Ratio

Findings of most research studies indicate that there is a positive association between financial disclosures and debt–equity ratio (e.g., Chow and Wong-Boren, 1987; Low, 1998). Firms with higher debt are generally under greater scrutiny by creditors to ensure that firms are not violating debt covenants. Consequently, this scrutiny would result in disclosure of more comprehensive information on different items especially those relating to debt covenants. Zarzeski (1996), however, argues for an expectation of a negative association between financial disclosures and debt ratio on the ground that debtors would be closely associated with the firm and would have direct access to information. This argument would be valid if firms have private debt rather than public debt. If firms have a higher level of public debt, debt-holders are not likely to have close relationships with the firms. Consequently, there will be an agency problem and this would require detailed financial disclosures to ensure adherence to debt contracts. Thus, in the case of public debt, a positive association can be expected, as indicated by the findings of several prior research studies.

In the absence of reliable information on the nature of debt, we assume that firms from common law countries would issue more public debt, and firms from code law countries would issue more private debt (e.g., La Porta et al., 1996). Thus, we expect a positive association between debt and financial disclosures in common law countries and negative association in code law countries.

Capital Markets

It has been argued that a strong equity market with diverse groups of shareholders is generally associated with better production and disclosure of sophisticated information (Doupnik and Salter, 1995). Moreover, financial disclosures by firms listed on stock exchanges can be influenced by total market capitalization (e.g., Adhikari and Tondkar, 1992; Salter, 1998), and also by the disclosure requirements of stock exchanges. Based on this evidence, we expect that there will be a positive association between financial disclosures and market capitalization.

Multi-nationality of Firms

With globalization of business, the number of international firms is steadily increasing. In addition to selling their products abroad, more and more firms are setting up production facilities across national boundaries to avail of business and investment opportunities. An increasing number of listings on foreign stock exchanges (e.g., Saudagaran and Biddle, 1992) also shows that more and more firms are crossing

national boundaries. As a result of internationalization of business and of capital markets, firms are being challenged to meet the information needs of diverse groups of investors with different cultural backgrounds. In order to meet these information needs, firms will be required to disclose more detailed financial information. If investors at home, as well as in foreign countries, demand detailed information, financial disclosures will be more comprehensive and there will be a positive association between multi-nationality and financial disclosures. If foreign investors demand detailed information and investors' information needs of investors at home are limited, or vice versa, there will also be a positive association between multi-nationality and financial disclosures because multinationals will have to meet information needs of both groups of investors. Only in the case of limited information needs of investors at home as well as abroad, the association between multi-nationality of firms and financial disclosures would be negative. The probability of limited information needs of investors at home as well as abroad is likely to be very small. Therefore, we expect a positive association between multi-nationality of firms and financial disclosures.

RESEARCH DESIGN

The validity of relationships between LSs, cultural values, and financial disclosures, as depicted in our model, is tested on a sample of firms from common and code law countries. Multivariate analyses are conducted with financial disclosures as a dependent variable, LSs and cultural values as independent variables, and others as control variables.

Sample Selection and Financial Data Collection

The initial sample for this study was selected on the basis of availability of disclosure scores from the database developed by the Center for International Financial Accounting Research (1993), and also on the availability of country's cultural values from Hofstede's (1984) study. As a result of this selection process, the initial sample consisted of 964 firms from 37 countries. Because the 1993 CIFAR database covers the fiscal year ending 1991, the study is based on 1991 financial data, obtained from the PC Plus Global Vantage. The sample was further screened to examine whether financial data for the sample firms was available in the 1998 versions of the *Global Vantage* database. As a result of non-availability of financial data, 291 firms from seven countries were dropped from the sample. The remaining firms were again screened for availability of data for the multi-nationality criteria used in this study. This screening process resulted in a further reduction of the sample by 168 firms. The number of firms remaining in the sample was 505 from 28 countries.

In order to avoid lopsided representation of countries in the study, it was decided to screen the sample with regard to the number of observations for each country. If the number of observations was less than 20 firms from any country, the firms of that country were dropped from the analyses. As a result of this screening process, the sample was reduced to 403 firms. Two additional firms with a debt-equity ratio above

Table 1. Sample Distribution by Country

<i>Country</i>	<i>Legal system</i>	<i>Number of firms in CIFAR^a</i>	<i>Total sample firms</i>	<i>Multinational firms</i>	<i>Domestic firms</i>
Canada	Common law	40	22	20	2
France	Code law	64	36	28	8
Germany	Code law	52	25	20	5
Japan	Code law	96	77	61	16
UK	Common law	83	51	51	0
USA	Common law	274	190	134	56
Total		609	401	314	87

Notes: ^a The samples of this study is selected from the database in Center for International Financial Analysis and Research (1993).

one were dropped from the analyses because their ratios were influenced by their negative equity. The final sample consisted of 401 firms from six countries. Out of six countries, three are common law countries with 263 observations and three are code law countries with 138 observations. The number of sample firms from each country with their LS is provided in Table 1.

Measurement of Variables

Financial Disclosures

The dependent variable of financial disclosures (DISC) is obtained from “the International Financial Reporting Index (IFRI) for Industrial Companies” developed by Center for International Financial Analysis and Research (1993). The IFRI is based on the mean disclosure scores of 90 items on a sample of largest industrial firms in each country.² Information contained in the financial statements is divided into seven broad categories: general information, income statement, balance sheet, funds flow statement, accounting policies, stockholders’ information, and supplementary information. On the basis of actual information disclosed and disclosure expectation for each firm, percentage disclosures are calculated, which provide the basis for IFRI of a firm.

The IFRI scores, which are calculated from actual disclosures and not from disclosure requirements, have been considered reliable and used by other studies (for example, Salter, 1998). Cooke and Wallace (1989) audited the database and concluded that the scores were developed with great care and every attempt was made to prevent inadequacies and pitfalls. They concluded that there were no biases or errors in the scores.

Cultural Values

Cultural values for each country have been obtained from Hofstede (1984). A country’s cultural values for dimensions of UA, PD, IND, and MAS have been used as the firm’s cultural values. It means that cultural values of all firms from a single country will be the same. A similar procedure has been used by other studies (e.g., Gray and Vint, 1995).

Legal Systems

The LS variable is coded as one for common law countries, i.e., the USA, Canada, and the United Kingdom, and zero for code law countries, i.e., Germany, France, and Japan. Classification for LSs has been obtained from La Porta et al. (1996).

Other Variables

The variable of total assets is used as a proxy for firm size, and its log transformation is used in the regression analyses. The debt ratio is calculated by dividing the total debt by total assets to be consistent with Zarzeski (1996).

Market capitalization is represented by the mean of market capitalization in US\$ divided by GDP for 1988–1990 of a country. Information on market capitalization is obtained from the Emerging Stock Markets Factbook (International Financial Corporation, 1996), while data for GDP are obtained from the World Development Report (World Bank, 1990–1992).

A number of criteria can be used to identify multi-nationality of the firm and these include national or foreign ownership of the firm, trading of firm's shares on foreign or domestic stock exchanges, foreign or domestic business transactions, etc. Zarzeski (1996) used total foreign sales of a firm to classify the firm as an international firm. We characterize a firm as multinational on the basis of Center for International Financial Analysis and Research (1992) classification, which has been developed based on the following criteria: (1) geographic diversification, i.e., diversification across foreign countries based on aggregate foreign sales, (2) ratio of foreign sales to assets, (3) export, i.e., domestic production sold in foreign markets, and (4) number of subsidiaries. Other studies (e.g., Errunza and Senbet, 1984; Sullivan, 1994) have also employed a similar combination of factors to capture a firm's multi-nationality. If the firm is classified as a multinational, it is coded as one, otherwise zero.

Statistical Analyses

The regression model (Equation 1) used in this study in a general form is as follows:

$$\text{DISC}_i = \alpha_i + \beta_{11}\text{UA}_i + \beta_{12}\text{PD}_i + \beta_{13}\text{IND}_i + \beta_{14}\text{MAS}_i + \beta_{15}\text{LS}_i + \beta_{16}\text{DEBT}_i + \beta_{17}\text{SIZE}_i + \beta_{18}\text{MKTC}_i + \beta_{19}\text{MNC}_i + \varepsilon_i \quad (1)$$

where: DISC_i = disclosure index of company i ; UA_i = uncertainty avoidance value of company i ; PD_i = power distance value of company i ; IND_i = individualism value of company i ; MAS_i = masculinity value of company i ; $\text{LS}_i = 1$ if the firm belongs to common law countries, and 0 if the firm belongs to code law countries; DEBT_i = debt-to-asset ratio for company i ; SIZE_i = firm size, proxied by log of total assets of company i ; MKTC_i = country's market capitalization divided by GDP for company i ; $\text{MNC}_i = 1$, if company i is multinational, otherwise zero; β_{11-10} = coefficients of variables from 1 to 10; ε_i = residual term.

Table 2. Financial Disclosures by Firms in Common and Code Law Countries

	<i>Total sample</i>	<i>Common law countries</i>	<i>Code law countries</i>
<i>N</i>	401	263	138
Mean	73.09	74.21	70.96
Medium	73.00	74.00	72.50
Standard deviation	6.03	5.52	6.40
Min	47.00	47.00	52.00
Max	88.00	88.00	88.00
Difference in means:			
<i>t</i> -value			5.07
Probability			.0001

RESULTS

Descriptive Statistics

Descriptive statistics on disclosure scores of firms from different countries with different LSs are given in Table 2. The *t*-test results on comparative analysis of disclosure scores from common and code law countries are also provided in the table.

The results indicate that the mean disclosure score for firms from common law countries is higher than the mean disclosure score of firms from code law countries (74.15 vs. 70.96). The difference between the disclosure scores of the two groups of countries is statistically significant ($p < .001$).

Descriptive statistics on independent regression variables are contained in Table 3. The results on cultural variables indicate that the mean scores of UA, PD, and MAS are higher for code law countries compared to common law countries. But the mean score of IND is higher for common law countries compared to code law countries. A higher mean score of MAS for code law countries suggests that individuals in these countries are more assertive and business institutions are more competitive and goal-oriented. This seems to be contrary to the general expectation, according to which common law countries are supposed to be more competitive and the firms in these countries are supposed to be more goal-oriented. Even Gray (1988) pointed out in his model that the link of MAS dimension to financial disclosures might not be strong. The mean of debt–asset ratio is slightly higher for code law countries than common law countries (0.31 vs. 0.26). An analysis of this ratio for each country indicated that the Japanese firms exhibited significantly higher ratio compared to all other countries, which seems to be reasonable. Consequently, the mean ratio for code law countries is higher.

Correlation Results

Correlation results on different variables are contained in Table 4. The results indicate that the financial disclosures are significantly positively associated with the LS, suggesting that common law countries are associated with higher financial disclosures. The association of financial disclosures with cultural dimensions of UA, PD, and IND is

Table 3. Descriptive Statistics on Independent Regression Variables

<i>Variables</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Panel A: Total sample (<i>N</i> = 401)				
MKTC	0.74	0.34	0.25	1.31
SIZE	10,395.68	18,393.97	297.42	184,325.50
DEBT	0.28	0.15	0.00	0.89
UA	58.32	20.91	35.00	92.00
PD	44.20	9.77	35.00	68.00
IND	78.21	17.46	46.00	91.00
MAS	66.84	15.07	43.00	95.00
Panel B: Common law countries sample (<i>n</i> = 263)				
MKTC	0.68	0.18	0.53	1.04
SIZE	8,751.11	19,300.68	297.42	184,325.50
DEBT	0.26	0.14	0.00	0.89
UA	44.03	4.47	35.00	48.00
PD	38.95	1.96	35.00	40.00
IND	89.69	3.04	80.00	91.00
MAS	61.94	3.39	52.00	66.00
Panel C: Code law countries sample (<i>n</i> = 138)				
MKTC	0.85	0.51	0.25	1.31
SIZE	13,529.89	16,135.61	569.14	84,825.50
DEBT	0.31	0.16	0.04	0.80
UA	85.54	10.02	65.00	92.00
PD	54.21	10.83	35.00	68.00
IND	56.33	11.72	46.00	71.00
MAS	76.18	22.52	43.00	95.00

Notes: Definition of variables: MKTC = Mean Market Capitalization in US\$ as a percentage of GDP in US\$ for 1988–1990; SIZE = Total Assets in US\$ (millions); DEBT = Total Debt divided by Total Assets; UA = Uncertainty Avoidance; PD = Power Distance; IND = Individualism–collectivism; MAS = Masculinity–femininity.

significant and is in the expected direction, but it is significantly negative with MAS, which is contrary to Gray's (1988) hypothesis. Financial disclosures are significantly positively associated with multi-nationality of firms and size, as expected. The correlation coefficient between disclosures and MKTC is positive and with debt is negative, but both are insignificant.

The results also indicate that the LS is positively correlated with the cultural value of IND (0.91) and negatively associated with the cultural values of UA (−0.94), PD (−0.74), and MAS (−0.45). All cultural values are strongly correlated among themselves. This means that their linear combination will not enable us to include all cultural variables and LS in the same regression test.

Results on Legal System and Financial Disclosures

The association between financial disclosures and LS is first examined by conducting regression tests on the total sample. Because of the linear combination of cultural values, all of them could not be included in a single regression test. Therefore, we included

Table 4. Pearson Correlation Results on Regression Variables

	DISC	MKTC	MNC	SIZE-log	DEBT	LS	UA	PD	IND
MKTC	0.07								
MNC	0.40***	0.09							
SIZE-log	0.11*	0.15**	0.17***						
DEBT	-0.00	0.25***	-0.07	0.21***					
LS	0.26***	-0.24***	-0.01	-0.25***	-0.15**				
UA	-0.26***	0.33***	-0.02	0.23***	0.24***	-0.94***			
PD	-0.11*	0.12*	-0.03	0.10*	0.19***	-0.74***	0.85***		
IND	0.24***	-0.55***	-0.03	-0.27***	-0.24***	0.91***	-0.93***	-0.64***	
MAS	-0.15**	0.87***	0.02	0.22***	0.26***	-0.45***	0.51***	0.12*	-0.72***

Notes: Definition of variables: DISC = Disclosure scores from Center for International Financial Analysis and Research (1993); MNC = 1 if the firm is a multinational, 0 otherwise; LS = 1 if the firm belongs to common law countries, and 0 if the firm belongs to code law countries. Table 3 provides definition of other variables.

* Significant at 0.05 (two-tailed test).

** Significant at 0.01 (two-tailed test).

*** Significant at 0.001 (two-tailed test).

individual cultural variables in separate regressions. Regression results on the total sample are presented in Table 5.

Table 5 contains results of six regression tests. In regression Model 1, the variable of LS and control variables are included in the analysis. In regression Model 2, LS is allowed to change with control variables of MKTC, MNC, and DEBT. This is done by including three interaction terms between LS and control variables.³ Models 3 through 6 include LS and a single cultural variable. The results show that the variable of LS is significantly positively associated with financial disclosures ($p < .001$) for Models 1, 2, 4, and 6. The coefficient of LS for Model 3 is positive, but not significant. It is, however, significantly negative for Model 5, with IND. This is because of positive correlation between LS and IND (see Table 4). The coefficient for the interaction term LS_MKTC is significantly positive ($p < .0001$), which means that the positive association between financial disclosures and LS is even higher in countries with high capitalization of capital markets. The coefficients of other interaction terms are insignificant.

The regression results of a positive association between financial disclosures and LS are consistent with the correlation as well as *t*-test results. The adjusted R^2 value of Models 1 and 2 is 23.86 and 30.43 percent, respectively. These results thus show that firms from common law countries are associated with higher financial disclosures and the models have a good explanatory power. These results thus support Hypothesis 1.

Results on Cultural Values, Legal System, and Financial Disclosures

The results of Models 3 through 6 (Table 5) show that the coefficients UA and IND are in the expected direction, but PD and MAS coefficients are not in the expected direction. Furthermore, only PD, IND, and MAS coefficients are statistically significant. Thus, only the IND coefficient is in the expected direction and is also significant.

To overcome the multicollinearity problem between LS and cultural variables, we ran regression tests on the total sample again on individual cultural variables but without the LS variable. The results (not reported) indicated that the coefficients for UA, IND, and MAS were similar to those reported in Table 5 for Models 3, 5, and 6. The coefficient for PD was negative. Thus, on an overall basis, there was no qualitative difference in the results with or without the LS variable. To have a better insight into the association between financial disclosures and cultural values under different LSs, we decided to run separate regressions for common and code countries. The results are contained in Table 6.

The regression results on common law countries (Panel A) indicate that none of the coefficients for cultural values are significant. The coefficients for IND and MAS are also not in the expected direction. These results suggest that there is no significant association between financial disclosures and cultural variables in common law countries, and the association is also not in the expected direction.

The results for code law countries (Panel B) indicate that the coefficients for all cultural values are statistically significant. But only the IND coefficient is in the expected positive direction. This result supports Gray's (1988) hypothesis on IND that the higher the individualism, the higher the financial disclosures. The coefficients of UA and PD are positive instead of being negative, and the coefficient of MAS is negative instead of being

Table 5. Regression Results on Financial Disclosures for Total Sample (N = 401) Refer to Tables 3 and 4 for definition of other variables

Variables	Expected sign	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Intercept		60.27	27.90	55.55	25.24	65.32	16.08	50.16	15.30	32.31	6.29	72.50	28.67
MKTC	+	1.64	2.00	7.73	6.24	2.04	2.37	2.00	2.48	8.54	6.09	12.97	8.03
MNC	+	5.52	8.44	4.91	7.71	5.41	8.22	5.57	8.66	5.39	8.58	4.71	7.64
SIZE-log	+	0.51	2.15	0.55	2.40	0.49	2.06	0.65	2.77	0.54	2.37	0.83	3.71
DEBT	+	1.15	0.60	3.26	1.76	1.78	0.92	-0.11	-0.06	2.47	1.35	1.04	0.59
LS	+	3.96	6.77	4.40	7.79	1.48	0.82	6.56	7.61	-7.53	-3.74	1.56	2.51
LS_MKTC	?	-	-	12.60	6.14	-	-	-	-	-	-	-	-
LS_MNC	?	-	-	-1.13	-0.86	-	-	-	-	-	-	-	-
LS_DEBT	?	-	-	3.33	0.88	-	-	-	-	-	-	-	-
UA	-	-	-	-	-	-0.06	-1.47	-	-	-	-	-	-
PD	-	-	-	-	-	-	-	0.16	4.04	-	-	-	-
IND	+	-	-	-	-	-	-	-	-	0.38	5.94	-	-
MAS	+	-	-	-	-	-	-	-	-	-	-	-0.32	-7.95
Adj. R ² (%)		23.86		30.43		24.09		26.71		29.95		34.23	
F-value		26.07		22.87		22.15		25.30		29.50		35.70	

Notes: Definition of variables: LS_MKTC = interaction between mean-adjusted LS and mean-adjusted MKTC; LS_MNC = interaction between mean-adjusted LS and mean-adjusted MNC; LS_DEBT = interaction between mean-adjusted LS and mean-adjusted DEBT.

Table 6. Regression Results on Financial Disclosures in Common and Code Law Countries

Variables	Expected sign	Model 1		Model 2		Model 3		Model 4	
		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Panel A: Common law countries (<i>n</i> = 263)									
Intercept		121.49	0.20	59.63	2.37	57.89	6.75	57.65	8.99
MKTC	+	-14.59	-0.06	11.47	1.91	12.07	7.36	12.23	5.34
MNC	+	4.52	6.32	4.52	6.32	4.52	6.32	4.52	6.32
SIZE-log	+	0.51	2.04	0.51	2.04	0.51	2.04	0.51	2.04
DEBT	+	4.47	2.12	4.47	2.12	4.47	2.12	4.47	2.12
UA	-	-1.05	-0.10	-	-	-	-	-	-
PD	-	-	-	-0.06	-0.10	-	-	-	-
IND	+	-	-	-	-	-0.01	-0.10	-	-
MAS	+	-	-	-	-	-	-	-0.01	-0.10
Adj. R^2 (%)						33.17			33.17
F-value						27.01			27.01
Panel B: Code law countries (<i>n</i> = 138)									
Intercept		26.76	3.72	42.78	8.68	-64.32	-2.80	69.55	17.52
MKTC	+	-6.21	-4.32	-0.38	-0.38	35.72	5.37	13.01	4.90
MNC	+	5.17	4.39	5.17	4.39	5.17	4.39	5.17	4.39
SIZE-log	+	1.33	2.95	1.33	2.95	1.33	2.95	1.33	2.95
DEBT	-	-2.62	-0.80	-2.62	-0.80	-2.62	-0.80	-2.62	-0.80
UA	-	0.40	5.52	-	-	-	-	-	-
PD	-	-	-	0.25	5.52	-	-	-	-
IND	+	-	-	-	-	1.59	5.52	-	-
MAS	+	-	-	-	-	-	-	-0.33	-5.52
Adj. R^2 (%)									29.55
F-value									12.49

Note: Refer to Tables 3 and 4 for definition of variables.

positive. These results thus show that the association between cultural value of IND and financial disclosures is significant for code law countries.

