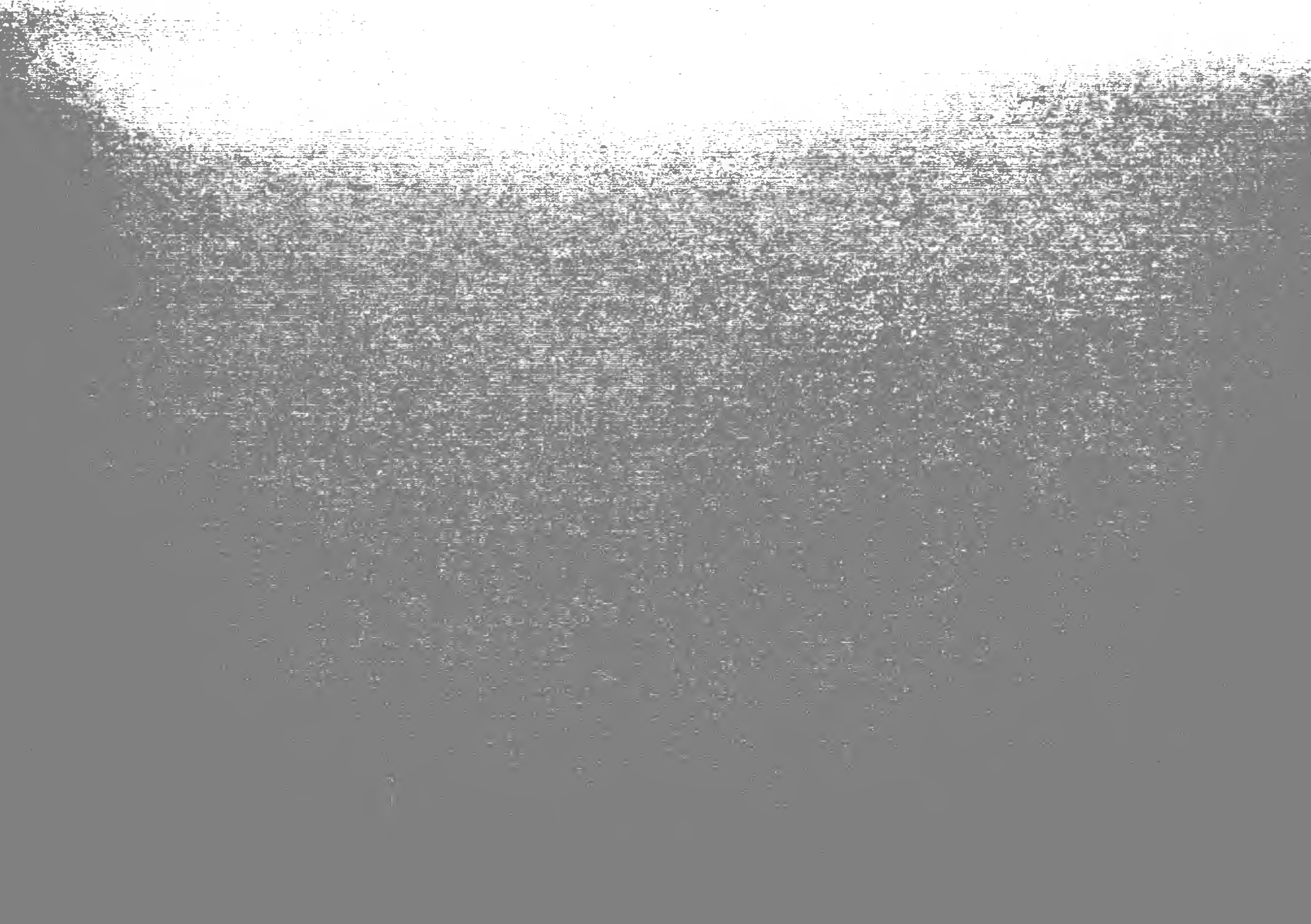

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FACULTY WORKING PAPER NO. 1186

A Short-Run Financial Management Model on Lotus 1-2-3

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September, 1985

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ABSTRACT

This paper presents a short-run financial management model (SRFMM) that is programmed on Lotus 1-2-3. The model integrates the cash budget, income statement and balance sheet. It highlights the inputs required to simulate monthly financial statement and generate key financial ratios, funds flow components and other insightful financial information. The SRFMM makes it possible for a user to simulate a series of planning scenarios and discover the total financial implications of each simulation.

A Short-Run Financial Management Model on Lotus 1-2-3

Discovering the linkages between short- and long-run financial management processes and learning to interpret financial performance are fundamental skills for students of finance. The task of integrating short- and long-run financial planning systems occurs when cash budget information is converted into accrual accounting information for pro forma balance sheets and income statements. Learning the origins of cash inflows and outflows and how they are transformed into basic financial statements is a cornerstone to the applied art of financial management.

The next step is to discover what happens to financial performance when the original planning scenario is altered. Simulating various planning scenarios and evaluating how and why financial performance changed is an enlightening experience. The building of interpretative skills is enhanced through the analysis of a wide variety of simulated conditions.

We have designed a short-run financial management model (SRFMM) on Lotus 1-2-3 that provides an experimental mode for students to discover the linkages that exist between the cash budget and the accrual accounting statements. A second objective of the model is to provide students an opportunity to analyze several financial performance scenarios and develop their interpretative skills.

The objectives of the paper are to provide an overview of the SRFMM; to introduce the key inputs and to show the interdependence among the inputs in constructing the primary statements of the financial forecast;

to illustrate the financial statements generated by the SRFMM; and finally, to discuss the uses of the model in creating real world environment that motivates student learning as it relates to short-run financial forecasting.

THE MODEL

Overview

The SRFMM creates a financial forecast for twelve monthly periods. The model generates cash budgets, pro forma income statements and balance sheets plus a variety of diagnostic statements for measuring the financial performance of a firm. A conceptual framework of the initial input information required to operate the SRFMM is presented in Exhibit 1.

The financial statements generated by SRFMM are shown in Exhibit 1. The input data is subdivided into three categories: (1) beginning information from preceding periods; (2) information for forecasting sales, production, fixed assets, tax rates, cash collection and payment patterns, interest earned on marketable securities, and interest paid on short- and long-term debt; and (3) policy variables for credit terms to customers, percent of sales in ending inventory, depreciation rates, minimum cash and minimum marketable securities. The input information is highlighted because it is the foundation of the forecast and the focal point when evaluating the outcomes generated by the SRFMM.

Inputs

The operation of the SRFMM is best understood by presenting a case example. The Hoover Textile division of GK&W Chemicals is used to illustrate the use of the SRFMM.[1] We have taken the basic input information that underlies the forecast in order to create examples that highlight the capabilities of the model. Hoover Textiles has been the cash cow of GK&W Chemicals, but competition is threatening to take away a portion of their market. A new product has been market tested and is about to be distributed nationally. Management is very concerned about the future of Hoover Textiles and, as fate would have it, they have just received an offer to sell the division. The case provides information for simulating various planning scenarios and to determine the value of Hoover Textiles.

A graphic overview of the key linkages in the SRFMM is found in Exhibit 2. The conceptual framework in Exhibit 2 shows that the cash budget, the fixed asset schedules, the cost of sales module and the financing/dividend inputs are primary sources of information used in constructing the balance sheet and income statements. In highlighting the primary input linkages that exists in the SRFMM, we shall frequently refer to Exhibit 2.

The determination of the cash flow is tied to the payment behavior of a firm's customers, which we refer to as a firm's collection patterns. In determining the cash inflows, the monthly sales forecast and cash collection patterns are presented in Exhibit 3. The forecast assumes sales in month t will be converted to cash in the following collection pattern--5% in cash, 30% in 30 days, 20% in 60 days and 42%

in 90 days with 3% uncollectable. Credit terms are 2% due in 30 days. The receivables balance patterns used to determine the amount of receivables outstanding on the balance sheet are easily determined given the forecasted cash collection pattern before discounts, Stone [5].

Period	Cash Collection Pattern (in percent)	Receivables Balance Pattern (in percent)
Cash	5	95
30 days	30	65
60 days	20	45
90 days	42	--
Bad Debt	3	

Exhibit 2 highlights how the receivable balance patterns convert the outstanding cash information to accrual accounting receivable in the balance sheet.

The forecasted purchases are presented in Exhibit 3. The payment pattern for purchases is also in Exhibit 3 and it is 10% in cash, 50% in 30 days, 30% in 60 days and 10% in 90 days. The payment patterns refer to the payment of cash to suppliers. There is a 1% discount if purchases are paid in cash. The payment patterns to the suppliers can also be converted to payables balance patterns.

Period	Payment Patterns (in percent)	Payables Balance Pattern (in percent)
Cash	10	90
30 days	50	40
60 days	30	10
90 days	10	

Exhibit 2 portrays the key role that payable balance patterns play in converting the deferral of cash outflows to accounts payable in the balance sheet.

The schedule showing the externally forecasted sales in quantity (units) and estimated price per unit are presented in Exhibit 4. The collection patterns and the payment patterns are critical pieces of information used to forecast cash inflows and outflows respectively, for the cash budget which is presented in Exhibit 5. The receivable and payable balance patterns are vital inputs for computing the respective balance sheet items.