Ignoring the dimension of MAS, which is the least important dimension for disclosures (Gray, 1988), these results show that UA and PD cultural values have no significance for financial disclosures either in common law or code law countries. Recall that both cultural variables are not in the expected direction for code law countries, though they are significant. These findings thus provide evidence that the impact of cultural values on financial disclosures in common law countries is insignificant, but the results for code law countries provide mixed signals. These results support Hypothesis 2 for common law countries only.

Additional Tests on a Broader Sample

We also conducted tests on a broader sample of 503 firms from 28 countries, representing economically developed and developing countries (results not reported).⁴ The regression tests also included the economic growth variable to capture the impact of the economic development in each country. The results on this broader sample are qualitatively similar to the results presented in this article. The results indicate that financial disclosures are significantly higher in common law countries compared to code law countries, and the impact of cultural values on financial disclosures in common law countries is insignificant. With regard to code law countries, the results also provide mixed signals.

Impact of Debt on Financial Disclosures

The results on the total sample in Table 5 show that the coefficients for DEBT except for Model 4 are positive, but are statistically insignificant for all models. The results of regression tests conducted separately on common law and code law countries (Table 6) indicate that the DEBT coefficients are positive and significant for common law countries, and negative but insignificant for code law countries. The signs for DEBT coefficients for common and code law countries suggest that financial disclosures in common law countries are positively associated with debt–equity ratio in common law countries, and negatively associated in code law countries, as expected.

Financial Disclosures by Multinationals

The results contained in Tables 5 and 6 indicate that the coefficient of multi-nationality (MNC) for the total sample as well as for common and code law countries is positive and statistically significant. These results suggest that multinationals are associated with high financial disclosures irrespective of the LS or cultural values of the country.

In order to gain better insight into the impact of cultural values on disclosures by multinationals of common and code law countries, we conducted regression tests on the total sample of multinationals from both LS countries, and also on common and code law countries separately. The results are contained in Table 7.

Table 7. Regression Results on Financial Disclosures for Multinational Firms

Variables	Expected sign	Model 1		Model 2		Model 3		Model 4		Model 5	
		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Panel A: Total sample (N = 314)											
Intercept		65.70	27.33	74.14	17.37	55.67	15.23	36.48	6.99	78.31	29.90
MKTC	+	1.39	1.60	1.93	2.17	1.80	2.10	8.27	6.01	13.59	8.35
SIZE-log	+	0.61	2.39	0.56	2.19	0.78	3.07	0.64	2.67	1.03	4.41
DEBT	+	-0.59	-0.26	0.88	0.38	-2.41	-1.07	1.26	0.59	-1.32	-0.66
LS	+	3.85	5.98	-0.38	-0.20	6.41	6.73	-8.23	-4.04	0.92	1.37
UA	-	-	-	-0.10	-2.39	-	-	-	-	-	-
PD	-	-	-	-	-	0.16	3.59	-	-	-	-
IND	+	-	-	-	-	-	-	0.40	6.22	-	-
MAS	+	-	-	-	-	-	-	-	-	-0.35	-8.55
Adj. R ² (%)			9.73		11.08		13.08		19.54		26.81
F-value			9.44		8.80		10.42		16.21		23.93
Panel B: Common law countries (n = 205)											
Intercept		250.84	0.40	68.73	2.75	63.60	7.52	62.90	9.96		
MKTC	+	-66.61	-0.26	10.11	1.69	11.90	7.66	12.35	5.60		
SIZE-log	+	0.68	2.55	0.68	2.55	0.68	2.55	0.68	2.55		

DEBT	+	1.34	0.54	1.34	0.54	1.34	0.54	1.34	0.54
UA	-	-3.09	-0.31	-	-	-	-	-	-
PD	-	-	-	-0.17	-0.31	-	-	-	-
IND	+	-	-	-	-	-0.03	-0.31	-	-
MAS	+	-	-	-	-	-	-0.04	-0.31	-
Adj. R^2 (%)			22.96			22.96		22.96	
F-value			16.20			16.20		16.20	
IND	+	-	-	-	-0.03	-0.31	-	-	-
Panel C: Code law countries ($n = 109$)									
Intercept		28.85	3.67	45.80	8.47	-67.61	-2.72	74.16	17.51
MKTC	+	-7.95	-5.27	-1.77	-1.70	36.45	5.11	12.41	4.36
SIZE-log	+	1.57	3.44	1.57	3.44	1.57	3.44	1.57	3.44
DEBT	-	-1.48	-0.40	-1.48	-0.40	-1.48	-0.40	-1.48	-0.40
UA	-	0.43	5.45	-	-	-	-	-	-
PD	-	-	-	0.26	5.45	-	-	-	-
IND	+	-	-	-	-	1.69	5.45	-	-
MAS	+	-	-	-	-	-	-	-0.34	-5.45
Adj. R^2 (%)			22.64			22.64		22.64	
F-value			8.90			8.90		8.90	

Note: Refer to Tables 3 and 4 for definition of variables.

The results on the total sample for multinationals (Panel A) indicate that all cultural variables are statistically significant but only UA and IND coefficients are in the expected direction. These results differ somewhat from Zarzeski's (1996) results. In order to have a better insight into the association between financial disclosures and multinationals from common and code law countries, separate regressions for multinationals from common and code law countries were conducted. The results are contained in Panels B and C of Table 7.

The results for multinationals from common law countries indicate that coefficients for all cultural variables are statistically insignificant and coefficients for IND and MAS are not even in the expected direction. The results for code law countries indicate that all coefficients of cultural variables are statistically significant, but with the exception of IND, none of them are in the expected direction.

The above results thus show that cultural values have no significant impact on financial disclosures of multinationals from common law countries. As far as multinationals from code law countries are concerned, the cultural variable of IND seems to be the only variable that has a significant impact on financial disclosures.

DISCUSSION OF RESULTS AND CONCLUSION

Discussion of Results

The findings show that the LS of a country plays an important role in financial disclosures. A comparatively higher level of legal protection rights provided to investors and debt-holders in common law countries, as documented by La Porta et al. (1996), results in a broad-based corporate ownership and high level of debt financing. These corporate characteristics are expected to trigger higher information demand from the financial statements users, which is likely to be matched with detailed financial disclosures in common law countries. The regression results also show that there is no significant association between cultural values and financial disclosures in common law countries. We interpret these results to suggest that financial disclosures in common law countries are more influenced by information demand rather than by cultural values. Thus, cultural values have a minimum direct impact on financial disclosures in common law countries.

As far as code law countries are concerned, the regression results show that only the cultural value of IND seems to have a significant impact on financial disclosures. Though the coefficients of other three cultural variables are statistically significant, they are not in the expected direction. These results thus provide mixed signals with regard to the impact of cultural values on financial disclosures in code law countries.

The results on multinationals are similar to the total sample. Financial disclosures by multinationals from common law countries are not influenced by any cultural variable. The cultural variable of IND seems to have an impact on financial disclosures by multinationals from code law countries.

On an overall basis, these results thus indicate that common law countries are associated with higher financial disclosures, and that none of the cultural values seem to have any direct significant influence on financial disclosures by firms in these countries. Disclosures by firms in these countries are more influenced by information needs, which

are determined by the ownership structure, capital structure, and capital market. The results on code law countries show that the cultural variable of IND has an influence on financial disclosures. The high F and R^2 values indicate that the models are well specified and the results are robust.

The following explanations can be offered for these findings: First, cultural values, which were developed 25 years ago, may have become outdated because of globalization trends in business and industrial changes in different countries. Second, it is possible that the methods used by Hofstede (1980) for determining the cultural values may not have properly captured managerial attitudes from different countries. Since the analyses were primarily based on the attitudes of individuals employed by a single firm, i.e., IBM in different countries, the cultural values may not have reflected the diversity of managers' attitudes in a country. Third, it is possible that the hypotheses developed by Gray may not be valid for financial disclosures, because disclosures are more influenced by business environment rather than cultural environment.

Conclusion

The findings of this study show that firms respond to information demand from financial statement users. With globalization of business, investors and debtors' information needs are steadily increasing, and it is even possible that the market equilibrium for information generation can be achieved without intervention from regulatory at some later date. But the achievement of such an equilibrium may take a long time, which will create asymmetry of information in different countries.

In order to reduce asymmetry of information, it is important that reliable and comprehensive financial information is disclosed, and it should be comparable across national boundaries. This can be achieved by developing international accounting standards, which can be followed by firms from different countries on a voluntary basis. If firms are interested to provide financial information, which are comparable at the international level, they may decide to follow these standards. The findings of this study show that cultural values are not likely to impact the compliance with international accounting standards, if firms choose to follow them. The results on disclosures by multinationals indicate that national cultural values do not appear to have a significant influence on financial disclosures. Instead, global cultural values may be more relevant for disclosures at the international level.

We would, however, like to mention that the findings of this study should be interpreted with caution. The validity of these findings is constrained by the validity and reliability of the disclosure index used in the study. Future studies could develop a disclosure index, which is directly based on financial disclosures contained in the firms' financial statements. Additionally, future studies could also refine the methodology used in this study to provide a better insight into the association between cultural values and financial disclosures.

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NOTES

1. Some studies also consider the variable of "economic growth" as an important variable for the development accounting systems and practices (e.g., Mueller, 1968; Radebaugh, 1975; Enthoven, 1981; Cooke and Wallace, 1990; Adhikari and Tondkar, 1992; Riahi-Belkaoui, 1997). This variable is not being considered in this study because the sample is based on firms from economically developed countries.
2. The list of 90 items can be found in Salter (1998, p. 231).
3. In order to reduce multicollinearity of interaction variables, mean-adjusted variables were used to form the interaction variables.
4. A list of countries and number of firms from each country is available from the authors.

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The Influence of Culture on Pension Plans

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Key Words: Culture; Pension plans; International accounting standards; Multinational firms

Abstract: It is widely recognized that culture is a dimension affecting a vast array of management and social choices. However, we know little about the effect of culture on choices that combine both business and social issues in an accounting setting. Employee benefit choices by managers reflect both the business choices of a firm in the selection and retention of employees and social choices in the type and extent of benefits provided to employees. The objective of this study is to investigate the extent to which culture affects employee benefits as manifested in pension plans. In a comparison of plans that differ according to the home country of the parent firm and are offered in the regulated environment of the United States, results indicate an effect of culture on pension plan choices. In particular, culture plays a role in determining the funding level percentage of the plan, employer contributions receivable, and revenues received or receivable from employers.

It is widely recognized that culture is a dimension affecting a vast array of management and social choices (Whitely and England, 1977; Hofstede, 1980, 1983, 1991; Adler, 1983; Sekely and Collins, 1988; Schneider and De Meyer, 1991; Chow et al., 1994). However, we know little about the effect of culture on choices that combine both business and social issues. Employee benefit choices by managers reflect both the business choices of a firm in the selection and retention of employees and social choices in the type and extent of benefits provided to employees. Employers may offer benefits to employees in the form of both welfare and pension plans. These benefit choices are particularly informative in that along with compensation, benefit practices compose a significant element of the human resource management strategy for multinational firms. Human resource management strategies are in turn becoming more important from a corporate strategic perspective for these firms as well (Dowling et al., 1999).

Cultural norms impact managerial choice in the provision of employee welfare plans (Hempel, 1998; Oliver and Cravens, 1999), but research has not demonstrated an empirical relationship between culture and pension plans. International accounting

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standards address reporting requirements regarding pension costs and disclosures, but differences still exist in the fundamental approach to pensions in various countries. The objective of this study is to investigate the extent to which culture affects the actions of management with respect to pension plans. We anticipate the most obvious manifestation of a cultural effect to exist in the degree of generosity of employers in providing and funding pension plans.

We specifically consider defined benefit pension plans in that the effect of culture is perhaps more interesting regarding pensions for several reasons. Firstly, in an international environment, companies providing pension plans comprise a set with diverse expectations for pension and welfare benefits determined by the country or countries where the firms operate. Since the U.S. government regulates and thus influences the overall environment, the detection of a cultural effect is challenging. Because of this regulation, defined benefit plans offer more discretionary choices for employers than defined contribution plans. Any differential in the degree of generosity provided by an employer would be more discernable for defined benefit plans.

The funding level of defined benefit pension plans offers an area to study. The requirements for funding pensions will be determined by the laws of the country in which the plan is operated. Some countries require a certain level of funding (the U.S.), while others do not (Japan) (Bodie, 1991). The current international standard regarding pensions, IAS 19-revised, does not require a company to disclose more than the pension expense for the current year. The liability that results from the difference between the accumulated obligation and the present value of the plan assets does not have to be disclosed. Therefore, a critical piece of information is absent for users of financial statements if a company follows only the guidelines of IAS 19. Without disclosing the liability resulting from this difference, users cannot adequately determine whether the company has sufficient funds to cover the future liability. Since this adequacy of funding cannot be sufficiently determined from the information required by IAS 19, we investigate data on defined benefit plans that is more explanatory using disclosures provided in reporting to the Department of Labor. To know what needs to be disclosed, we must first know where the problem areas lie. This article explores the connection between culture and critical pension plan information to help determine if there are differences. These differences, if found, will affect harmonization of accounting standards.

Another dimension addressed by this study is the relative importance of private-sponsored versus government-sponsored plans. To the extent that government plans do not provide coverage for the population, the burden falls upon private (employer-sponsored) plans to fill the needs of society. There is a growing need for research to investigate the provision of benefits by private sponsors as an expanding proportion of the world's population receives benefits from these plans. While accounting standard setting only affects private sponsors, the mix of private versus public coverage in a culture will necessarily determine how important the regulation of and the standard setting involving these private plans are.

Finally, it is important to consider the actions of non-U.S. pension plan sponsors as the U.S. pension market holds a decreasing percentage of the world's pension assets. U.S. public and private plan sponsors held 50 percent of the world's pension assets in 1990 (Davanzo and Kautz, 1992), and this level is expected to decrease to 44 percent by the year

2000. Sponsors from other countries such as Canada, the United Kingdom, Japan, and continental European countries are expected to hold either constant or proportionally larger shares of global total pension assets. The increasing potential influence of these non-U.S. sponsors makes it likely that the U.S. may play less of a major role as a template for international accounting standards regarding pensions. It is thus important to ascertain the effect of culture in terms of pension plan choices.

The remainder of the article is organized as follows. First, we provide background as to the effect of culture on pension plans both from the area of regulation and standard setting, and from issues regarding managerial choice and human resource management strategy. The next section develops exploratory hypotheses that are then tested in the Research Method section. The following section provides the results and an interpretation of the findings.

CULTURE AND PENSION PLANS

The effect of culture on pension plans may be apparent along two different dimensions. One dimension at the micro-level reflects the human resource management strategy for multinational firms. A key component within this strategy is the compensation and benefits decisions that are designed to coordinate with the overall human resource management strategy. The second dimension at the macro-level regards cultural effects as manifested in the regulation and standard setting environments for a country and how this translates to pension plan norms.

Human Resource Management Strategy

Although there is still considerable debate as to which particular elements of human resource management strategy are most sensitive to cultural issues, evidence exists that compensation and rewards in particular are culturally sensitive (Easterby-Smith et al., 1995). Moreover, the global strategy of a multinational will also affect specific human resource practices (Caligiuri and Stroh, 1995). The degree of subsidiary autonomy, global integration, and local responsiveness will all help to determine what particular choices the multinational will make with regards to human resources. Thus, it seems apparent that regardless of the strategies selected, there is little doubt that culture does indeed affect multinational human resource decisions on some level (See Hofstede, 1993; Schuler et al., 1994, 1996; Denison and Mishra, 1995). In fact, culture is the complicating issue that distinguishes international human resource management from decisions for a purely domestic firm (Dowling et al., 1999). For example, Monks (1996) found that in a study of multinationals operating in Ireland, a localized approach was dominant with headquarters monitoring the overall financial effects of human resource decisions. In this case, decisions were made with local concerns dominating home country norms, but the culture of the host country was also an important determinant. The effect of culture could be manifested in either localized or centralized decisions. If the multinational made human resource decisions that did not relate to local norms, but instead followed home country practices, then this would indicate the dominant effect of the culture of the headquarters of the multinational firm.

Within the context of social benefits, research does show a relationship between culture and Hofstede's (1983) dimensions. In a study of cultural effects on managing human resources, Schuler and Rogovsky (1998) found a relationship between social benefit programs and individual dimensions denoting culture. Although they did not consider pensions, they based their research on specific benefit practices. The relationship to culture was evaluated across 24 countries resulting in recommendations for the use of social benefits and programs in various countries.

General Regulatory Effects

Developing accounting standards in an international setting involves a fundamental awareness of differences in environment. Hofstede (1980) first recognized these numerous environmental differences and formulated a set of dimensions defining national culture. Using Hofstede's dimensions, Gray (1988) proposed a comprehensive model that explains how culture determines accounting values and systems. It is precisely these differences across cultures and accounting systems that make accounting harmonization problematic. These difficulties are perhaps more extreme when the area of interest involves the provision of a benefit that is, in essence, defined by social values.

Pension plans reflect the propensity of a society (or company) to care for its members in the future. The cultural attribute that is most apparent in terms of the provision of pension plans is Hofstede's (1980) power distance dimension (Hempel, 1998). Power distance is the society's level of equality among the members. Countries exhibiting a high level of power distance have a great deal of social inequality and autocratic leadership. Individuals in these countries seek to maintain the distance among its members. Countries with lower power distance are more likely to remove the inequalities in power or wealth among its members. Hempel (1998) notes that "the difference in sources and covered groups for pension programs is one of the most immediately striking variations across countries." Hempel (1998) provides an analysis of the pension coverage averages for several countries and compares the level of coverage by country scores for the power distance dimension. His conclusion is that culture (in terms of the power distance dimension) explains the differences in pension coverage. Societies exhibiting low power distance are more likely to attempt to reduce income differences between its members with pension benefits. The pension benefits might be more generous in these countries and oriented towards generating more income for employees with lower income levels.

Other than Hempel (1998), there is no research that investigates the effect of culture on pension plans. Limited evidence also exists regarding the potential for harmonization across pension reporting standards. To address these gaps, we separately consider these areas where pensions, culture, and standard setting interact. The first area is the prevalence of private-sponsored versus government-sponsored pension plans. The second area is the accounting standard setting and disclosure process in general.

The Prevalence of Private Pension Plans

Table I provides an overview of the primary sponsors of pension plans in a variety of countries and details of the specifics of the plans. Plans privately sponsored by employers

are providing an increasingly larger percentage of the total retirement benefits to employees in non-U.S. countries (Crosson, 1991; Winston, 1991). Although the U.S. has a public retirement plan, Social Security, the amount of money contributed to private pension plans continues to grow. This trend is continuing in other developed countries as well, where the typical primary provider of pension plans is becoming the private employer (Table 1). Beyond the information provided in Table 1, you find that the government is the primary provider in France, Germany, and Sweden, in 1988 roughly 70 percent of the total population aged 65 and over received *some* benefits from a private pension plan in France (Dailey and Turner, 1991). The private benefit percentage for older citizens in France is clearly much higher than that in Germany-West (33%) or the Netherlands (31%) and dramatically higher than in Japan (9%). The most recent comparable measure available for the U.S. indicates that approximately 29 percent of the population aged 65 or over received benefits from private plans (Dailey and Turner, 1991).

Various economic situations, coupled with social benefit traditions, will also affect the provision of benefits from government-sponsored plans. Government-sponsored plans may not be able to provide adequate benefits to employees. Given the aging of the population and the decreasing size of the existing workforce, countries such as Canada, France, Italy, and Japan are facing pension debts in the state system that show no sign of abatement (*The Economist*, 1993; Dornbusch, 1995). During the period from 1970 to 1988, the ratio of plan beneficiaries to active participants steadily increased in France, Canada, Japan, and the U.K. (Dailey and Turner, 1991). In the U.K., the ratio of active workers to pensioners was 3.3 to one in 1990. This ratio is expected to decrease to 2.4 to 1 by the year 2030 (*The Economist*, 1996). Thus, even private plans will be increasingly burdened by a growing pool of beneficiaries and a decreasing pool of active workers. However, encouraging private plans sponsored by corporate employers provides a means of reducing some of the pressure on state plans. One International Monetary Fund study found that in the major industrialized nations, pension expenditures represent the largest portion of social expenditures (Haar, 1989). For most countries, this percentage is expected to increase over time. A report from the World Bank also urges pension reform with an increased emphasis on privately sponsored plans (*The Economist*, 1994).

Thus, the overall increase in pension plans that are sponsored by private sources can affect the future ease of harmonization. Plans with a variety of sponsors and components that are not standardized by government providers create the potential for greater differences within the same country. Within-country differences do have an effect on the potential for harmonization (Archer et al., 1995).

Standard Setting and Disclosure

The fundamental influence of regulation on pension plans begins with the standard setting process. Culture affects the ease of harmonization of accounting standards across nations (Bloom and Naciri, 1989; Meek and Gray, 1989; Freedman and Stagliano, 1992) and affects the development of national accounting systems (Gray, 1988; Salter and Niswander, 1995). Private pension plans are highly regulated by governments in most countries. This level of regulation stems from the potential for abuse in the absence of monitoring as well as from the desire to inform the public

Table 1. Comparison of Pension Plans

	Australia	Canada	France	Germany
Typical providers	N/A ^a	Private and government	Government and supplementary private	Government and supplementary private
Type (defined benefit or defined contribution)	Defined contribution	Defined benefit	Defined benefit	Defined benefit
% of private workforce as participants in private plans	28%	28%	100%	42%
% of total contributions to private plans paid by employers	67%	72%	60%	89%
Indexation of retirement benefits for private plans (inflation)	N/A ^a	Not common for private plans	According to national salary index ^b	N/A ^a
	Italy	Japan	Netherlands	Sweden
Typical providers	N/A ^a	Private and government	Private dominates	Government dominates
Type (defined benefit or defined contribution)	N/A ^a	Defined benefit	Defined benefit	Equal
% of private workforce as participants in private plans	N/A ^a	37%	62%	N/A ^a

	Switzerland	United Kingdom	United States
% of total contributions to private plans paid by employers	N/A ^a	100%	74%
Indexation of retirement benefits for private plans (inflation)	N/A ^a	Not common for private plans	Virtually complete indexation
			N/A ^a
			N/A ^a
Typical providers	Private dominates	Private and government	Private and government
Type (defined benefit or defined contribution)	Defined contribution	Defined benefit	Equal
% of private workforce as participants in private plans	92%	29%	46%
% of total contributions to private plans paid by employers	58%	73%	N/A ^a
Indexation of retirement benefits for private plans (inflation)	N/A ^a	Common for private plans	Not common for private plans

Sources: Gerboth and McFee (1988), Clark (1991), Dailey and Turner (1991), Murakami (1991), Needles et al. (1991), Scay and Hardy (1991), Organisation for Economic Co-operation and Development (1994).

^aNot available.

^bIn effect for the time period of the sample; now will switch to indexation for inflation (Milbank, 1995).

and plan participants. Most of the regulatory interest has been directed towards disclosure issues. The effect of culture on disclosure practices has been investigated often with the intent of determining the potential for harmonization of accounting standards. Zarzeski (1996) found that both the secretiveness of a culture and market forces could affect disclosure behavior. In a study focusing on employee benefits, Needles et al. (1991) hypothesized that regulatory differences across countries would appear in the disclosures for pensions. However, results of the study indicated that the overall degree of regulation for a country was not reflected in the pension disclosure practices. The countries studied appeared to exhibit fairly similar disclosures. A more recent examination by Street and Gray (1999) notes that relatively few differences exist in pension disclosures pursuant to IAS 19 when compared to those prepared under U.S. GAAP. This finding leads us to question the applicability of pension disclosures as a means to examine any underlying cultural differences.

Most of the studies regarding disclosures in general involve comparisons across different countries without considering similarities in country groups or regulatory backgrounds. It is not surprising perhaps that Needles et al. (1991) were not able to detect the effect of culture on pension disclosures. A more precise examination of the effect of culture on pensions requires a study of cultural differences that might manifest in the same reporting environment. In addition, pension disclosures on financial statements may not be sufficient for this examination. Therefore, a more direct means to investigate the influence of culture on pension choices requires examining pension plans that are subject to the same regulatory influences. Any other differences that might occur would then reflect the cultural influences on the managers making the choices.

HYPOTHESIZED EFFECTS OF CULTURE

Given that pensions are indeed so highly regulated within each country's environment, perhaps pension disclosures do not provide for any degree of managerial discretion that would reflect a cultural orientation. Epstein and Mirza (1997) concluded that "The relevant accounting standard, IAS 19, is concerned only with the accounting aspects of pensions: the funding of pension benefits is considered to be a financial management matter and accordingly is not addressed by this pronouncement." It is more likely that managers would display any cultural influence through other aspects of pension reporting. If the nature and type of disclosures are standardized, then it is more important to examine other pension issues. Eventual harmonization with respect to pension reporting may need to be considered on two levels. The first level considers the existing reporting environment regarding disclosures. The major work in this area (Needles et al., 1991) suggests that pension disclosure practices were fairly similar across the sample. Harmonization regarding general disclosures is thus not likely to be as problematic. A second level considers the provision of additional information that is much more beneficial to users of financial statements. This information is less likely to be provided in mandated disclosures on financial statements.

For example, the funding status of the plan and employer contributions are critical barometers of the ability of the pension plan to provide for the needs of employees. Similarly, management's choices with regard to these two issues may reflect cultural

norms in the extent to which funding issues and the flow of funds differ according to the home country of the firm offering the pension plan. Since we expect differences related to culture to manifest in these two primary areas regarding pension plans, we develop the following exploratory hypotheses:

- H₁:** Culture is a determining factor in the funding level of pension plans.
- H₂:** Culture is a determining factor in the flow of cash (employer contribution) from the firm to the pension plan.

The funding level is of particular interest when the *employer* is funding the plan because *employee* funding would be deducted from the employee's salary and then contributed to the plan. This is the most common pattern in the U.S. Employer funding, although regulated, offers more discretion by the employer as to *when* the cash is actually contributed to the plan.

Thus, investigating both of these components would provide information that addresses the fundamental nature of the benefit provision and the desire to care for employees in the future. It is anticipated that in a comparable environment, variations in the levels of generosity towards employees would be related to cultural factors.

RESEARCH METHOD

Sample Selection

If pension plan funding is determined by the laws of each country and the IAS standards do not require disclosure of funding levels, how will the users of financial statements be able to judge the comparability of the liabilities of various companies? The influence of culture may exist, but there is not a common basis of comparison. To investigate this issue, we must obtain data for the same pension component from companies whose origin and operations are outside of the U.S. Since this information is not currently available from secondary data sources, it is thus necessary to collect a sample of pension plans that are subject to the same regulatory influences, but allow some manifestation of differences in national culture. Therefore, we collect information on U.S. pension plans for firms operating in the U.S. that differ according to the home country of ownership. Since the plans are domiciled in the U.S., these plans are subject to the same reporting and disclosure requirements.

In addition, we require information that is more comprehensive than that reported in financial statement disclosures to test our hypotheses. The only public data source of pension information on wholly owned subsidiaries of non-U.S. firms is provided by the Internal Revenue Service Form 5500, *Annual Return/Report of Employee Benefit Plan*. This unique data source provides information on employee benefit plans (including pensions) with 100 or more participants. This data source provides a proxy for the information behind the disclosures in the financial statement footnotes and provides information that would not be publicly available for the wholly owned subsidiaries of non-U.S. firms. For example, if a firm is 100 percent owned by a non-U.S. company, it would

not be required to file financial statements in the U.S., but it would be required to file a Form 5500 in the U.S.

Identification of the final sample for analysis involved first determining non-U.S. firms with significant (greater than 20%) ownership of U.S. firms. This increased the likelihood that the firms would be large enough to sponsor plans that would be available in the Form 5500 database. Our basis for this identification was the 1994 annual *Forbes* list of the 100 largest foreign investments in the U.S., which corresponds to ownership during 1993 (Lombo, 1994).

Form 5500s were then obtained for the calendar year 1993. The *Forbes* list of 100 foreign owners specifies 175 U.S. subsidiaries. This list of 175 companies was matched to the list of companies sponsoring a pension plan and filing a Form 5500. This process resulted in a sample of 147 firms that appeared on both lists. The final procedure to collect the sample consisted of matching every non-U.S. firm to a wholly owned U.S. firm to control for size and industry effects.¹ Firms were matched by financial data available on the National Automated Accounting Research Service (NAARS) according to three-digit SIC code, sales, and asset size. This matching process resulted in a total of 126 firms: 63 non-U.S. and 63 U.S. firms without reportable (5% or greater) foreign ownership that sponsored plans which filed a Form 5500.

Tests of Hypotheses

We group the sample for analysis according to the culture areas developed by Gray (1988), based on Hofstede (1980, 1983). We use these groupings expecting firms with owners from countries reflecting similar dimensions of culture to exhibit similar societal norms in their pension choices. Unfortunately, the sample does not comprise sufficient firms from each country to allow analysis by country. Gray's (1988) groupings provide an avenue by which to test the cultural predilections of the firms according to country with a minimum loss of information. Table 2 describes the home countries of the firms included in the sample and the corresponding groups for analysis. Tests of hypotheses employ these groups as a categorical variable to represent the influence of culture.

We confine our analysis to defined benefit plans since these types of plans allow a considerable degree of managerial choice relative to defined contribution plans. Defined benefit plans promise to provide a pre-determined benefit to employees. Government regulations determine the minimum level of funding each year, but, essentially, it is the employer's responsibility to insure that the contributions in the plan will yield the promised benefit. Defined contribution plans specify the amount to be placed in the plan and government regulation determines when those contributions must be made. Short of changing the plan, the employer has little discretion with respect to defined contribution plans once they have been established.

In terms of defined benefit plans, there are a variety of measures that could indicate choices made by management. The reported funding level can be determined by first considering the amount of cash contributed to the plan along with plan earnings (the assets of the plan), and then subtracting from the assets the benefits offered to the employees when they retire (the liabilities of the plan). To determine the liabilities, a discount factor must be used to calculate the present value. The choice of discount factor (the discount

Table 2. Country Groups by Culture Orientation (Gray, 1988) (Number of Firms in Sample)

<i>Group 1</i> (Anglo)	<i>Group 2</i> (More developed Latin)	<i>Group 3</i> (Germanic)	<i>Group 4</i> (More developed Asian)	<i>Group 5</i> (Nordic)
Australia (2)	France (5)	Germany (7)	Japan (6)	Netherlands (6)
Canada (12)	Italy (1)	Switzerland (4)		Sweden (2)
United States (50)				
United Kingdom (9)				

rate) can result in a higher or lower value for the plan liabilities depending upon the selection of management. Management can determine the discount rate used in the actuary's calculations of potential plan liabilities. The cultural orientation of the company's management could influence the choices made concerning the funding level and amount of cash transferred from the firm to the pension plan. For example, the extent to which management wishes to provide for employees might be reflected in the extent of contributions to the plan and the generosity of the benefits offered by the plan.

The Form 5500 provides data concerning each plan's assets, liabilities, and actuarial information. We extracted data items that would affect the funding level, the amount of cash not yet placed into the plan (the receivables from the plan's balance sheet), and the amount of cash which the employer will place into the plan for the 1993 plan year (the revenues received or receivable from the employer). These are the most basic items that allow a degree of management discretion and thus would reflect any cultural orientation.

To test the funding level, we define the variable, *funding level percentage*, which is calculated by taking the plan assets minus the plan liabilities and dividing the result by the plan liabilities. Plan assets in excess of plan liabilities indicates an over-funded plan, and the reverse indicates an under-funded plan. By dividing the over- or under-funded amount by plan liabilities, we mitigate the effect of plan size on the variable. The *rate used to calculate the liability* is another variable of interest as this choice can increase or decrease the amount of the liability.

Additional variables were collected from the balance sheet on the Form 5500 for each plan. Receivables represent instances where cash has been promised by the company, but has not yet been added to the plan. To scale the variables for size, all balance sheet items were divided by total plan assets. Specifically, we employ four variables: non-interest-bearing cash, employer contributions receivable, participant contributions receivable, and income receivable. Management determines the amount of contribution to the plan and also has control over the timing of the actual contribution. This degree of management discretion could also reflect a cultural orientation. Plans with management from cultures that truly wish to provide for their employees would likely be concerned that plan assets are adequate to meet plan liabilities.

The income statement on the Form 5500 provides an additional variable to consider the extent of the employer's contribution to the employee's welfare. The income statement item, *revenues received or receivable from employers*, is divided by total revenues to create a variable that represents the percentage of total plan revenues contributed by the company. In other words, this variable reflects how much of the income of the plan comes from the employer compared to what the plan itself creates through earnings or the employer collects from others. One would not expect, or want, all of the income to come

Table 3. Test for Correlation Between Country Group and Pension Variables

<i>Pension variable</i>	<i>Pearson correlation coefficient</i>	<i>p value</i>
Funding level percentage	-0.18839	0.0579
Rate used to calculate the liability	-0.00244	NS
Receivables:		
Non-interest-bearing cash	0.08056	NS
Employer contributions receivable	0.31062	0.0014
Participant contributions receivable	-0.06362	NS
Income receivable	-0.06689	NS
Revenues:		
Received or receivable from employers	0.23571	0.0165

NS: not significant at 0.10 or below.

from employer contributions because that would indicate that the assets were not earning a return. However, the higher the percentage, the more that management is taking responsibility for caring for the employees. Again, management discretion is manifested in the generosity of revenue contributions to the plan.

Of the 126 firms identified on the Form 5500 tapes, 104 firms offered defined benefit plans. If a firm offered more than one defined benefit plan, then a mean was calculated for the firm for all of the plan variables. Therefore, the final sample for analysis consists of 104 firms with one observation for each variable.

RESULTS OF ANALYSIS AND INTERPRETATION OF RESULTS

To test the hypotheses initially, a Pearson correlation was computed between the pension plan variables and a categorical variable indicating the country group (Table 2) for the plan of the firm. The country group is the variable that represents culture in the analysis. Table 3 provides the results of this test and indicates that when considering the category of the pension variable, there are three significant correlations between pension plan variables and the measure of culture. Funding level percentage, employer contributions receivable, and revenues received or receivable from employers all show a significant degree of correlation to the variable group. Thus, there is a significant correlation in each category of pension variable except for the rate used to calculate the liability. Although not all of the correlations are significant, these results warrant additional investigation given the relationship among the variables. In particular, the significance of the funding level percentage, revenues received or receivable from employers, and the employer contributions receivable denotes the generosity of the employer and thus, may reflect a cultural predisposition.

To more fully explore the significant correlations, a multivariate analysis was computed using the following regression model:

$$\text{FUNDPER} = \beta_0 + \beta_1 \text{GROUP} + \beta_2 \text{RATE} + \varepsilon$$

where FUNDPER is funding level percentage; GROUP is country group for the firm sponsoring the plan; RATE is the rate used to calculate the liability.

Table 4. Regression Analysis. Culture as a Determinate of Funding Percentage

$$\text{FUNDPER} = \beta_0 + \beta_1 \text{GROUP} + \beta_2 \text{RATE} + \varepsilon$$

<i>Variable</i>	<i>Parameter estimate</i>	<i>F value</i>	<i>p</i>
GROUP	Class variable	-1.841	0.0686
RATE	-16.4468	-2.294	0.0239

$R^2 = 0.0613$; $p = 0.0167$; $F = 4.266$; $df = 100$.

NS: not significant.

Where: FUNDPER is funding level percentage; GROUP is country group for the firm sponsoring the plan; RATE is the rate used to calculate the liability.

The results of the model are shown in Table 4 and indicate that the model is significant, as are both of the independent variables. The level of funding is modeled as a function of both the rate selected (which estimates funding) and culture (which determines the degree of funding.) Both the correlation analysis and the regression model support Hypothesis 1, which posits culture as a determining factor of the funding level. In other words, the cultural bias of the firm's managers will affect the degree to which the firm attempts to fund the plan. Given that Table 1 shows that employers in different countries tend to pay a different percentage of the total contributions, this result is as anticipated.

Finally, we computed a Kruskal–Wallis test for the same variables examined in the correlation analysis. A Kruskal–Wallis test (Conover, 1980), a non-parametric version of an ANOVA, allows us to test which country groups are different from each other through the use of multiple comparisons. The Kruskal–Wallis test as shown in Table 5 indicates significant differences between the groups for both the employer contribution receivable and the revenues received or receivable from employers, and provides support for Hypothesis 2.

The difference in the revenues received or receivable from employers demonstrates how much coverage the employer provides for the employee. Employers can provide all of the contributions or the contributions can be split between the employer and the employee. The larger the mean, the greater the percentage of total contributions made by the employer. The results of the multiple comparison indicate that group 4 (Japan) differs significantly from groups 1 (Anglo), 2 (More developed Latin), and 3 (Germanic), with Japan providing the greatest percentage of employer contribution. While only 37 percent of the private workforce in Japan are participants in private plans, the employers that do offer plans pay 100 percent of the contributions (see Table 1). None of the other countries offer as much employer coverage, with the other percentages of coverage ranging from 58 for Switzerland to 89 for Germany. It is problematic to use Table 1 as a complete predictor, since information on some of the key countries is not available and standardization of the data may not be as complete as one might wish. Yet, the information presented in Table 1 does help to explain the results of the multiple comparisons and supports the influence of culture on pension plan decisions.

The significance of the employer contribution receivable, which supports the results of both the correlation and regression analyses, reinforces the differences between the cultural orientations of the different groups. Multiple comparisons (Conover, 1980) also shown in Table 5 indicate that group 1 (Anglo) differs significantly from groups 3

Table 5. Kruskal–Wallis and Multiple Comparisons. Class Variable: Country Group as Determined by Gray (1988)

<i>Variable</i>	χ^2	<i>p value</i>
Funding level percentage	3.3353	NS
Rate used to calculate the liability	2.3802	NS
Receivables:		
Non-interest-bearing cash	5.3970	NS
Employer contributions receivable	9.9607	0.0411
Participant contributions receivable	2.4807	NS
Income receivable	4.5051	NS
Revenues:		
Received or receivable from employers	10.036	0.0398

NS: not significant at 0.10 or below.

Multiple comparisons for significant results (See Table 2 for country groups): *Employer contributions receivable*, group 1 differs from groups 3 and 5. *Revenues received or receivable from employers*, group 4 differs from groups 1, 2, and 3.

(Germanic) and 5 (Nordic). The Anglo group has the smallest mean and the Nordic group the largest. The Germanic group has the second largest mean. The larger mean indicates that a greater portion of the assets are tied up in receivables from the employers, so that less cash has actually been transferred from the company into the pension plan. Thus, the results show that if the firm has its origin in an Anglo culture, it is more likely to make payments to the plan more quickly than firms from either Germanic or Nordic origins. Unfortunately, there is no publicly available source for international data that deals with the timing of the cash funding. This clearly indicates a future research direction.

IMPLICATIONS FOR FUTURE RESEARCH

This study presents results that the cultural orientation of a firm plays a part in the managerial decisions made by the firm in a regulated environment where international standards do exist. This fact has been documented in several areas of management and control, but never investigated with respect to pension plans. First, culture affects the determination of how much of the contribution to the pension plan is to be made by the firm. Once this decision is made, culture also affects the decision on when the contribution is to be made and how the funding will be disclosed. Knowledge of the potential effect of culture becomes more important as contributions to private pensions become a larger part of the total compensation for world populations, and as multinational companies play a larger role in the world economy.

The results of this exploratory study are particularly interesting given the vast diversity in approaches to pension disclosures and pension funding throughout the world. Even within a controlled environment, the cultural orientation of managers becomes apparent in those particular aspects of pension choice that reflect social issues. This result reinforces the difficulty faced by international standard setters regarding pensions. If these cultural differences exist within a single reporting environment more highly regulated (and disclosure-oriented) than the international accounting standard (IAS 19) prescribes, then it will likely be even more difficult for international standard setters to achieve harmony in

reporting across numerous regulatory environments. More importantly, there must indeed be additional areas that the standard setters must address. At the parent level of the multinational firm, it appears that the lack of disclosure resulting from the current standard is not sufficient to provide users of financial statements with adequate information to assess the pension obligations of the company. More importantly, the difficulties for users are likely to multiply as multinational firms increase operations, and plans become more varied to serve the needs of a diverse set of employees.