Production and purchases are synonymous in the SRFMM. Conceptually, production costs are shown as a separate module in Exhibit 2 and they are direct inputs to the income statement in Exhibit 6. The production forecast is dependent on the sales forecast, the desired ending inventory, and beginning inventory. Fixed overhead and variable overhead costs are other inputs from Exhibit 7 that are used to determine forecasted production costs. The equation for determining production is:

$$\text{Production}_t = \text{Sales}_t + \text{Desired Ending Inventory} - \text{Beginning Inventory}_t \quad (1)$$

where

$$\text{Desired Ending Inventory} = X\ (\text{Sales}_{t+1}) \quad (1a)$$

and $X = .70$ in the case.

The calculation of the fixed asset schedule is presented in Exhibit 8. The forecasting inputs for fixed assets, namely, additions

to fixed assets, changes in existing fixed assets and changes in accumulated depreciation, are shown in Exhibit 7. Conceptually, Exhibit 2 shows that the net fixed asset information is transferred to the cash budget and then directly to the balance sheet in Exhibit 9. The depreciation expenses on the additions to the fixed assets are inputs to the income statement as shown in Exhibit 2.

The forecasted interest rates on marketable securities and the interest rates on short- and long-term debt are presented in Exhibit 7. Also the forecasted monthly inflation rates for sales and production costs as well as forecasted information on long-term debt offerings and repayments, sale of common stock and dividends payments are shown in Exhibit 7.

The cash budget utilizes the above information to provide key information to the balance sheet and income statement. The cash budget, Exhibit 5, uses a hierarchical approach to determine the allocation of any excess cash or the financing of a cash flow shortfall. When cash inflows are greater than cash outflows and there is excess cash, the model uses the following hierarchy of rules to draw down the excess cash to the minimum cash balance: (1) retires short term debt, (2) if cash remains it is invested in marketable securities.

When cash outflows threaten to reduce the cash account to a level below the policy minimum, the model uses the following hierarchy of rules in order to replenish the cash account to its minimum balance: (1) sell sufficient marketable securities to cover the shortfalls or until the minimum marketable securities level is reached, (2) if

a shortfall still exists, borrow short term debt to finance the remaining balance. As reflected in Exhibit 2, the cash budget injects increases or decreases to the balance sheet accounts of cash, marketable securities or short term debt.

The cash budget supplies the following information to the firm's income statement: sales, purchases, interest income, other costs (fixed and variable overhead), interest expense, and taxes. These linkages are shown in Exhibit 2. The cost of sales module in Exhibit 2 is a direct production expense input to the income statement. A weighted average ending inventory value is determined and transferred to the cost of sales module and then transferred to the balance sheet.

The planned offering or retirement of long term debt or the sale or repurchase of common stock is a direct input into the cash budget and then transferred to the balance sheet. Also a planned outflow to dividends is an input to the cash budget and subsequently is reflected in the income statement. The above transactions are depicted in Exhibit 2.

Outputs

The three major output exhibits are the cash budget (Exhibit 5), the income statements (Exhibit 6) and the balance sheets (Exhibit 9). The key linkages among these three exhibits were developed earlier and conceptually shown in Exhibit 2.

The monthly cash based funds flow statements in Exhibit 10 are generated from information in the monthly income statements and balance sheets. There are eight net funds flow components: operations, working capital, financial, fixed coverage expenditures,

dividends, investment, other assets and liabilities and net change in cash. The monthly relative funds flow components (funds flow component/total net flow) are also created as outputs by the model. The cash based funds flow model provides insightful information for analyzing the implications of changes in the level and trend of relative cash inflow and outflow components, Gentry, Newbold and Whitford [2].

The ratio analysis information is found in Exhibit 11. The duPont analysis shows the components of return on total assets, the financial leverage multiplier and return on net worth. The profitability measures are the return on gross margin, operations and net income. The objective of the profitability measures is to identify trends in the changes of costs of production, operations and financing. Liquidity is measured with the current, quick and cash ratio. Additionally the cash conversion cycle, Richards and Laughlin [4], is calculated by the model. Debt management performance is measured with the debt ratio and the coverage ratio.

When the level and trends of items in financial statements are analyzed, the common sized income statements and balance sheets are an invaluable source of information. The common size statements are calculated by the SRFMM, but examples are not included as exhibits. Finally, the information used in creating receivables and payables is in Exhibit 12.