Future research must continue to investigate the information content in existing disclosures. Other than the Form 5500 information in the U.S., secondary data sources are virtually non-existent. One alternative to evaluate the adequacy of disclosure is to collect primary data on multinational firms that consider the cultural orientation of private pension plan sponsors and their goals regarding the provision of pension plans. Once we understand the differing motivations of multinational firms regarding their diverse employees, then it is possible to modify international standards to provide information more useful to users of financial statements.

NOTES

1. The Form 5500 tapes are organized by Employer Identification Number (EIN) of the plan sponsor. EINs could not be obtained for every plan directly or indirectly sponsored by a firm on the *Forbes* list. It is not possible to identify every possible plan sponsored by a company if a variety of EINs are registered for the same company. Unless we knew that a company with two different (but similar) names and two different EINs were part of the same company, we only included the company that matched the name listed in *Forbes*. Because of this process, not all of the different parts of some of the companies may have been included.

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On the Myth of “Anglo-Saxon” Financial Accounting

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Key Words: Anglo-Saxon; Financial reporting; Myth; IASC

***Abstract:** The term “Anglo-Saxon accounting” (ASA) is used by a number of academic writers on the subject of International Accounting to refer to an approach to financial accounting and reporting that is supposedly common to the UK and Ireland, the USA and other English-speaking countries including Canada, Australia, and New Zealand. While most of the writers we cite as using this term are continental Europeans, they also include an Englishman, J. Flower. The term is typically used to imply not just similar conceptual and technical approaches, but also a hegemonic alliance in the international politics of accounting regulation.*

This article seeks to establish that ASA in this sense is a myth. We do this first by critically examining four putative commonalities that are frequently attributed to the UK and USA approaches to financial accounting and that form the basis of the myth, and second by indicating the unfeasibility of such a hegemonic alliance within the IASC. A myth may have some factual foundations, but belief in it rests also on bases that are non-factual. So it is with ASA. In particular, analysis of the terms “true and fair view” (TFV) and “fair presentation (FP) in accordance with generally accepted accounting principles (GAAP)” shows that, far from their possessing a semantic equivalence that constitutes a commonality between UK and US financial reporting, their interpretation indicates a profound difference between the UK and US approaches. What UK and US financial reporting have historically shared is a micro- and capital market orientation that lends itself to international accounting regulation in a context of global capital markets. But with such an orientation now being generally accepted internationally, the differences between UK and US financial reporting are taking on an increased significance that this article seeks to highlight.

The concept of “Anglo-Saxon” or Anglo-American accounting (hereafter ASA) has a long tradition and is very much “alive and kicking” as a recent article by Flower (1997) demonstrates.

In broad terms, there are two groupings of countries that dominate financial reporting at the international level: the European Union, through its Directives, and the Anglo Americans, with the IASC as their chosen instrument. The European Commission is seeking a grand realignment of the powers that determine the rules

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governing financial reporting. It is attempting to detach the IASC from its long-standing alliance with the Anglo-Americans and to bring it over to the side of the Europeans. Instead of, as in the past, the IASC and the Anglo-Americans presenting a united front, against the European Union, the future may be quite different: the IASC and the European Union combining together against the Anglo-Americans.

Flower then gives an analysis of the membership of the IASC Board that suggests that something like an "Anglo-American" accounting hegemony exists in the IASC.

The conclusions to be drawn from this analysis of the IASC's membership is that the Anglo-Americans, whilst not commanding a majority on the board, should be capable of dominating the IASC's agenda and output, by acting as a united block, in the face of the very diverse approach of the other members.

In this context, what are we to make of a news item in *Accountancy* (1997) that, under the headline "SEC Miffed at UK Victory" included the following?

IAS1, *Presentation of Financial Statements*, was approved but not without the usual argument over the true and fair override which has been left in the standard. Essentially the US, Canada and Australia do not believe in it but the UK and most European countries do. The SEC's Mike Sutton made his disapproval of the final standard clear at the meeting, though he had already written to the IASC to say that the true and fair override was unacceptable to SEC staff. "Are you prepared to sign off accounts that you know are wrong?" Sir David [Tweedie] asked the US. "They said yes because that's what the rules say, and we were just rolling around on the floor at this stage—it's bizarre what the US does."

This article critically examines the notion that there is an "Anglo-Saxon" approach to financial accounting, together with related ideas regarding the existence of an Anglo-American accounting hegemony. Our argument, as our title suggests, is that these notions constitute a myth, in the sense that they reflect a certain historical truth regarding both the origins of the accounting professions in the English-speaking countries and certain important shared ideas and institutional characteristics, but fail to take account of fundamental differences in both thought and, even more, practice.

The key point we wish to make about myths is not that they are false, as they may not be in obvious contradiction to reality and indeed may be at least partially true. Rather, our argument is that their truth-value is of little importance compared to their symbolic or metaphorical value (Archer, 1993).

Although the basis of our argument is attitudinal and philosophical, we also explore the political implications of our hypothesis in terms of the IASC scenario that Flower posits. Our analysis suggests that the political realities are more complex than might at first appear.

The rest of this article is structured as follows. The next section explores the historical origins of the notion of ASA and gives examples of references to it that indicate belief in

ASA. The next section discusses four hypotheses that could be taken to *support* the validity of the ASA, i.e.,

1. The relationship between "the true and fair view" (TFV) and "fair presentation" (FP).
2. The propensity to develop "conceptual frameworks" (CF) for financial accounting and reporting.
3. Common law versus codified law.
4. Private- versus public-sector accounting regulation.

The article then sets out a number of reasons why these putative supporting hypotheses do not in fact support belief in ASA.

The next section considers the implications of our analysis regarding the "politics" of the IASC and the future development of financial reporting at the "big generally accepted accounting principles (GAAP)" level. Finally we conclude that ASA is indeed a myth and discuss the implications of this conclusion, with particular reference to the position of UK accounting standard setting on the world scene.

ANGLO-SAXON ACCOUNTING

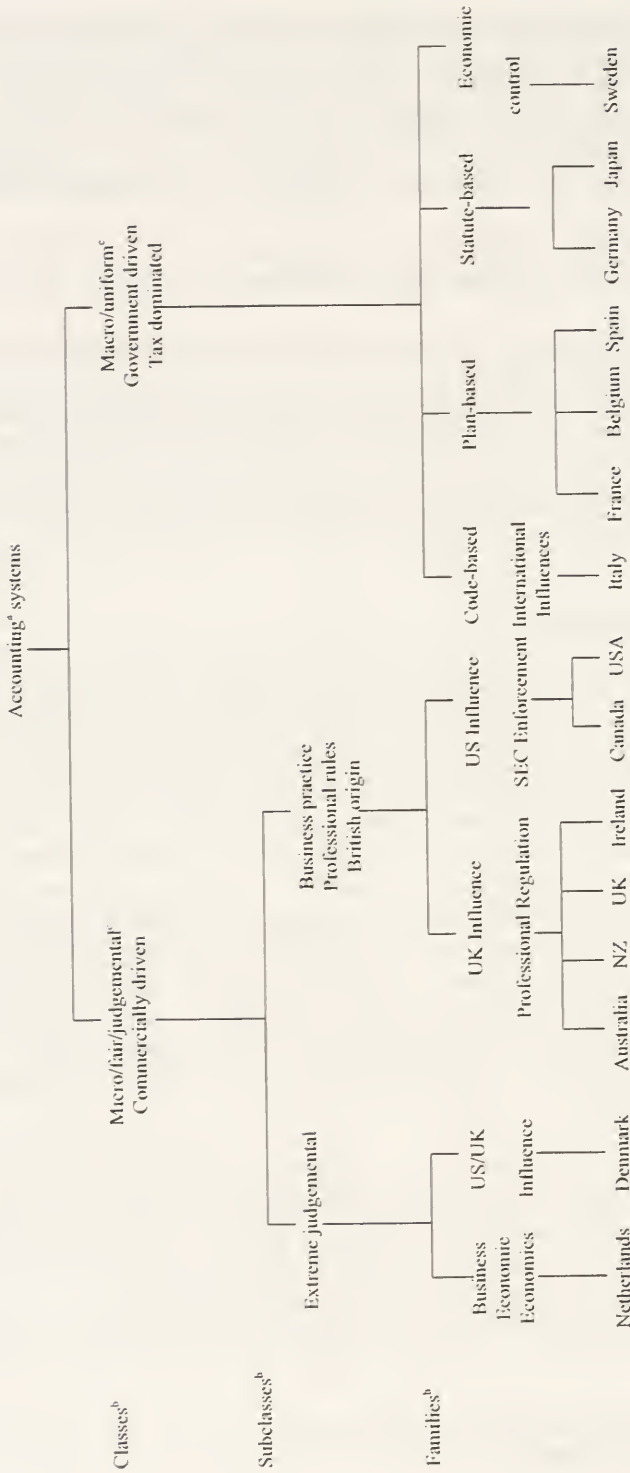
If asked to define ASA, a useful starting point may be found in the classification work of Nobes, Mueller, and others in the 1960s and 1970s. This work predates any effects of enacting the European Union's (EU) Fourth or Seventh Directives across Europe, and it also predates any practical effects from the foundation of the IASC in 1973. The well-known Nobes (1983) classification is shown as Fig. 1.

Thus, ASA is micro-orientated and judgmental, reflecting business practice and professional rules. Some of the detailed "similarities" between the UK and the US are described and critically analyzed below. At this point, we should emphasize the fundamental nature of the "classes" level. The UK and the US are the (historically) most significant of those countries where accounting is essentially capital market-driven, with a focus on the needs of the investor as an "accountee" (Ijiri, 1975). This has led to an emphasis on consolidated financial statements, as opposed to legal entity financial statements that tend to be dominated by tax rules and legal rules relating to dividend-paying capacity.

This similarity between the UK and the US is no doubt grounded in the long shared history of the two countries (Churchill, 1957). This started with colonization and the implanting of a common law-based legal system, and (following independence) continued with emigration, investment, trade links and, last but not least, similarity of language, notwithstanding the dictum attributed to George Bernard Shaw (Oxford, 1992) that England and America are two countries divided by a common language.

Mueller (1967) suggested that four patterns of development were discernible. These he labeled as follows.

1. Accounting within a macro-economic framework
2. The micro-economic approach



^a This is an abbreviated term for corporate financial reporting.

^b These terms, while borrowed from biology, should be interpreted merely as loose labels.

^c The terms at these and other branching points are merely labels to be used as shorthand to try to capture some of the attributes of the members of the accounting systems below them. This classification has been prepared by a UK researcher and may contain usage of terms that will mislead those from other cultures.

Figure 1. Groupings of Some Major Countries (Source: Nobes, 1983).

3. Accounting as an independent discipline
4. Uniform accounting

The UK and the US are included in the third "independent discipline" pattern, which Mueller characterized as follows:

Systems of this sort have developed independently of governments or economic theories. Accounting has developed in business, has faced problems when they arrived, and has adopted solutions which worked. Theory is held in little regard and turned to only in emergencies or used ex post facto in an attempt to justify practical conclusions. Expressions such as "generally accepted accounting principles" are typical. Mueller recognized the accounting systems of the United Kingdom and the United States as examples.

It is important not to underestimate the strength and importance of this shared history and parallel development. In terms of a general emphasis on the investor and the needs of capital markets, and an increasing emphasis on openness and transparency, the UK and the US show a long-standing and significant similarity. Nevertheless, for the reasons that we discuss below, this similarity lacks explanatory power for today's developments and, even more significantly, lacks explanatory or predictive power for tomorrow's.

A different way of investigating the perception of ASA is to look at sources from outside that tradition. A few brief quotations from textbooks and writings outwith the AS region can give the general flavor.

The first one is worthy of a little reflection (Seckler, 1998).

With the adoption of the three EC Directives, the most important Anglo-Saxon accounting principles were implemented into German accounting law.

In questa prospettiva, il presente lavoro è rivolto ad approfondire I filoni teorici che sono riconducibili alla tradizione anglosassone del-l'*orientation postulate*, e in particolare le *teorie dell'entità e della proprietà* (Zambon, 1996).

... dans le contexte culturel et institutionnel Anglo-Saxon, le seul cadre comptable de la pratique a longtemps été limité à des applications de ces principes généraux (Boussard, 1997).

Mais il faut reconnaître que cet effort de rationalisation des grands choix qui déterminent les règles concrètes n'est pas facile. Nous suivrons donc la voie «historique» et culturelle en présentant d'abord le cadre des principes généraux puis les approches qui sont venues les compléter, les situer ou les préciser: l'image fidèle et les cadres conceptuels, d'inspiration Anglo-Saxonne (Eglen et al., 1995).

There are many individual differences between German and Anglo-American accounting methods (Ordelheide and Pfaff, 1994).

These quotations indicate that, at least in Continental Europe, there is a belief that ASA principles, traditions, or concepts are an influential reality on the international accounting

scene. This does not imply, however, that the term “Anglo-Saxon” is necessarily being used with precisely the same meaning by the writers just quoted or other users of the term.

One possible influence that may partly explain the type of thinking exemplified above is the tendency up until the end of the 1960s for partners in major international practices in continental Europe to consist largely of UK, US, or Canadian “ex-pats.” The first French partner in the Paris office of PW was not appointed until 1969 (Pollard, 1975). However, the major international practices have been instrumental in disseminating concepts, and techniques such as consolidation methods, deferred tax accounting, substance over form, and others typically thought of as “Anglo-Saxon.”

SUPPORTING HYPOTHESES

The Relationship between the “True and Fair View” and “Fair Presentation”

The view that TFV and FP are, if not identical, at least very similar “Anglo-Saxon” concepts, has been put forward by no less an authority than the IASC (1989) (the heading is as in the original document):

True and Fair View/Fair Presentation. Financial statements are frequently described as showing a true and fair view of, or as presenting fairly, the financial position, performance and changes in financial position of an enterprise. Although this Framework does not deal directly with such concepts, the application of the principal qualitative characteristics and of appropriate accounting standards normally results in financial statements that convey what is generally understood as a true and fair view of, or as presenting fairly such information.

This clearly treats conveying a TFV, and presenting fairly, as interchangeable concepts relating to the supposed qualitative characteristics of financial statement information.

The Propensity to Develop “Conceptual Frameworks” for Financial Accounting and Reporting

The notion of ASA is given credibility by virtue of the efforts made, not just in the USA and the UK, but in other English-speaking countries such as Australia and Canada, to develop and promulgate a CF that is supposed to provide theoretical support for the standard-setting process (Archer, 1993). There are reasons for thinking that private-sector accounting standard-setting bodies feel the need for a CF in order to convey legitimacy on their regulatory activities. As Dopuch & Sunder (1980) put it in relation to the USA:

Being largely an offspring of the accounting profession, the FASB has (as did the APB) little defense against the criticism that it does not have legitimate authority to make decisions which affect wealth transfers among members of the society ... [A] conceptual framework is needed to provide the rationalization for its choices.

Thus, the notion of ASA seems to be linked to the role of a CF in the context of private-sector accounting standard setting in the English-speaking countries. This view may be reinforced by the fact that the IASC itself has developed and promulgated its own CF

(IASC, 1989), which owes a great deal to the FASB's CF (FASB, 1978, 1980a, b, 1985). As the quotations from Flower (1997) and Eglem et al. (1995), given above, suggest, the IASC's promulgation of a CF is seen by a number of commentators (especially Continental Europeans) as evidence that the IASC has been "captured by the Anglo-Saxons."

Common Law Versus Codified Law

The use of private-sector accounting standard-setting bodies has also been linked to the existence of common law-based legal systems. The latter tend not to provide for the development of sets of accounting rules by statute. Common law-based legal systems, as well as private-sector accounting standard setters, are found in most English-speaking countries (see Fig. 1). Thus, the nature of the legal system is seen as part of the nexus of characteristics that constitute the "Anglo-Saxon" approach to financial accounting and reporting.

Private- Versus Public-Sector Accounting Regulation

Enough has been said above to indicate how the use of private-sector accounting standard-setting bodies is seen as constitutive of ASA. One might add that the use of such bodies is also perceived to be linked to the role and status of the accounting and auditing profession in the respective countries, with particular regard to the profession's perceived capacity for a form of self-regulation that goes beyond the domain of professional ethics to include a major role in accounting standard setting (Archer, 1993).

APPRAISAL OF THE SUPPORTING HYPOTHESES

In the following subsections, we show that none of the four supporting hypotheses withstands detailed examination. First, analysis shows that US FP and UK TFV are far from being semantically equivalent, as is sometimes assumed. There is no US equivalent of the UK interpretation of TFV as an overriding requirement. Second, the shared propensity to develop CF can be shown to be part of, and evidence for, the mythical nature of ASA. Third, the notion of a kinship in accounting thought following from similarities in legal systems is undermined by important counterexamples. Finally, we show that the US system of accounting regulation is significantly more "public sector" in nature than the UK system.

True and Fair View/Fair Presentation

The TFV in the UK was clearly established as an over-riding requirement in the 1947 Companies Act and then into the 1948 consolidating act. It is now expressed in section 226 of the 1985 Act, a section inserted as an amendment by the 1989 Act. Auditors are given a corresponding duty to report on this requirement, stating whether in their opinion (note the subjectivity implied by this phrase) the accounts have been properly prepared in accordance with the Acts, and whether in their opinion a TFV is given. It should be noted

carefully that in section 226, subsections (2) and (3) are separate requirements. Since both must explicitly be attempted, it follows that they are independent and that either one could be achieved without the other. In particular:

1. complying with all detailed requirements of the Acts does not necessarily lead to a TFV
2. where such a conflict arises, it is the true and fair requirement which is the more important.

The meaning of TFV is obviously of crucial importance. From a legal point of view, UK courts have placed considerable reliance on expert witnesses in developing accounting case law. The expert witnesses as to the meaning of TFV would likely be composed in large measure of pillars of the accounting profession. In this sense, it might therefore be said that TFV means whatever the pillars of the accounting profession officially declare it to mean.

Successive UK governments have taken the position, at least up to the Companies Act 1989, that the precise definition of what is necessary in order to give a proper impression of the financial results and position of a business is a technical accounting matter and should therefore be left to the accounting profession. Parliament would lay out guidelines, and would establish certain minimum requirements (especially regarding disclosure), but would leave the "fine tuning" to the accounting profession, either through published recommendation or by general practice.

In general, therefore, a firm of auditors could safely attest that in their opinion a TFV was given, provided that they had done what any other firm of accountants would have done, and that the financial statements met criteria that any other firm of accountants would also have found to be acceptable. It is clear that this approach leaves open the possibility of the precise meaning of a TFV being different at different times. The "normal" view becomes by definition the "acceptable" view. Far from preventing change, this actually facilitates it as attitudes and opinions gradually evolve within the profession. Case law provides a vehicle for propelling change from time to time.

The Companies Act 1989 seems to have modified the situation in the UK, insofar as it gives some explicit recognition to the private-sector Accounting Standards Board. Following the Dearing Report (Dearing, 1988), the ASB replaced the former Accounting Standards Committee, which was an emanation of the six UK and Irish professional accounting bodies represented in the Consultative Committee of Accounting Bodies and lacked any statutory recognition. Formally, at least, the ASB is not under the control of the accounting profession, for reasons given below.

Following the UK implementation of the EU Fourth Directive in 1981, UK accounting law presents the interesting characteristic of containing a general rule (the obligation to give a TFV) that may require a specific rule to be overridden. A relevant example concerns depreciation, now required by UK statute law (subject to the override). Prior to this implementation in the Companies Act 1981, there was no statutory requirement in the UK for fixed assets to be depreciated. But the requirement to do so was an uncontested rule of good accounting practice, as may be seen from professional publications and textbooks. In other words, the requirement to depreciate fixed assets with a finite useful life was generally a necessary condition for giving a TFV. But if a TFV, prior to 1981, required that depreciation not be provided, no specific legal rule needed to be over-ridden, as no specific

rule existed. It is this aspect that changed when the legal detail (relative to *UK* experience) of the EU Fourth Directive was enacted into the UK law.

The introduction of accounting standards into the UK accounting regulatory system has created the need to try and clarify the precise relationship between the standards and the law in general and the TFV requirement in particular. Expert legal counsel has twice been given on this question, in 1983 and again, following the changes introduced in the 1989 Companies Act, in 1993. The essence of the argument of the later report, by Mary Arden QC (1993), is that the changes:

Increase the likelihood, to which the earlier joint opinions referred, that the courts will hold that in general compliance with accounting standards is necessary to meet the true and fair requirement.

The issue is a very complicated one, and the logic of counsel's argument is sometimes suspect (Alexander, 1999). The views expressed in that opinion have not been tested in any court.

The usage of the TFV override in the UK is illustrated in Fig. 2, which summarizes investigations carried out in 1993 and 1997 (Company Reporting, 1997). Most, but by no means all, of the cases involved departure from company law but not departure from accounting standards.

We have explored TFV in rather more detail in Alexander (1999) and Alexander and Archer (1998a, b).

With regard to the view that TFV in the UK and FP in the US are, or are close to being, semantically equivalent, the views of Zeff (1993) are highly pertinent (although German colleagues, at least, would quarrel with the statement that TFV is, in fact, used as an override throughout the EU):

In the European setting, "TFV" is used as an "override," which means that it is intended to be the governing criterion by which financial statements are to be judged. In the US, however, the governing criterion is conformity with GAAP. "Present fairly" is defined by reference to conformity with GAAP, and there is no authoritative literature in the US in which "present fairly" is explained or defined. In the US, therefore, "present fairly" is not in itself the governing criterion by which financial statements are judged by the organized accounting profession and by the Securities and Exchange Commission (SEC).

It must be noted the US requirement is "to present fairly in accordance with GAAP," not to present fairly in accordance with *promulgated GAAP*. It is therefore, hypothetically, possible for FP as required by non-promulgated GAAP to override an explicit rule set out in promulgated GAAP. However, SAS 69 (AICPA 1992) is at great pains to minimize the possibility of this happening in practice.

It is clear from both the general tenor and the specific content of SAS 69 that departure from promulgated GAAP, where such GAAP exists, is extremely unlikely. Zeff (private correspondence, 1993) has commented:

While it is true that rule 203 of the AICPA Code of Professional Conduct provides that there may be circumstances in which the auditor could believe that adherence to promulgated GAAP would make the financial statement misleading, experienced US

	1997	(1993)
	Total	Total
Number of companies.....	536	(450)
	=====	=====
	%	%
True and fair override invoked.....	14	(10)
True and fair override not invoked.....	86	(90)
	-----	-----
	100	(100)
	=====	=====

Note: The percentage figures below are based on the number of companies invoking the true and fair override.

	%	%
True and fair override invoked in respect of:		
investment properties.....	75	(44)
consolidation	7	(5)
government grants.....	9	(16)
capital instruments	1	(14)
post balance sheet events.....	-	(5)
other reasons.....	19	(19)
	=====	=====

Source: Company Reporting 1997

Figure 2. Implementation of the True and Fair Override (TFO).

auditors tell me they cannot recall ever seeing "rule 203 exceptions." especially in the financial statements of companies subject to the Securities and Exchange Commission, which would comprehend almost all publicity traded companies.

Rule 203 does not necessarily imply an override in the UK sense of a TFO. Rather, rule 203 states that compliance with GAAP may not always be sufficient. Furthermore, there is no requirement that any US standard-setting body should use the FP criterion as an influence inputting into the creation of its detailed recommendations. Indeed, the whole point is that FP is *not* a criterion in this sense at all. Again to quote Zeff (private correspondence, 1993):

As a matter of fact, acting at the suggestion of the 1978 Cohen Commission on Auditors' Responsibilities, the US Auditing Standards Board actually proposed in 1980

that the term "fairness" be deleted from the opinion paragraph of the audit report! "Fairness" is not in US legislation; it is no more than an amorphous standard of quality invoked by the AICPA.

In summary, Zeff (1995) argues that, while "jurists, financial journalists, members of Congress, and other lay commentators" may see "present fairly" as an "essential quality," it is in fact:

A term that was developed in the private sector but which seems not to be invoked in professional or regulatory circles. Today, discussions within the major accounting firms, and between the firms or corporations and the SEC's accounting staff over the propriety of accounting or disclosure practices revolve about the question, "is it GAAP?"

Zeff's view is consistent with that expressed by Van Hulle (1997). Describing the discussions at the IASC Board meeting that finalized IAS1 (revised) (the same discussions commented on in the Accountancy 1997 news item already quoted), he wrote the following:

... Canada and the United States came out strongly against the override. [They] were not in favor of the override because they feared abuses ... The representative of the SEC argued that—although there is an override test in the auditing standards in the US—no registrant with the SEC had *ever* applied the override in its financial statements (emphases added).

David Tweedie, even allowing for his admitted tendency to roll around on the floor, seems an unlikely bedfellow—in any sense—with the SEC.

The Propensity to Develop "Conceptual Frameworks" for Financial Accounting and Reporting

This propensity is undeniably a shared feature of UK and US approaches to accounting, as well as that in other English-speaking countries. In our view, the nature of CFs is such that they are a part of the myth of ASA; more precisely, the shared myth that the accounting profession has a self-regulatory capacity that extends to its playing a major role in accounting standard setting. As Archer (1993) put it:

Ideologically speaking ... so far as self-regulation is concerned, appearance may be more important than reality. Thus, it may be acceptable for the FASB to be, in the final analysis, the SEC's catspaw, provided the final analysis is generally avoided. From this perspective, the CF might be seen as a partially effective effort to sustain a cherished myth of self-regulation; a myth which, for much of the time, is not in obvious contradiction to reality.

The fact that the CF's role is more ideological than practical may be seen from the following. In the first place, the ASB's CF, the **Statement of Principles**, is still in draft stage and has aroused considerable controversy (Archer, 1997). Moreover, the influence of the thinking in it on the drafting of FRSs seems to be very variable. For example, FRS 10,

Accounting for Goodwill and Other Intangibles (ASB, 1997), requires acquired goodwill to be reported on the balance sheet like an asset, even though it does not conform to the criteria for recognition of an asset given in the **Statement of Principles**. As for the FASB's CF, it proved incapable of preventing the recognition of dry oil wells as assets under SFAS 25. Similar failures occurred in connection with SFAS 87 on pension fund accounting, which specifically states in the text of the standard that it does not follow the CF (Archer, 1993), and the recent furore over the "dirty surplus" treatment of the cost of stock option compensation plans (where Congressional interference forced the FASB to back down from requiring a treatment that it and others considered to follow from the CF) (Zeff, 1997).

We contend, therefore, that the shared predilection for CFs is indicative of a "common approach" largely in the mythological sense, which supports our thesis that the belief in ASA is belief in a myth.

Common Law Versus Codified Law

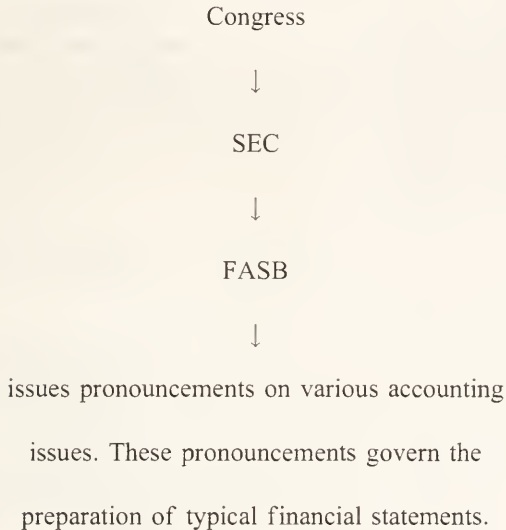
The proposition that ASA is fostered by a shared common law tradition in English-speaking countries hardly withstands the observation that the country most often bracketed with the UK and Ireland in its approach to the TFV is The Netherlands (Parker and Nobes, 1994), a country that has a codified system of law. If it is sometimes contended that the common law tradition coupled with private-sector standard setting leads to a more flexible and responsive system for accounting regulation, it is at least as easy to find counterexamples to this proposition as it is to find supporting evidence. The US, which has a common law legal system increasingly has a very detailed and rigidly prescriptive set of financial accounting standards. This seems to have little to do with the nature of the US legal system, and a great deal to do with the litigious nature of US citizens. By contrast, Germany (like Continental Europe in general) has a codified law system, but the use made of statute law to promulgate accounting rules leaves considerable scope for flexibility. A large part of German basic accounting principles, namely the *Grundsätze ordnungsmäßiger Buchführung*, are not part of the codified law. Consequently, there exists in Germany a "market for interpretations" (Ordelheide and Pfaff, 1994), in which senior professionals and academics contribute their views in commentaries, journal articles and expert opinions.

Rhenman (1973) proposed a "principle of equifinality," according to which similar ends could be reached by disparate means. It seems to us that either flexibility or rigidity of a system of accounting rule making may be achieved under either a common law-based legal system or a codified law system. This is further evidence of the mythical nature of the belief in ASA.

How "Private-Sector" Is US Regulation?

It is interesting to look at this issue as discussed in some standard US textbooks. The situation as we perceive it is succinctly given by Horngren et al. (1996).

The US Congress has designated the Securities and Exchange Commission (SEC) as holding the ultimate responsibility for authorizing the generally accepted accounting principles for companies whose stock is held by the general investing public. However, the SEC has *informally delegated* much rule-making power to the FASB. This public sector–private sector authority relationship can be sketched as follows:



Reconsider the three-tiered structure above. Note that Congress can overrule both the SEC and the FASB, and the SEC can overrule the FASB. Such undermining of the FASB occurs rarely, but pressure is exerted on all three tiers by corporations if they think an impending pronouncement is “wrong.” Hence, the setting of accounting principles is a complex process involving heavy interactions among the affected parties; *public regulators* (Congress and the SEC), private regulators (FASB), companies, the public profession, representatives of investors, and other interested groups (emphasis added).

Belkaoui (1985) gives a similar outline, and concludes as follows:

In other words, the SEC endorses the FASB with some reservations, in that it has not delegated any of its authority or given up any right to reject, modify, or supersede FASB pronouncements through its own rule-making procedures.

The overall position in the US that emerges is quite clear, namely that the public-sector SEC is the source of authority, whether or not there is some informal delegation of this to the FASB. What, then, are we to make of the following news item in *Accountancy* (1998)?

Standards upset in US. If legislation proposed in the US last month goes through, it would change the way that accounting standards have been set there for the past 25 years. The proposals were immediately attacked by the Financial Accounting Standards Board which called them a “direct broadside” against what it says is the world’s best accounting

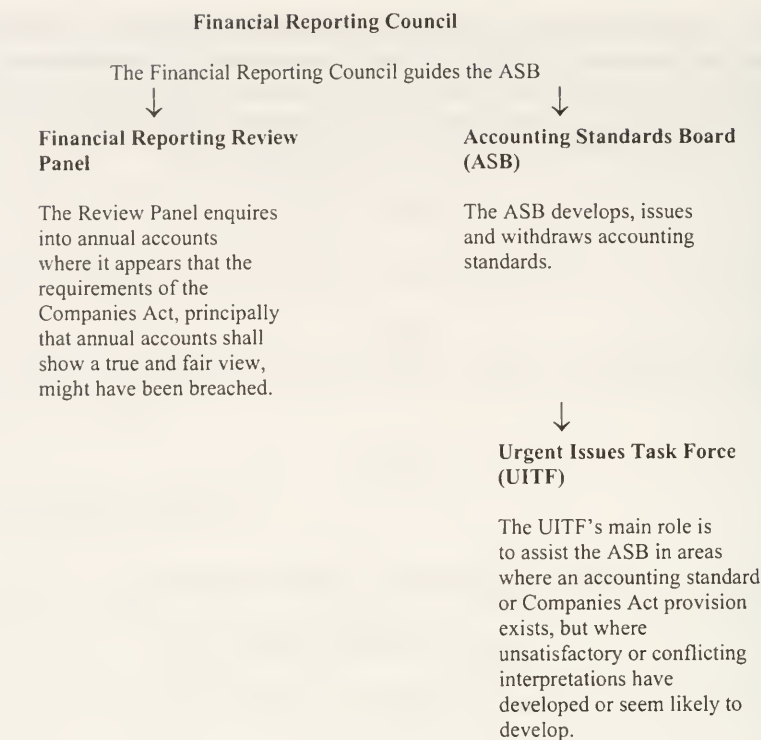


Figure 3. UK Standard Setting (Source: Coopers & Lybrand, 1997).

standards-setting system. At present, FASB pronouncements effectively have the force of SEC regulations even though the SEC does not formally review them. Mr Baker contended that while other SEC rules could be challenged in the courts, the FASB is, to all intents and purposes, "exempt from legal challenge." Within 24 hours of these proposals, FASB chairman Ed Jenkins had delivered letters to every member of Congress urging them not to support the new legislation. In the letter, he argued that it would "remove accounting standard-setting from the public sector and put it squarely in the hands of the federal government," thereby removing the benefits of independent standard-setting.

The word "public" in the last sentence, would appear to mean "private." Freud lives on! Congressman Baker's misgivings about the private-sector FASB being, unlike the publicly accountable SEC, "exempt from legal challenge," recall the remarks of Dopuch & Sunder (1980) mentioned above about the FASB's problem of legitimacy. This indicates the potentially precarious, as well as ambiguous, nature of the FASB's status as a private-sector standard setter.

The UK structure surrounding the creation of accounting standards is shown in Fig. 3 (Coopers & Lybrand, 1997).

Some of the nuances of the working out in practice of this structure have already been touched on above in our consideration of the TFV requirement. But the general conclusion seems clear, i.e., that the US system is significantly more "public sector" than the UK system. In particular, the principal enforcement agency in the US is a body set up by Act of

Congress with statutory powers to impose penalties (the SEC), while in the UK it is a private-sector body closely associated with the accounting profession that needs to turn either to the government or to the courts if companies refuse to do its bidding. It has to be said that we are unaware of any instances of this happening.

THE POLITICS OF THE IASC

The formal position can be briefly stated. The IASC Board contains 16 voting members, as listed below (each "member" has two representatives plus up to two technical advisers, but only one vote), as of January 1999.

- Australia
- Canada
- France
- Germany
- India
- Japan
- Malaysia
- Mexico
- Netherlands
- Nordic Federation of Public Accountants
- South Africa
- UK
- USA
- International Council of Investment Associations
- International Association of Financial Executives Institutes
- Federation of Swiss Industrial Holding Companies

To approve a new Standard requires a 75 percent majority, so it is perfectly obvious that no standard acceptable only to "Anglo-Saxons," however defined, would or could be issued.

The first matter to consider is the question of whether the broad general historical thrust of Nobes' (1983) Micro/fair/judgmental strand is set to dominate the Framework and Standards of IASC. In the terms used by Flower (1997), will the "Anglo-Americans" dominate the "EU" in this fundamental respect?

The answer might appear to be yes, for the very simple reason that this has already happened—indeed happened by, at the latest, the publication of the IASC Framework in 1989 (IASB, 1989). The direct cause of this outcome can only have been majority voting from a broad spectrum of voting board members over many years. The underlying causes were the evolution of global markets and the resulting acceptance by the IASC's members of an approach to accounting standard setting that is oriented towards the assumed information needs of the international investor community. The investor-oriented approach historically associated with the English-speaking countries provided a more relevant basis for this than the so-called macro-uniform approaches with their links to tax systems and state involvement in economic planning. An individualistic micro-approach is much easier to internationalize than a statist macro-approach!

It is noteworthy that the IASC reports in *Insight* (IASC, 1999) that 29 of the 30 enterprises making up the German DAX share index are either already (1998) publishing financial statements under IAS or US GAAP, or have decided to change by the year 2000. In the light of this, can anyone seriously expect the German vote on IASC decisions to go in favor of secretive, creditor-focused commercial code accounting?

But what of future detailed developments? Are the "victors" (to use Flower-type hegemonic terminology) likely to descend into internecine warfare? And if they do, what expectations might arise regarding possible developments and their effects?

We believe that the logical conclusion from our earlier analysis is that such internecine warfare is inevitable. Indeed, it is clearly already happening. The "Accountancy" quotation given on our second page surely makes this abundantly clear. If anything, to use Flower's simplistic phraseology, the future in our view is that the IASC and the EU, explicitly including the UK, will combine against the Americans, unless the Americans accept the IASC Standards for registration purposes, as influenced, but not determined, by themselves.

But such simplistic phraseology is not really helpful. Particular issues will continue to be decided in particular circumstances. The authors are not privileged with access to the inner workings of IASC, but three anecdotes may suffice to reveal what we believe to be typical of its decision-making process.

1. In the debate on IAS 1 (revised), the two UK delegates argued "passionately" (to quote one of them in private conversation) on opposite sides of the TFO argument, yet the UK, of course, eventually cast a single vote.
2. In a private discussion with an IASC representative concerning the likely outcome of the vote on IAS 1 (revised), it was stated that the vote of the Nordic Federation is unpredictable, as it "depends on who turns up."
3. The twistings and turnings of the LIFO debate are complicated. LIFO is widely used in the USA and the Society of North American Analysts favored its retention. The US delegation on IASC nevertheless supported the majority view and voted for the deletion of LIFO. However, four countries, i.e., Germany, Italy, Japan, and Korea voted for its retention, and so it remains permitted today. Raffournier (1998) bizarrely interprets this as another example of dastardly Anglo-Saxon influence. Cairns (1999) sets the record straight.

None of the above anecdotes is remotely consistent with grand conspiracy theories of any kind. We therefore conclude that

1. such alliances as do exist tend to be shifting and ad hoc.
2. UK and US attitudes and policies are often on different sides, and this position seems set to continue.

CONCLUSIONS

We believe that we have produced enough evidence in this article to demonstrate that the belief in an Anglo-Saxon or Anglo-American approach to financial accounting and its regulation is of a mythical nature. The one characteristic that is common to the US and the

UK (and to other English-speaking countries), as well as to The Netherlands, is an expressed concern for the quality of accounting information from the perspective of capital market actors. Even in this respect, however, we wonder whether the emphasis on "measurement" rather than "disclosure" standards is genuinely reflective of the needs of financial analysts and other knowledgeable users with a capital market orientation in a context of informationally efficient capital markets (Beaver, 1989).

A myth may still form an effective basis for a coalition provided that the myth is sustained. This requires that the parties desire this situation. In this article we argue not only that ASA is a myth, but also that there are reasons for believing that it may not be sustainable, or indeed necessary, in the future.

The recent criticisms expressed by the Chairman of the UK ASB of what he sees as the increasingly rule-bound approach of the US accounting regulators motivated us to ask whether the myth of Anglo-American accounting might not be about to explode, and, if it did, whether there would be any significant implications for UK accounting regulation. Those criticisms may have been partly motivated by the desire not to see the UK government introduce an SEC-type stock exchange regulator with powers over financial reporting. Depending on one's view about the desirability of a UK SEC, one may therefore feel that the ASB's distancing itself from the US regulators is a shrewd and praiseworthy move. We take no position on this issue. The thrust of our article is that such a distancing would be much more the explosion of a myth than a substantive parting of previously close associates; for the closeness was in many ways itself a myth.

Our analysis throws considerable light on current and likely future "political" developments. We argue that (A) in broad philosophical terms the essentially nineteenth century Anglo-Saxon attitude triumphed internationally years ago and (B) as regards future detailed standards and regulations, any notion of an Anglo-Saxon conspiracy or even of any cooperation beyond convenient ad hocery is demonstrated to be without foundation. At neither level does the notion of Anglo-Saxon cooperation have any predictive or future explanatory power.

Much more may be at stake in the negotiations between the IASC, the SEC, and the International Organization of Securities Commissions (IOSCO), regarding the future role of IASs as an internationally recognized basis for meeting stock exchange listing requirements, including the US stock exchanges. The future of accounting standard setting at the national level (except at the level of "little GAAP") may be in question.

NOTE

The text of this paper is up-to-date as of the time of acceptance in late 1999.

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Auditing Standards in China—A Comparative Analysis with Relevant International Standards and Guidelines

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Key Words: Chinese auditing standards; International Standards on Auditing; Chinese professional ethics; International Federation of Accountants; Code of Ethics for Professional Accountants; Chinese accounting industry

Abstract: The continuing and deepening economic reforms in China have brought many changes both socially and economically to the society. The primary function of auditing in China has begun to shift away from the traditional tax compliance assessment towards the credibility lending to financial statements. The economic reforms and the development of the Accounting Standards for Business Enterprises have necessitated the parallel development of auditing standards in China. While some significant differences exist, the new Chinese auditing standards are, in a number of important aspects, similar to the professional standards promulgated by the International Federation of Accountants. The development of a comprehensive body of standards, auditor independence, the role of certain auditing techniques, and certified public accountant (CPA) population are the major areas that China needs to improve. Opening up the Chinese accounting industry will trigger significant advances in the implementation of Chinese standards and the development of the Chinese accounting profession.

Over the last decade, China (the People's Republic of China, or PRC) has experienced tremendous social and economic changes. The development of socialist market economy, privatization, and large inflows of foreign investment demand the innovation of a Chinese accounting system in harmony with international practice. As a result, China released a set of *Accounting Standards for Business Enterprises (ASBE)* in 1993. To reinforce the confidence of investors, to regulate the performance of audits, and to harmonize with international practices, China began to issue independent auditing standards with the first batch being effective from January 1, 1996. The issuance of the Chinese auditing standards marks an important milestone in the development of the Chinese accounting profession. The standards also represent a commitment on the part of China to improve the quality and standard of certified public accountants (CPAs) with a view to harmonize China's professional standards with international practice.

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Compared with research on international accounting standards, there has been limited study on international auditing standards (Needles, 1989, 1997). It is not surprising that research into Chinese auditing standards is rare. Xiao et al. (2000) identify various factors that motivated auditing standards setting. Their study, however, did not directly compare the new Chinese auditing standards with international standards on auditing. In contrast, there have been numerous studies on Chinese accounting standards (e.g., Fang and Tang, 1991; Winkle et al., 1994; Chen and Tran, 1995; Davidson et al., 1996; Xiao and Pan, 1997). Motivated by the relative lack of attention to Chinese auditing standards, this article analyzes the motivations for the recent development of auditing standards in China and describes the framework of the standards. A comparison is made of the Chinese standards and the technical pronouncements issued by the International Federation of Accountants (IFAC) focusing on five broad areas: the auditor and attest function, independence, ethical principles and enforcement, audit evidence, and audit report. These five broad areas were identified because they are fundamental to the confidence and credibility that can be placed on an auditor's opinion (Stamp and Moonitz, 1978; Needles, 1985).

THE ACCOUNTING PROFESSION IN CHINA

The accounting profession in China is much younger and inexperienced compared to most Western countries. The Chinese Institute of Certified Public Accountants (CICPA) was founded in November 1988. This is the first professional accounting body founded in China since the establishment of the PRC in 1949. In most western countries, accounting firms and auditing firms are alike and their associated professional bodies are independent, private, and self-governed organizations not affiliated with the state. The situation in China is quite different. Accounting firms and auditing firms are treated separately. This is evident by the parallel coexistence of the CICPA and the Chinese Association of Certified Public Auditors (CACPA) established in 1991. Although CICPA and CACPA are technically private organizations, they are governed and regulated, respectively, by the Ministry of Finance (MOF) and the State Audit Administration (SAA) and their day-to-day functions are directly influenced by substantial government involvement (Chow et al., 1995; Macve and Liu, 1995; Graham, 1996). The establishment of an accounting firm or an auditing firm and the qualifying procedures for becoming a CPA or a practicing auditor were within the discretion of their respective sponsoring body. The parallel coexistence of both accounting and auditing firms has led to many problems in the Chinese public accounting profession such as abnormal competition and duplicate audits (Li, 1991; Li and Lin, 1991). Following a notification issued by the MOF in June 1995, the two professional bodies emerged to form a new professional body by the name of CICPA, under the direct control of the MOF. This change has resulted in the unification of name, institution and regulations. While the work of the SAA after the merger focuses on governmental audits and audits of state-owned enterprises in compliance with economic laws, the performance of the attest function is restricted to the CPAs.

In China, only foreign investment enterprises and listed companies are required to have a legal audit by CPAs. There is generally no statutory requirement as to other types of businesses that must receive financial statement auditing. The choice of auditor is a matter of management's discretion. However, in order to audit listed companies' and foreign

investment enterprises' financial statements, CPA firms must first be approved by the state. There are 107 CPA firms qualified to do securities-related business by the end of 1998 (The Hong Kong Accountant, May 2000). The *Law of the People's Republic of China on Certified Public Accountants (CPAs Law)* requires auditors to perform the following services: to audit the enterprise's financial statements, to verify the enterprise's capital contribution, to engage in the audit work of the enterprise' merger, dismerger and liquidation, and to provide professional services specified by the law and regulations.

In light of the need for independent audit services, China has undertaken various measures to establish an independent audit profession. The set up of accounting body in 1988 and the promulgation of the *CPAs Law* in 1993 are examples of various measures (National People's Congress, 1993). In addition, China allows non-Chinese citizens to write CPA examinations. So far, more than 220 expatriates have passed the exams and obtained non-practicing membership of CICPA (Tang, 1999). Sooner they will enjoy the same practicing rights as Chinese CPAs after they have worked at least 2 years for a CPA firm in China. The establishment of accounting firms must be approved by the MOF to be able to provide statutory services. CPAs may form an accounting firm on a partnership basis,¹ providing that the registered capital of the firm is not less than 300,000 RMB yuan (approximately US\$36,000) and that the firm has at least five registered CPAs (*CPAs Law*, art. 24). By the end of 1997, there were 62,460 practicing CPAs and 6,900 accounting and auditing firms in the country (Tang, 1999). The CICPA expects that the country needs 100,000 CPAs by 2000 and 300,000 by 2050 (Zhang, 1995).

Over the last decade, there is a tremendous growth of foreign direct investment in China. Since 1993, China has been for five consecutive years the second largest recipient of foreign direct investment, after the United States. Foreign direct investment amounted to US\$45 billion in 1998 (Beijing Review, 1999). More than 200 of the world's top 500 companies have invested in the country. Driven by their clients' move, over the past few years, leading international accounting firms have moved into the country by opening representative offices. However, they are not allowed to do any statutory audit work under the law. They can, however, establish their presence in China through: a) opening representative office to offer consulting services, b) establishing joint ventures to perform audits on multinational corporations and Chinese firms listed overseas, c) accepting Chinese accounting firms as their member firms, and d) applying for provisional operation licences to set up operations in China (Hong Kong Trade Development Council, 1999). At present, there are 22 representative offices, 11 joint ventures and seven member firms of international CPA firms (The Hong Kong Accountant, August 2000). The Big 5 takes up about 15 percent of the total market share in China (Tang, 1999).

As a part of a big overhaul of its state-run economy, China is in the midst of privatizing thousands of state enterprises and listing many on overseas exchanges, which typically requires the skills and reputation of international accounting firms. China has responded to this by gradually freeing up its accounting industry. Furthermore, in the effort to gain membership in the World Trade Organization, China has eased its restrictions on the establishment of branches by joint venture firms and overseas firms. The deadline to transform joint ventures in China into member firms has been extended from 2001 to 2010 (Xindec Business Information, 1998). The restriction on the maximum ownership of 33 percent equity by overseas firms in joint ventures has also been lifted.

THE NEED FOR AUDITING STANDARDS IN CHINA

Prior to the open-door policy in 1979, auditing played a very limited role in China. The government was the single source of financing for state enterprises and there had virtually been no foreign investment. Under such a situation, auditing had been no more than a mean of compliance tests to see if government funds were properly utilized. Prior to 1979, business operations were fully controlled by the government. As a result of the economic reform in 1979, which relaxed the relationship between state-owned enterprises and the central government, enterprises were given more power and control over their operations and retained profit. Auditing began to play the role of evaluating the effectiveness of business operations. In the early 1980s, state auditing was viewed as the most important part of China's auditing activities. State-owned enterprises and organizations of major economic importance are subject to audit by the SAA. One of the most important purposes of state auditing is to help safeguard the state against misconduct, such as fraud and corruption. By June 1988, state auditing institutions discovered misconduct amounting to over 40 billion RMB yuan (US\$11 billion) (Skousen et al., 1990). As the majority of Chinese government's revenues came from taxes from state-owned enterprises,² auditing in China primarily served the function of tax compliance checks. With the deepening economic reforms in 1993, this function has gradually shifted away towards lending credibility to financial statements. The shift of emphasis is attributable to the following events.

Although state-owned enterprises are still the dominant part of the Chinese economy, as a result of the economic reforms, collective and private enterprises and foreign investment enterprises coexist and compete with state-owned enterprises. There are over 300,000 private enterprises and 320,000 foreign investment enterprises in operation in China by the end of October 1998 (Beijing Review, 1998). Recent estimates indicate that about 73 percent of industrial output was generated outside the state sector in 1999 (National Bureau of Statistics, 2000). The movement in China toward private ownership that is almost totally divorced from management requires an independent audit on the financial reports made by management. This audit is essential for the success of the economic reforms. As private ownership is separated from management, the flow of investor funds to corporations has become dependent to a large extent upon reports by management. If investors are to have confidence in the veracity of the financial representations of management, it is necessary to provide an independent opinion on the truthfulness and fairness of the reports.

The development of stock markets in China, as a result of the establishment of the share capital system in 1992, has had a profound influence on the development of auditing. So far, some Chinese companies have successfully issued and listed bonds, A-shares, B-shares, H-shares, and N-shares³ to raise capital from domestic and foreign stock markets. Companies that offer B-, H-, and N-shares must provide understandable financial statements comparable to international standards. However, the traditional Chinese financial reporting system has many deficiencies compared to internationally accepted practice. As a result of the demand for revision in the accounting system, China formulated the *ASBE*, which became effective on July 1, 1993. This has brought Chinese accounting practice in harmonization with internationally accepted accounting principles. China's new accounting framework is based on many common aspects on Western accounting frameworks (Davidson et al., 1996). However, this does not necessarily mean that financial

position and operating results provided by the Chinese system represent the true and fair view. Although the financial statements prepared under the new accounting framework are comparable to those of Western financial reports, the overall credibility of the information contained in the Chinese financial statements depends to a critical extent upon the quality of the opinion of the auditor. If the auditor's primary function is to lend credibility to the financial statements, it follows that auditors themselves must be credible (Stamp and Moonitz, 1978). Sound auditing standards can lend credibility to auditing itself. The continuing economic reforms, as well as the development of accounting standards in China, necessitate a corresponding development of a set of auditing standard in harmony with international practices. The coexistence of the two standards are mutually reinforcing in establishing investor confidence that the financial statements prepared in a country other than their own can be relied upon.

Furthermore, the development of auditing standards in China is a necessity for enhancing the quality of audit work, services, and practices. Chinese accounting profession has developed rapidly over the last 10 years. However, a large number of CPAs at the early stage were qualified through an evaluation process based on working experience before a nationwide CPA examination was introduced in October 1991. Furthermore, there is a lack of continuing professional education for CPAs. A relatively low degree of professionalism is anticipated in China, as many CPAs did not receive systematic academic education and possess experience with market economy transactions and international accounting practice (Graham, 1996). It is therefore particularly necessary to provide a set of uniform professional standards that is clearly accepted and enforced by all members of the profession.

FRAMEWORK OF CHINESE AUDITING STANDARDS

Empowered by the *CPAs Law*, an Auditing Standards Task Force of 15 headed by the Secretary General of the CICPA, was formed in October 1994 to draft the auditing standards. Exposure drafts on the first 10 independent auditing standards were completed and released in January 1995 to all Chinese CPA firms and then in July 1995 to all finance bureaus in provinces and cities for consultation. Two separate teams of Chinese and international experts were formed in July and October of 1995 to help finalized the exposure drafts.⁴ However, there was no public exposure in the sense that not everyone in the general public was invited to comment on the exposure drafts and there was no public hearing. This practice of soliciting comments is another difference between Chinese and international auditing standards. On December 25, 1995, the MOF approved and issued the first set of 10 independent auditing standards, which became effective from January 1, 1996 (Ministry Of Finance, 1995). The issuance of auditing standards has been described by Zhang Youcai, Chinese Vice Minister of Finance, as "a landmark of the development of the Chinese CPA profession," and its development is "a necessity for the legalization, standardization, and internationalization of the Chinese CPA profession." The second and third batches of seventeen standards, five practice pronouncements and three related general standards on professional ethics, quality control and continuing professional education became effective from January 1, 1997, and July 1, 1999, respectively. As such, the regulatory framework of professional standards for CPAs in China has been basically established.

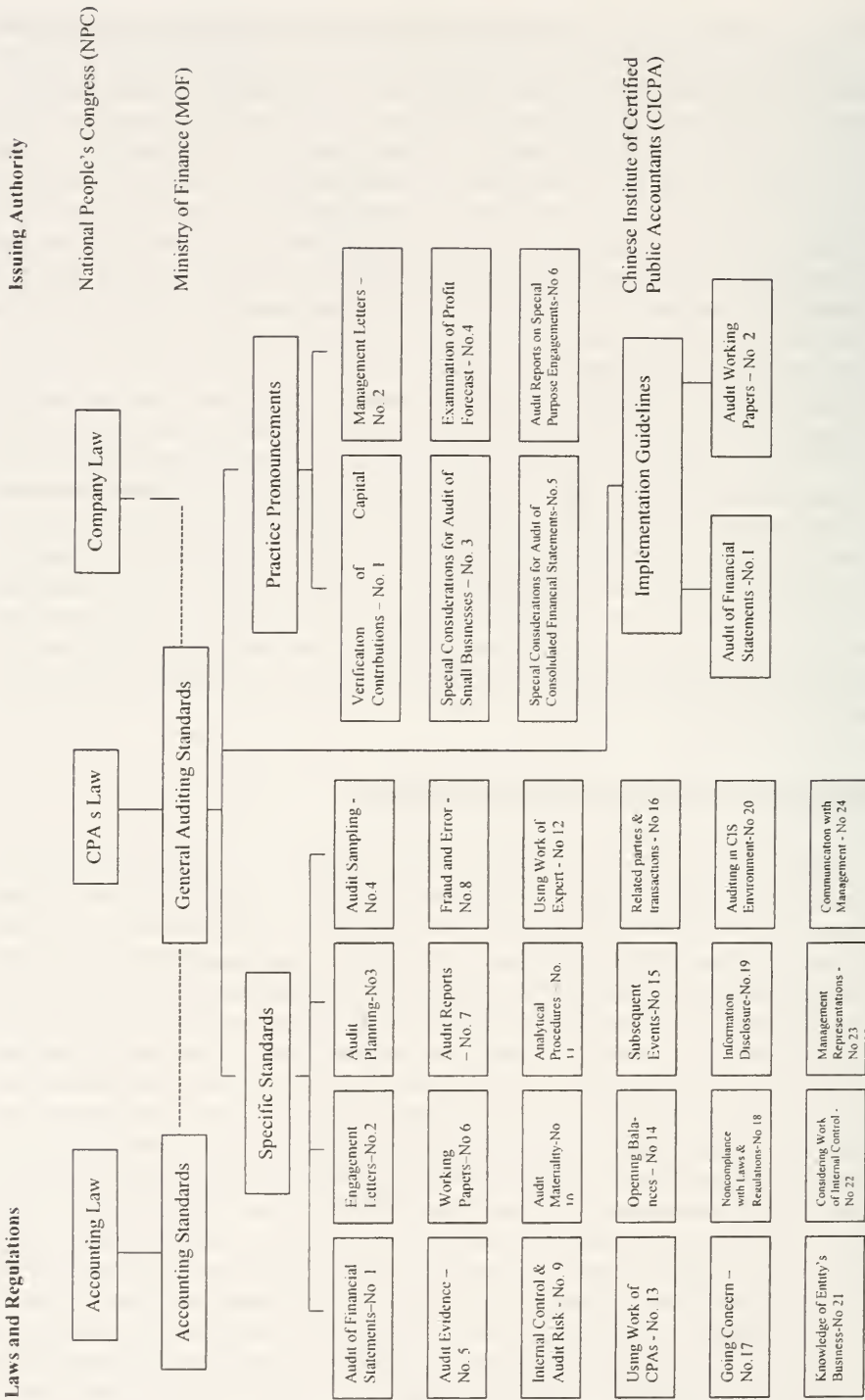


Figure 1. Regulatory Framework of Auditing and Independent Auditing Standards.

The independent auditing standards are comprised of three categories of statements of different levels of authority. Fig. 1 depicts the regulatory framework of the standards in relation to other laws.

The general auditing standard acts as the overall framework and provides a basis for the development of other categories of statements. The second category consists of two types of statements: (a) specific auditing standards are detailed standardization of an ordinary audit engagement and audit reports, and (b) practice pronouncements are detailed standardization of audits relating to specific purposes audits and specialized industries. These two categories of statements must be approved and issued by the MOF and compliance is mandatory. Implementation guidelines are statements issued by the CICPA as practical guidance on applying the specific standards and practice pronouncements. Their implementations are within the auditor's own discretion. The independent auditing standards apply to any audit with a view to expressing an opinion on the truthfulness and fairness of the financial statements prepared by business management.

A COMPARATIVE ANALYSIS WITH RELEVANT INTERNATIONAL STANDARDS AND GUIDELINES

The following subsections focus on comparisons in five broad issues that are fundamental to the confidence and credibility that can be placed on an auditor's opinion (Stamp and Moonitz, 1978; Needles, 1985). The comparison is made to the *International Standards on Auditing (ISA)* (for subsections 1, 4, and 5) and the *Code of Professional Ethics for Professional Accountants* (for subsections 2 and 3) promulgated by the IFAC (International Federation of Accountants, 1994, 1996, 1998a,b,c). Verification of capital contribution, a statutory audit unique to China, is also described. A summary comparison of the Chinese auditing standards to the *ISA* is given in the Appendix.

The Auditor and the Attest Function

The Chinese *CPAs Law* defines CPA, the business name of the auditor, as a professional who possesses a CPA designation and works in the auditing and accounting fields. The auditor should possess professional knowledge and experience, undergo appropriate professional training, and possess sufficient analytical capability and judgment. *ISA* refers the auditor to be the person with final responsibility for the audit.

Differences in the qualifications and training of auditors may cause variations in the quality of audits. There are differences between China and IFAC with regard to how auditor's professional competence should be examined. Before October 1991, there were two routes to become a registered accountant in China: through the written examination and through the evaluation process. China's national uniform examination of professional competence started in October 1991. Like IFAC, China also requires the equivalent of a university degree and the completion of a qualifying examination. The similarity is somewhat misleading, however, because the nature and contents of the examination vary. IFAC Education Committee recommends the knowledge that individuals must gain prior to qualification. This knowledge falls into four categories: general knowledge, organizational and business knowledge, information technology knowledge, and accounting and

accounting-related knowledge (International Federation of Accountants, 1996). The syllabus of the Chinese CPA uniform examination is more limited in scope since it relates only to accounting and accounting-related knowledge (accounting, financial management, auditing, economic laws, and taxation).

Article 4 of the Chinese General Standard states that the objective of an independent audit is "to express an audit opinion on the legitimacy and fairness of the entity's financial statements and the consistency of the accounting treatments." Legitimacy refers to whether the financial statements are prepared in conformity with the *ASBE* and other related financial accounting regulations. Fairness refers to whether the financial statements present fairly, in all material aspects, the financial position, operating results, and changes in cash flow. Consistency refers to whether the accounting policies adopted follow the consistency principle. *ISA 200* describes the objective of an audit of financial statements as being enabled the auditor "to express an opinion whether the financial statements are prepared, in all material respects, in accordance with an identified financial reporting framework." Thus, it appears that Chinese standards are more specific about the objective of an audit. *ISA 200* does not address whether the examination seeks to determine whether the financial statements are prepared according to legal requirements prescribed by law, or whether the financial statements present fairly in accordance with a set of accounting standards.

Independence

It is of the essence of the auditor's function that the auditor shall be independent in his or her relationships with the client if he or she is to be objective, and be perceived to be objective in expressing his or her opinions. Article 5 of the Chinese General Standard on Professional Ethics requires the auditor to remain independent in form and in substance. An accounting firm or a CPA must not accept the engagement for an audit or other attestation function if vested interest with the client exists.⁵

IFAC addresses the independence issue in the *Code of Ethics for Professional Accountants* (International Federation of Accountants, 1998b). It stresses the importance of both the appearance and the substance of independence and identifies many ways that would impair the independence of the auditor. These include: financial involvement with clients, appointments in companies, provision of other services to the clients, personal and family relationships, audit fees and ownership of the capital.

Despite similar definition, the practical situation in China raises question marks over the independence of CPA firms. Due mainly to insufficient assets to bear the full responsibilities and legal liabilities that go with an accounting practice, most of the accounting firms established in the early 1980s were shielded, funded, and managed by different government agencies. Furthermore, all CPA affairs are supervised by the MOF in the name of a seemingly autonomous body, CICPA.⁶ Substantial government involvement in the accounting profession in China has resulted in a strong statutory control and influence over accounting activities (Zhong, 1998). To enhance audit independence, since 1997, China has started the institutional restructuring of CPA firms, aiming to sever the CPA firms' financial links with related government agencies. The delinking of CPA firms from their sponsoring organizations in terms of four main areas—personnel, finance, business strategy and name, has been rigidly enforced. So far, there are about 1,000 CPA firms being restructured into

partnerships with limited liability. The delinking of CPA firms in Shenzhen, Hainan and Beijing for CPA firms qualified to conduct securities-related business has been completed (The Hong Kong Accountant, February 2000). In 1998, the government decided to turn all joint venture CPA firms into independent partnership by the year 2010 (Xindeco Business Information, 1998). After the restructuring, Chinese CPA firms will be more independent and free from government interference. DeFond et al. (2000) find that the new Chinese auditing standards have resulted in increased auditor independence since 1996. However, the social and cultural constraints (centralization, conservatism, and uncertainty avoidance) on the development of a more flexible self-regulatory accounting body in China will continue for the foreseeable future (Chow et al., 1995).

Ethical Standards and Enforcement

Ethical standards are to ensure the public that the profession will maintain a high quality performance. Similar to *ISA 220*, China has issued the *General Standard on Quality Control* to ensure that all audits are conducted in accordance with relevant laws and regulations. China addresses the professional ethics in the *General Standard on Professional Ethics*. The term "professional ethics" in the standard refers to the CPA's professional integrity, discipline, competence, and responsibility. It further requires that during the period of professional engagement, the CPA must maintain objectivity, confidentiality, professional conservatism, and competence and observe professional standards.

ISA 200 requires the auditor to follow the ethical principles addressed in the *Code of Ethics for Professional Accountants* issued by IFAC (International Federation of Accountants, 1998b). Ethical principles governing the auditor's responsibilities include independence, integrity, objectivity, professional competence, and due care, confidentiality, professional behavior, and technical standards.

The Ethics Committee of IFAC has proposed that the power for disciplinary action may be provided by legislation or by the constitution of the professional body. China sets and enforces ethical standards through a process that involves both a legal basis in law (e.g., *CPAs Law*) and a code of ethics adopted by the CICPA (e.g., *General Standard on Professional Ethics*).⁷ The MOF enforces ethical standards. The authority to revoke a license rests with the MOF. However, it is the CICPA that actually conducts the disciplinary investigations (*CPAs Law*, art. 37). The lack of adequate adherence to the ethical standard by Chinese CPAs has been serious. The practice review of CPA firms in 1998 has resulted in 344 CPA firms being closed down, 1,509 firms being penalized by temporary suspension of licenses, fines, forfeiture of illegal gains, and compulsory restructuring, and 1,441 branch offices being shut down. The certificates of 352 CPAs were cancelled and other actions such as suspensions or warnings were given to 2,396 CPAs (Tang, 1999). It appears that it will take a long time to improve the ethical standard of the Chinese accounting industry.

Evidence

The key element in any audit is the marshalling and evaluation of evidence. Chinese specific auditing standard No. 5, *Auditing Evidence*, requires the auditor to obtain sufficient

appropriate evidence necessary for the expression of an opinion and issuance of an audit report. The auditor should exercise his professional judgment to decide whether evidence is adequate and appropriate, based on the factors such as audit risk, materiality, misstatement, or irregularity, and types and sources of evidence. Sufficient appropriate audit evidence may be obtained by such means as inspection, vouching, observation, inquiry and confirmation, computation, and analytical procedures. When obtaining evidence through compliance tests, the auditor should consider such factors as the existence and effectiveness of the client's internal control system. When obtaining evidence from substantive tests, the auditor should consider such factors as the existence or occurrence, rights and obligations, completeness, measurement, valuation, and matching of income and expense.

This section closely resembles that of *ISA* in terms of determination of sufficient appropriate evidence and procedures for obtaining evidence. Audit evidence can be obtained from compliance tests and substantive tests, such as analytical procedures. Chinese specific standard No. 11 deals with analytical procedures. However, the role of analytical procedures in the evidence collection process in China has generally not been recognized to the same extent as in the West. The efficiency and effectiveness of the use of analytical procedures in audits has been well recognized by the western accounting firms for decades. The primary advantage of using analytical procedures is their apparent abilities of reducing time-consuming detailed testing and of signaling a large proportion of financial misstatements (Hylas and Ashton, 1982; Wright and Ashton, 1989). American SAS 56 (American Institute of Certified Public Accountants, 1988) and British SAS 410 (Auditing Practices Board, 1995) have made analytical procedures mandatory in the planning and review stages of the audit and strongly recommend their use directly as substantive procedures. However, the decision to use analytical procedures at any stage of the audit in China is a matter of auditor discretion. The general lack of the attention on analytical procedures may be due to insufficient competitive pressure among Chinese CPA firms for cost savings.

In most Western countries, professionalism is relatively high where accountants are encouraged to adopt independent attitudes and to exercise their individual judgments to a great extent. Solomon (1995), on the basis of a review of American auditing standards, concludes that judgment pervades virtually every aspect of contemporary financial statement audits. In general, compared with the West, professional judgment has not really been emphasized in accounting education in China, which has been based on an over-specialized and industry-oriented accounting curriculum (Tang et al., 1994). As judgment involves a certain degree of "freedom" and "uncertainty," it is understandable that a society of strong uncertainty avoidance that has long been accustomed to detailed rules and guidelines may adopt a conservative approach to deal with this issue (Gray, 1988; Chow et al., 1995).

Audit Report

The content and structure of the Chinese audit report are generally similar to international standards. With regard to the scope paragraph, specific auditing standard No. 7 (art. 15) requires that audit report specify the following matters: the name of the financial statements audited including the date of and period covered by the financial statements, the accounting responsibility and the audit responsibility, the basis of the audit (i.e., China's Independent Auditing Standards of CPAs), and the major audit

procedures performed. Moreover, it requires that the auditor's opinion paragraph convey three messages. Firstly, whether the financial statements conform with the *ASBE* and other relevant financial accounting regulations. Secondly, whether the financial statements present fairly, in all material respects, the financial position, results of operations, and changes in cash flow. Finally, whether the accounting policies adopted follow the consistency principle. The auditor may issue an unqualified, qualified, adverse, or disclaimed report. An unqualified opinion is expressed when the entity's financial statements prepared comply with the three matters specified in the opinion paragraph and no material matters requiring adjustments have not been made by the entity. A qualified opinion is expressed when the entity refuses to make a material adjustment, or audit evidence cannot be obtained as required due to a significant limitation on the audit scope on certain aspects, or the application of individual material accounting treatment is not consistent. An adverse opinion is expressed when the application of the accounting treatments by the entity seriously violates the requirements of the *ASBE* or the financial statements prepared seriously distort the financial position, operating results, and changes in cash flow, and the entity refuses to make adjustments. A disclaimer of opinion is expressed when the CPA cannot obtain the necessary audit evidence due to a severely limited audit scope imposed by the client, the entity, or other circumstances. The impact of such a limitation is so material that the CPA is unable to express an audit opinion on the financial statements as a whole.⁸ In the case of the last three types of audit report, the auditor shall provide adequate explanations and quantify the extent of its possible effect on the financial statements.

ISA 700 provides guidelines for the content and structure of audit report. It recommends that the report contain the following basic elements: title, addressee, identification of the financial statements audited, a statement of the responsibility of the entity's management and the responsibility of the auditor, a reference to the auditing standards or practice followed, a description of the work the auditor performed, an expression of opinion on the financial statements, the auditor's signature and address, and the date of the report. The guideline indicates that the terms used to express the auditor's opinion are "give a true and fair view" or "present fairly, in all material respects." Thus, audit reports prepared under Chinese standards and IFAC guidelines are similar in format. However, there are some differences in terminology used (e.g., audit report title) and in the details of the guidelines provided. Unlike *ISA 700*, which provides guidelines on standardized wording, the language of the Chinese audit report is not standardized. Standardized wording should promote a more consistent understanding of whether or not the auditor has any reservations and should also avoid the confusion, which can result from using different messages to describe essentially similar situations (Hatherly and Skuse, 1991). Moreover, Chinese audit report tends to provide less detail on qualifications reflecting a conservative culture in information disclosure (Chow et al., 1995).

Verification of Capital Contribution

Chinese practice pronouncement No. 1 defines verification of capital contribution as the verification of the truthfulness and legitimacy of the entity's paid-in capital (share capital) and its relevant assets and liabilities. A CPA certified verification of capital

contribution is a legal requirement when: (1) a new business is set up that requires each party to pay its contribution within the time as fixed in the contract; (2) the change of legal person, merger, or demerger, increases in and assignments of registered capital; and (3) contracting parties wish to change (increase, decrease, or withdraw) their registered capital. For example, equity joint ventures in China are required to have a registered capital to which all parties must contribute. Contribution can be made in cash or in tangible and intangible assets. After all contributions are made by each party, a CPA firm is called upon to verify them and issue a certificate of verification. The scope of verification includes the paid-in capital, the corresponding cash, tangible and intangible assets that make up the paid-in capital, and the relevant liabilities. The guidelines require the auditor to conduct necessary verification procedures and obtain sufficient appropriate evidence for the expression of an opinion and the issuance of a verification report. Among other elements, the verification report should contain two paragraphs: one describing the scope of the verification and one expressing the auditor's opinion on the verification of capital contribution.

No equivalent *ISA* was found in this area. Verification of capital contribution is generally not a statutory audit in the developed economies such as Australia, Canada, UK, and USA, although auditors sometimes have to verify capital contributions under various regulatory requirements. Verification of capital contribution is peculiar to and forms an important practice area of the Chinese CPAs. Several economic cases in the early 1990s,⁹ all involving fictitious verification reports by the accounting firms, have caused the society serious concerns over the work of auditors. In response to these incidents, the Chinese government has made the verification of capital contribution a statutory audit in various laws and regulations and made it clear that the issuance of an untruthful certificate by the auditor is a criminal offense.

CONCLUSION

While it is impossible to develop a set of faultless auditing standards in one attempt, China has now established a general framework for further development of a comprehensive body of standards. The standards and guidelines issued contain both international and Chinese characteristics. Guidelines on the verification of capital contribution, as a statutory audit, are developed based on China's unique economic environment. A comparison of the Chinese auditing standards with the IFAC pronouncements suggests that the Chinese standards most closely resemble international standards and guidelines in a number of important dimensions. Many of the similarities occurred because the development of Chinese accounting profession is so recent that many standards and guidelines issued by IFAC and well-established accounting professions were adopted with relatively little change. This is a very efficient way of making the new standards harmonized with international norms. However, differences exist with respect to how auditor's professional competence is examined, how independence is defined and practiced, how ethical standards are established and enforced, and how certain audit procedures are emphasized and performed.

For example, differences exist with regard to how auditor's competence should be examined. Chinese CPA examination only started in 1992 and the syllabus of the

uniform CPA examination and the curriculum of higher education are somewhat narrow in scope. Furthermore, there is a lack of post-qualification education. In terms of auditor independence, there are inherent weaknesses in the management system of Chinese CPA firms and in the status and authority of the CICPA. It is expected that cultural constraints on the development of a more flexible self-regulatory accounting body will continue for the foreseeable future. As for ethical standards, the MOF enforces the standards. The CICPA merely acts as an investigator, due to the lack of authority and power. Cultural constraints (conservatism and uncertainty avoidance) and the lack of emphasis on school curriculum and training may explain why professional judgment and analytical procedures are not emphasized in China. Lack of sufficient competitive pressure on audit fees may also explain this lack of emphasis by the Chinese CPAs. Finally, the language of the Chinese audit report is not standardized and the report tends to provide less detail on qualifications, reflecting a conservative culture in information disclosure.

With the number and the comprehensiveness of standards it has developed, China moved closer to ISA. The three batches of 35 statements form the framework for regulating the auditing practices in China. Though it is relatively young and inexperienced compared to Western counterparts, the Chinese accounting profession is developing rapidly. China has the formal structure necessary to support a strong auditing profession. It now has a legislative framework at the national level, a professional organization, a systematic education program, and a uniform CPA examination system operating in close concert with government agencies. The mutual reinforcement between accounting standards and auditing standards will improve the usefulness and enhance the credibility of the financial reports of Chinese companies.

However, at present, the accounting industry in China has not yet fully opened up to the international accounting firms. It is understandable that for self-interest, China will protect its young accounting industry to allow it to grow to some extent before permitting expatriate competitors to enter the market. It is argued, however, that freeing up access to the market for international firms will help the profession implement the accounting and auditing standards as well as transfer the necessary skills and technologies to Chinese nationals and enable the profession to grow as rapidly as the economy demands.

One of the most important areas in which China needs to improve relates to the independence of CPAs. Given the cultural influence, Chinese accounting profession will continue to be characterized by substantial government control over its accounting activities. The relationship between the state, the auditor, and the client clearly should be clarified before the image of the auditor in China can be substantially improved. The recent requirement of establishment of member firms severing CPA firms from sponsoring government agencies is an important step in the right direction.

Now that the new Chinese standards are closer to the *ISA*, full implementation and adoption by firms become the key in meeting the public expectations. One major concern in the implementation of auditing standards in China is the relative small number of adequately qualified CPAs in practice in light of its economic size. Current shortage of qualified CPAs may become more apparent as more state-owned enterprises are converted to private enterprises. Opening up the accounting industry, allowing more competitors into the market, and granting qualified expatriates the practicing rights in China would trigger significant advances in the implementation of Chinese standards and allow the industry to expand and improve. It is equally important to provide existing

auditing personnel with adequate training and continuing education to ensure the proper application of these standards. Although promulgating ethical requirements is partly the responsibility of the legislative body, Chinese accounting profession body has the responsibility to promote high standards of professional conduct and to ensure that ethical requirements are observed. Failure to observe them should be investigated and appropriate actions taken.

APPENDIX A

Comparison of Chinese Auditing Standards to ISA

ISA #/Corresponding Chinese # Responsibilities	ISA title	Chinese standards generally conform to ISA?
200/1	Objective and General Principles	Yes. However, ISA highlights persuasive conclusive evidence and absolute and relative audit assurance.
210/2	Terms of Audit Engagements	Yes. However, ISA also considers recurring audits and provides example of an engagement letter.
220	Quality Control for Audit Work	Similar to Chinese General Standard on Quality Control
230/6	Documentation	Yes.
240/8	Fraud and Error	Yes. However, ISA also considers reporting of fraud and error to regulatory and enforcement authorities.
250/18	Consideration of Laws and Regulations in an Audit of Financial Statements	Yes. However, ISA also considers reporting of noncompliance with laws and regulations to regulatory & enforcement authorities.
Planning		
300/3	Planning	Yes.
310/21	Knowledge of the Business	Yes.
320/10	Audit Materiality	Yes.
Internal control		
400/9	Risk Assessments and Internal Control	Yes. However, ISA also illustrates the interrelationship of the components of audit risk.
401/20	Auditing in a Computer Information Systems Environment	Yes.
402	Audit Considerations Relating Entities Using Service Organization	No similar Chinese standard.
Audit evidence		
500/5	Audit Evidence	Yes.
501	Audit Evidence—Additional Considerations for Specific Items	No similar Chinese standard.

510/14	Initial Engagements—Opening Balances	Yes.
520/11	Analytical Procedures	Yes. Roles at planning and review stages not specifically emphasized.
530/4	Audit Sampling and other Selective Testing Procedures	Yes.
540	Audit of Accounting Estimates	No similar Chinese standard.
550/16	Related Parties	Yes.
560/15	Subsequent Events	Yes.
570/17	Going Concern	Yes. However, ISA also provides examples of opinion paragraph when highlighting the going concern problem.
580/23	Management Representative	Yes.
Using work of others		
600/8	Using the Work of Another Auditor	Yes.
610/22	Considering the Work of Internal Auditing	Yes.
620/12	Using the Work of an Expert	Yes.
Audit conclusions and reporting		
700/7	Auditor's Report on Financial Statements	Yes. However, ISA also suggested wording of the report.
710	Comparatives	No similar Chinese standard.
720/19	Other Information in Documents Containing Audited Financial Statements	Yes.
Specialized areas (Corresponding to Chinese auditing practice pronouncements)		
800/6	Auditor's Report on Special Purpose Audit Engagements	Yes.
810	Examination of Prospective Financial Information	No similar Chinese standard.
810/1	Verification of capital contribution	No similar ISA.
810/2	Management Letters	Discussed in ISA 580.
810/4	Examination of Profit Forecasts	No similar ISA.
810/5	Considerations for Audit of Consolidated Financial Statements	No similar ISA.
Related services (No similar Chinese standards)		
910	Engagements to Review Financial Statements	
920	Engagements to Perform Agreed-Upon Procedures Regarding Financial Information	
930	Engagements to Compile Financial Information	

International auditing practice statements		
1000	Inter-Bank Confirmation Procedures	
1001	CIS Environments-Stand-Alone Microcomputer	
1002	CIS Environment-On-Line Computer Systems	
1003	CIS Environment-Database Systems	
1004	Relationship between Bank Supervisors and External Auditors	
1005	Particular Considers in audit of small Business	Similar to Chinese Practice Pronouncement No. 3
1006	Audit of International Commercial Banks	
1007	Communications with Management	
1008	Risk Assessments and Internal Control	
1009	Computer-Assisted Audit Techniques	
1010	Consideration of Environmental Matters in the Audit of Financial Statements	

NOTES

1. Due to the lack of an unlimited liability concept and of a developed legal environment in which to apply this concept, most CPA firms in China are established with limited liability (Chow et al., 1995; Graham, 1996).
2. The State-Owned Enterprise Income Tax Law, which was introduced in 1983, requires state-owned enterprises to pay income tax on profits rather than handing over surplus to the state government. Under that law, large and medium-sized state-owned enterprises have to pay income tax at the rate of 55 percent and small state-owned enterprises were taxed at progressive rates.
3. A-shares and B-shares are available to Chinese citizens and foreigners, respectively. H-shares and N-shares are respectively listed on the Hong Kong stock exchange and the New York stock exchange.
4. Chinese expert team was headed by the late Yang Jiwan, head of Research Institute of Financial Science, MOF, and consisted of university accounting professors and CPA professionals. Foreign expert team was led by Xiao Weiqiang, partner of KPMG (Beijing) and composed of representatives from the leading international accounting firms.
5. Furthermore, the *CPAs Law* (art. 22) requires that during the period of a professional engagement, the auditor should not: (1) buy or sell stocks or bonds of the client, (2) accept compensation other than the audit fee specified in the engagement letter, (3) act as a liability collector, (4) allow others to practice on his behalf, (5) work in two or more CPA firms, (6) obtain clients by advertising, and (7) engage in other activities that violate laws and regulations. However, there is no limitation on providing non-audit services, such as bookkeeping, preparation of the financial statements, taxation and management consulting, nor is there any

- restriction on the percentage of total fee income deriving from one client. To enhance auditor's independence, some countries prohibit certain services by the auditor. For example, a firm in Japan and Netherlands cannot perform tax and consultant services for the same client for which it also serves as auditor. In Switzerland, fees from one client cannot exceed 10 percent of total income. In Mexico, an auditor is economically bound to the corporation if more than 40 percent of his income arises from one client for more than 1 year (see Needles, 1985).
6. The CICPA is not a delegated authority to issue accounting regulations or standards. The MOF has the real power on accounting regulations. The chairman of the CICPA is the Vice-Minister of the MOF in charge of accounting affairs. Although CPA firms are financially independent, they must distribute from their profits social payments for risk funds, housing, and development to the state and they may contract with the state to audit state-owned enterprises (Graham, 1996). The MOF approves the choice of auditors for foreign investment enterprises and the establishment of CPA firms. The MOF and its affiliated departments themselves operate several CPA firms (Chow et al., 1995). Some CPAs hold multiple positions including some in government agencies. All these raise a serious question over the independence of auditors in China.
 7. For example, the *CPAs Law* (art. 20) stipulates that the auditor should not issue the report if: (1) the client hinted to the auditor to report untruthfully; (2) the client intentionally did not provide relevant accounting information and documents; (3) the client, because of other unreasonable requests, caused the auditor unable to express an opinion on the material items of the financial statements. On the other hand, the auditor is liable for not reporting the following: (1) the auditor knew that the accounting policies adopted by the client contradict with the regulations laid down by the State; (2) the auditor knew that the result of accounting treatments by the client would directly damage the benefits of the report users; 3) the auditor knew that the result of accounting treatments by the client would mislead the report users; 4) the auditor knew that the client's financial statements contained materially false items.
 8. DeFond et al. (2000) and Chen et al. (2000) observe that since China enacted its first set of auditing standards in 1995, the percentage of listed companies receiving modified audit opinions has risen sharply.
 9. The "Shenzhen Yuanyie Incident" in 1992, the "Beijing Great Wall Incident" in 1993, and "Hainan Zhongshui Group Incident" in 1994, all involving illegal fund raisings, have caused substantial financial damages to the investors. The companies concerned and their auditors, because of issuing fictitious audit reports, were sued and sentenced.

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Book Reviews

Accounting Services, the Islamic Middle East, and the Global Economy by David L. McKee, Don E. Garner; and Yosra AbuAmara McKee, Quorum Books, Westport, CT, 1999, vi+ 185 pp.

This book was written with the purpose of presenting the role of the major international accounting firms in selected Islamic Middle East nations in building linkages between the national business and economy of these nations and the world at large.

First, the authors made a selection of six Middle East Islamic countries (Egypt, Saudi Arabia, Turkey, Bahrain, the United Arab Emirates, and Qatar) with a total population of 151 million, and they decided to exclude, apart from Israel, seven Islamic countries with a total population of 110.6 million (Jordan, Lebanon, Syria, Iran, Iraq, Oman, and Kuwait). These latter Islamic countries adopt mainly a different economic order than the countries chosen. Iraq and Syria are still implementing a socialist regime, Iran is implementing an Islamic economic order, and Jordan is turning to a more liberal economy. The authors did not explain the reasons for their exclusion.

Second, in analyzing the business and economy of the selected nations, the authors presented the position as they see it from the references and information they could collect, but did not concentrate on the impact of the more subtle changes taking place in the economy, i.e., the move toward liberalization of the market, deregulation, privatization, the promotion of fixed direct investment, and the emergence of the role of the stock exchange in most of the selected nations. In the course of this process, new systems and techniques of accounting have emerged. This includes the evaluation of public economic and service units, and more concentration on budgeting and costing. The use of managerial control systems creates the need for new fields of theoretical studies and practical expertise.

Third, when the authors emphasize the Islamic version in their study, they have ably presented the principles and tenets of Islam in general, which can be of great interest to Western readers, but to the Islamic world they are known facts. The authors have concentrated on presenting what they call the fundamentalists' role, but I think they should have differentiated between the extremists and those who represent certain groups of schools of thought in Islamic jurisdictions.

Fourth, in analyzing the concepts of the Islamic economic order, they should have explained in more detail the major financial tools or mechanisms that are being implemented, and in particular the "morabaha," the "modaraba," the "ijara," the "mozara," etc., which undoubtedly would have been new to Western readers. They

neglected to refer in detail to the development of standards of accounting, auditing, ethics, and "sharia," which amounted to 29 standards. These have been prepared and issued by the Accounting and Auditing Organization for The Islamic Financial Institutions that was established in Bahrain, by the Islamic Development Bank in Jeddah, and by some of the Islamic banking and financial funds or investment companies that amount to more than 60 entities. This development attracted the attention of the International Monetary Fund, the International Finance Corporation, the International Federation of Accountants, the Basle Committee, and other local, regional, and international institutions.

Fifth, as to the role of selected international accounting firms (the Big Six), the analysis was not comprehensive, as it treated some of them in one country and others in another. One could not find the basis on which the authors made their choice of an international accounting firm for each country and then arrive at their conclusions. One expects that the authors should have an overall description of the status of these offices in the nations selected, number of partners, and staff, foreign and nationals, function, volume, significance, and importance of their work in the fields they carry on, i.e., accounting, auditing, management consulting, tax, etc. We know the difficulty of obtaining this information, but for the Big Six this should not be a problem.

Sixth, with the implementation of GATT and of free access to the region's market, national accountants as well as the governments concerned are cognizant of the need to introduce certain conditions for the work of non-nationals as well as reciprocal treatment. To be sure, the need for exchange of knowledge and expertise is becoming a necessity, but this should not be carried out at the expense of the nationals who are increasing in number. In the fields of education, training, and setting standards, and in the qualification of accountants and auditors, the role of the international accounting firms is beyond doubt beneficial, and such global linkage is welcomed and appreciated.

Seventh, in the field of institutional specifics and jurisdictional developments in the selected Islamic Middle East countries, the authors presented an analysis of the legal system as related to the business firms, the business climate suitable for economic expansion, and business growth, in relation to national entities as well as to foreign participation. The role of the major national accountants and firms, as well as the situation of the international accounting firms, especially the Big Six, is also presented. It is my belief that the authors should have covered a larger scope to include the legal system and regulations concerning investment, stock exchanges, trade, tax, and other related regulations concerning the accounting and auditing profession, which is currently under review, especially after the implementation of GATT. The governments and professional bodies in the selected countries in the region are carrying out studies to regulate the work of the non-national accounting firms, whether in the direction of placing conditions on admission or enforcing reciprocity. But the trend is clear: to build up the linkage with the global market.

To conclude, I think that the authors have succeeded in presenting an up-to-date picture of the economic situation in the selected countries and the legal systems adopted in running the national economies. These countries are in the process of transformation to a more liberal system with an eye to joining the movement toward globalization, but exercising caution not to violate their national interests, culture, and stage of development so far achieved, especially in the field of human development. The need for better understanding, exchange of information, and partnership in development are targets to be achieved.

It would have been useful if the authors had covered some of the gaps outlined in my review of the book, especially in the following areas:

1. To include the rest of the Islamic Middle East countries, which have a different status both in the development of the economy and the accounting profession. Different economic orders will affect the techniques of accounting and auditing.
2. To present a more comprehensive analysis of the Big Six international accounting firms. They should not select a sample but should judge the significance and power of the firms' role in terms of the relative size of their income achieved in each field as well as their collective capacity in comparison to that of the national firms.
3. To complement the discussion of the legal system with information about the economic reform and adjustment that is occurring on the road toward liberalization, deregulation, and privatization in a world of globalization. They should enlarge on the role of accountants (national and foreign) in the field of evaluation and control (transparency).

To me, this book is a good addition to the literature on the changes taking place in some of the Islamic Middle East countries.

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Rachunkowość sektora publicznego: koncepcje, metody, uwarunkowania (Public Sector Accounting: Concepts, Methods, Contingencies) by *Wojciech Andrzej Nowak*, *Wydawnictwo Naukowe PWN, Warszawa, 1998, 241pp., approx. \$6.00*

The book written by Doctor Nowak has at least two qualities that distinguish it from other works of this type. The first is the economic sector with which it is concerned. The majority of accounting literature deals with commercial enterprises, banks, and sometimes with budgetary entities. This book treats the whole public sector as the subject of accounting theory. It should be noted at this point that this issue had not been treated previously in the Polish accounting literature in the form of a monograph, although the demand for this type of study has been growing markedly. The development of democracy and modern capitalism cannot progress properly without a reliable economic calculus in the form of an appropriate system of accountability.

The management of public property in developed countries, deriving largely from taxes, is a matter of continuing public concern and control by means of constantly improved standards of accounting for not-for-profit entities. By producing a monograph on this subject, Doctor Nowak makes available to interested readers verified theoretical concepts plus his own ideas and findings.

The second distinctive feature of the book is its consistently theoretical focus. In this respect, this is a phenomenon unprecedented in the Polish accounting literature, on a par with theoretical dissertations of A.R. Belkaoui and E.S. Hendriksen, the authors of

Accounting Theory. Doctor Nowak identifies and explores valid issues and presents their conceptual framework, proving that in creating a general language of accounting, he measures up to the highest Western standards.

With regard to the structural composition of the book, it is divided into six regular chapters plus a seventh containing relevant supplementary material. Such an arrangement is fully appropriate to the contents of the book. The author starts with examining the relations between accounting and organizational complexity, and he then proceeds to outline the orientations and theories of accounting: ownership-, entity-, and fund-based. The next chapter explains the issue of measurement, the process of generating information, and forms of communicating it to the users. The new perspective on public sector property and trends now occurring in the management of public resources are the subject of further parts of the study. It concludes by presenting a model of Polish public sector accounting and the necessary enclosures.

The principle organizing the contents of the book is the criterion of generality. The first chapter analyzes organization from the philosophical as well as the ontological, epistemological, and axiological perspectives. Against this background, the author discusses the system of accounting and its role in the coordination of societal activity. The model of an entity as a complex adaptive system turns out to be a very useful concept, which facilitates comprehension of the role of accounting to ensure the homeostasis within this social organization. This is discourse at the highest level of generality, leading to an explanation of the principal paradigm of accounting, which itself should be regarded as a complex, composite adaptive system. Accounting monitors the adaptability of entities comprising an organization that operates in a changing, market-driven environment.

When considering and describing accounting as theory, the author uses the language of metatheory. In the light of ontology, he explains the ownership theory, the entity theory, and the fund theory, pointing out distinct links between existential independence of an entity and the accounting concept. This is the subject matter of the second chapter, which also formulates accounting paradigms indicating directions of further research and the development of accounting theory. These paradigms are particularly worthy of notice, because an understanding of paradigms underpinning a theory or action leads to more insight and makes possible the choice of new paradigms. The author has not analyzed all possible accounting paradigms, because this would be outside the scope of the research theme. It is, however, a very interesting issue worthy of separate elaboration.

Are basic principles of financial accounting appropriate for public sector accounting? Does accrual accounting meet the needs of not-for-profit and budgetary units? Are the private sector accounting standards relevant for the public sector? These important issues are analyzed in the third chapter. The author demonstrates that, in those cases where full accrual accounting is employed, International Accounting Standards may be a thoroughly useful source of guidelines for public sector accounting. He also concludes that the performance of public sector entities should be measured in a way similar, though not identical, to that adopted in the private sector. In advanced Western countries, the process of developing the conceptual framework for public sector accounting is already well under way; e.g. the US has the Governmental Accounting Standards Board (GASB).

The fourth chapter deals with public sector resources, their types and classification. In the public sector, besides typical resources, there are substantial non-financial resources, such as infrastructure, cultural heritage resources, natural resources, military resources, intangibles, etc. The author carries out an analysis that allows the reader to draw a distinction between the different types of assets from the perspective of public sector accounting. As a result, the definition of an asset is generalized to define it as "an economic resource that enhances prospects for accomplishment of the mission of a given economic entity, being under control of this entity as a result of past events, which allowed to take over its control or to produce it by processing other resources . . ." This is one of the many definitions proposed by the author which reveal the innovativeness and creative value of his thought.

The fifth chapter analyzes recent trends in public sector accounting. The author emphasizes the role of the government as an institution allocating resources, complementary to the market. Market forces plus government intervention should cooperate to reach an optimum state of the economy. Where the market is an ineffective mechanism, e.g. in education, health care, etc., public sector entities have an important role to play. They should be equipped with adequate accounting systems allowing the improvement of public accountability of managerial and governmental bodies. (The operation of such systems in the European Union could be observed on the occasion of the events of March 15, 1999, when the European Commission members resigned from office after the inspection carried out by accounting and auditing experts.) The author discusses the emerging forms of management (managerialism), which represent a major step toward greater efficiency in the public sector. New forms of management in public sector entities require the application of accounting systems using both a full accruals basis and the full set of financial statements, including the statement of costs and results. The author argues that this process concerns not only public utilities, but also such entities as a commune, a ministry, or even a central government viewed as a whole (p. 137).

The analysis of global trends in public sector accounting is followed by a discussion of the situation in Poland. The system-wide change in 1989 in Poland triggered an intensive evolution of the public sector, with public sector entities financed mainly by the state budget, thus forming the budgetary sphere. The author explores changes in Polish budgetary accounting after reinstatement of communal property and restitution of local government. This chapter is very illuminating, as it systematically expounds the knowledge about the budgetary sector accounting in Poland, outlines its past and present evolution, and identifies future development trends. It provides a comprehensive, comprehensible, and lively description of the theoretical underpinning and conceptual framework of the Polish public sector. The final part provides a useful recapitulation by summing up the main points and drawing important conclusions. The appendices illustrate forms of reporting used in various countries, mainly in New Zealand, and relevant legal acts.

It should be emphasized again at this point that the quality of the book is outstanding both in respect of its content and form. The author has created a proper scientific language with which to discuss issues in public sector accounting and to communicate ideas and findings to the academic community. It is also important to draw attention to the author's exploration of the issue of accountability, which is essential, among other things, for

understanding the role of accounting in the public sector. The concept of accountability derives from the concept of freedom and autonomy of a person. Increased freedom, self-government, and autonomy in Poland call for steady improvement of accounting as an instrument for the realization of the public accountability of entities, organizations, and institutions through a reliable, solid system of accounting for public property. This is the central theme of the entire study.

Another valuable feature of this book is the good theoretical presentation of measurement conventions. Accounting is a system of economic measurement, but this obvious fact requires an appropriate theoretical foundation. The author provides such a foundation when he sets out bookkeeping theories, the cash and accruals conventions, and their various modifications. He also addresses the issue of the reliability and relevance of accounting measures and information. The definitions presented frequently in the text are very clear, well-considered, and formulated with great precision, both with regard to existing economic categories and to many new ones. The validity of classifications set out by the author (according to various criteria: time, liquidity, legal restrictions, nature, and function of assets) has already been verified in the practice of accounting and management. Now it has achieved theoretical validation in the book by W.A. Nowak.

In conclusion, I would like emphasize the fact that this study is an outstanding scientific achievement. It is the first work in Poland providing a theory of public sector accounting. The author has successfully coped with exploratory, classification, and explanatory problems, which requires a really vast knowledge and great experience.

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The Decision-Usefulness Theory of Accounting: A Limited History, by *George J. Staubus*, Garland Publishing, New York, 1999, vi + 346 pp.

This book is a collection of Professor Staubus' writings for many years—articles and some chapters from his books—interspersed with recent commentary. It has, of course, an autobiographical flavor. It is part of the series on accounting history edited by the beneficent Professor Brief; it is published by Garland in photostat form, which has now become remarkably elegant.

A collection of this kind can hardly claim to be succinct or free from repetition. But its argument is clear and forceful, and it ranges over much important ground.

The argument concerns decision-making. Professor Staubus maintains that accounts achieve maximum helpfulness when they aid this process. He tells us that he was feeling his way toward this view in the 1950s, and developed it further in following years. It was not widely held at that time. He can justifiably claim to have been a standard bearer in the campaign for its adoption.

It suddenly began to win converts in the 1970s, largely because the Trueblood Group espoused it with enthusiasm: "the basic objective of financial statements is to provide information useful for making financial decisions." This view has since (a "dead of night

conversion”) become common. Looking back, David Solomons wrote: “It seems barely credible now that such a conclusion could ever have been considered controversial. Yet when the FASB made a survey of reactions to the Trueblood Group’s objective in 1974, only 37% of respondents approved the ‘usefulness’ objective.”

Theorists and standards boards have an obvious reason for gratefully seizing on “usefulness” as an aid to their work. Much of this is concerned with choice between various accounting figures and practices (historical vs. current values, depreciation methods, Fifo vs. Lifo, etc.). Choice can be made easier by looking through the spectacles of investors who seek help with their decisions.

Professor Staubus developed his views further in years following the 1960s. He decided that investors’ decisions must mainly hinge on predictions of cash flows: “the property of an asset that financial statement users would most like to know is its cash flow potential.” Ideally, investors would be given a cash budget showing all future cash distributions to equity-holders; but “accountants are not omniscient,” and so cannot provide such a budget. They provide balance sheets instead.

Many pages of the book are devoted to cash flow potential. They stress that different users will be interested in different sections of the accounts. Short-term creditors will try to predict capacity to pay in the near future; so they will study the short-term balance sheet items (defined as being within three months of maturity) and those items’ rate of net recurring flows; earnings figures are less important. Investors in fixed-interest securities also study liquidity, but must predict the likelihood of income payments being maintained; they will therefore look at earnings and tests such as times-interest-earned.

Common stockholders may be less concerned with immediate liquidity problems than with the long-term future; to them, an accurate earnings account is more important than the cash flow statement. However, the book quotes Myron Gordon’s words: “the fundamental proposition of capital theory is that the value of an asset is the future payments.”

To give maximum aid, lists of monetary items should show the times and amounts of expected movements. If future times are remote, the amounts should be discounted (but then the actual payments should be noted as well).

The book deals with cash flow statements at some length, and underlines their importance and limitations. Historical flow figures can be measured easily and perfectly. But they can be manipulated (e.g., by maneuvering payments of accounts payable), and may be affected by erratic items; and they are not always reliable guides to earnings and wealth. The statements should separate recurring from non-recurring items.

This section of the book will leave readers with an enhanced appreciation of cash flow statements and liquidity problems.

The book points out that several kinds of flows can be interesting. It lists:

1. Cash flow.
2. Quick flow (change in short-term monetary assets).
3. Working flow (change in net current assets).
4. Earnings flow (change in net assets due to recurring operations).

It uses a set of helpful examples to show how type (1) can be gradually expanded until it blossoms into (4), an earnings statement.

Future flows will be affected by inflation. Professor Staubus deserves credit as a pioneer in dealing with this topic: he wrote on it while it was still largely ignored, and introduced it into his narrative whenever appropriate. While inflation's abatement has no doubt been a social blessing, it is regrettable from the teacher's viewpoint: inflation accounting was admirable training in analysis and economic thought. The book gives clear arithmetical examples of inflation's effects on earnings and assets (though it might perhaps have put more stress on the real appreciation of fixed assets, and the consequent difficulties of dealing with real depreciation and gain).

Standards boards and writers have become increasingly preoccupied with questions of reliability, relevance, timeliness, etc. Perhaps because it does not lend itself readily to the discovery of principles, this seems a somewhat arid area. The book settles for a multiple criteria approach.

The book very properly devotes many pages to asset valuation (historical cost, net realizable value, etc.). It explains the merits and demerits of each measure at some length.

Discussion of asset value would be much clarified if it started by reminding us of Adam Smith's teaching: "the word 'value' has two different meanings. . . . the one may be called 'value in use'; the other 'value in exchange'." Writers and standards boards tend to blur the distinction. Accounting very wisely values assets at "value in exchange," i.e., historical or current cost (save where an asset is not worth this, and so "value in use" must be substituted). "Value in use" depends on an owner's highly subjective guesses at future cash flows: it must often be helpful in his management calculations, but would cause enormous confusion and dispute if used widely in accounts, e.g., because many assets work jointly with their neighbors.

Unfortunately, American writers have not appreciated the great advantages of the deprival value approach, and so their rules on value must, to British readers, seem ill-disciplined. By comparing an owner's position (a) in possession of the asset, and (b) if deprived of it, a writer can formulate a consistent set of rules: current value is replacement cost save where the asset is not worth replacing. Professor Staubus gets near to this approach when he reviews the effects on a firm if an asset disappeared, but he does not press the idea home. He is also on target when he describes current replacement cost as "a logical surrogate for future purchase cost saved": in accounts, usually an asset's task is to reduce outflows, not earn inflows.

Accountants should surely beware of reasoning that links an asset's value with physical attributes, flow sequence, etc. We esteem an asset not because of such attributes but because of its power to give us utility. Accounting rules based on the attributes can be defended only on grounds of ease and convenience.

Accounting defines revenue as increase in the conventional asset pile. The figure is acceptable enough for routine purposes, but disaffected theorists can challenge it easily (e.g., which measures should be used, and is research an asset?). The ideal figure is Hicks' *ex ante* increase in cash flows; and this, alas, is impossible to predict or verify.

The book ends rather sadly. Decision-usefulness theory is not being accorded the respect that it merits. It has not won complete acceptance by the FASB. Preparers of accounts have had considerable success in limiting its influence. And even teachers have not shown much interest in it.

A devil's advocate could perhaps proffer three reasons for this muted enthusiasm:

1. Decision-usefulness depends on prediction, and mankind is not able to predict with certainty. The crystal ball is an imperfect instrument. We are wise to budget—but also to accept that our figures may turn out to be wildly misleading.
2. Accounts may indeed be helpful background material for investors. But how far back is background? If I am writing about social problems in Spain, a map of Spain may conceivably give background to my work, but its precise benefits may be hard to detect. The role of background material is unclear.
3. Accounting historians remind us that the fundamental task of accounts has been, not to measure wealth and income, but to keep track of debtors, creditors, and cash. This is still their main task; without it, business would collapse. But we have not been content with this immense achievement. Double entry does not demand intellectual brilliance, and its practice and teaching can get boring. So we are now trying to graft extra uses onto it, by promoting it into an aid to management and investment problems—something for which it was not intended and is not particularly suited. Investment-decision theorists are trying to get more juice out of the well-sucked orange. We may wish them well but they have limited expectations.

An interesting book. It gives one much to argue about.

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