USING THE MODEL

The changing role of the workstation and the rapid development of the personal computer and spreadsheet programs has revolutionized the

accomplishment objectives of financial management. A challenge to management is to determine what information will give the firm a competitive advantage. The SRFMM depends on information from various data schedules and is designed as a planning tool for management to interpret the financial results that were created by various planning strategies. When using computer models to aid the learning process, a major challenge is to maintain the unresolved mystery that underlies the case or problem. An objective is to present a case with an optimal amount of information, and avoid revealing critical information that makes a case trivial. Creating an exciting learning environment is a key to successful learning through a computer model.

Before introducing the SRFMM it is very important to have students calculate by hand cash budgets, pro forma income statements and balance sheets. This is a time consuming and often frustrating experience, but it is very critical in helping students to discover the linkages among the statements. Furthermore, discovering the overwhelming task of completing all of the financial statements in the forecast without a computer model is an important event.

An overview of the various uses of the SRFMM will provide insights on how to use the model in the classroom. One of the major benefits of the SRFMM is to provide students an opportunity to be involved in an active financial forecast and learn about the strengths and weaknesses of the forcasting process. A hands on simulation approach allows students to discover why certain inputs can greatly increase profitability, liquidity or growth, while other inputs have little or no effect on outcomes. Learning the benefits of a "what if" type

simulation is invaluable. It allows students to observe the power of the model to rapidly generate several forecasts with vastly different assumptions. Additionally, it is extremely important for students to observe and test the relationships that exist between the cash budget, the balance sheet and the income statement. The SRFMM provides students an opportunity to be totally involved in a natural learning experience related to financial forecasting.

In the past the model has been introduced with a case. The case provides basic information for a financial forecast which is placed in a data file that students can easily access. After completing the first analysis, students can interpret the results and prepare inputs for a second analysis, which are included in the case. The results of the second analysis can be compared to the results of the first, which provides a discovery type learning experience. The primary learning objective of the case is to present basic financial forecasting concepts, which, in turn, can be explored and tested with the model. In summary, the SRFMM provides the framework for students to have an integrated and dynamic learning experience concerning financial forecasting through a Lotus 1-2-3 program.

After learning how to use the SRFMM, students have a second case in which they are responsible for inputting information directly into the model. Usually the second assignment is a credit analysis case that focuses on the need for bank credit. In a different setting, the SRFMM is used to provide a rich learning experience for students interested in small business research projects. It is our judgment

that the types of problems or issues which the model provides a useful framework is limited only by the creativity of the user.

There are several scenarios one can utilize when using SRFMM to create a stimulating learning environment. One technique is to present the model with appropriate labels for all of the exhibits, but without entering any information from the case into the model. The student has to determine the vital information and insert it into the model. When the information is entered in the appropriate cells, the SRFMM will generate a financial forecast. The student uses the forecasted information to analyze the case. The brighter students will recognize that certain elements of the data are questionable and will experiment with other inputs to determine the sensitivity of the forecast to changes in specific relationships, e.g., a change in the sales forecast, production costs or the tax rate.

A second approach is to load the information from the case into the model and provide several scenarios of possible strategies being considered by management. Strategies that create a paradoxical result are especially useful in flushing out anomalies or dilemmas that confront management. The student becomes involved in changing key inputs and simulating various strategies. Interpreting the outcomes involves students in a rich learning experience.

An extremely useful approach for advanced students is to write a case that utilizes the SRFMM. Case writing is a unique learning experience that creates higher levels of motivation and insight. Leenders and Erskine [3] show the degree of difficulty or the educational

challenge in the case, can be viewed in at least three major dimensions--analytical, conceptual and presentation. When using a micro-computer model, the case writer develops a creative skill for presenting the input information for the SRFMM. Creating the output exhibits is also a challenge to the case writer because the solution to the mystery of the case must be subtle. A final benefit of case research is to "shake up" researchers' and research consumers perceptions of reading, and to broaden their ways of construing knowledge, Bonama [1]. Case research with the SRFMM can help researchers to rethink knowledge in novel and insightful ways. The model can provide information that will give management a competitive advantage.

The SRFMM can be altered to provide additional information. The challenge to all users is to identify new and novel uses of the model. The creating of new diagnostic statements or the addition of new linkages in the short-run financial forecasting process is the final challenge to all users of the SRFMM. The authors invite you to use the SRFMM in an upper level short-run financial management offering or a course on the analyses of financial statements. To receive a copy of the program send a five dollar check to the first author.

FOOTNOTE

1. The GK&W Chemicals case is in a University of Illinois publication by James A. Gentry, Joseph A. Kiedaisch and David T. Whitford entitled A Short Run Financial Forecasting Model.

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1. Thomas V. Bonama, "A Case Study in Case Research: Marketing Implementation," Harvard Business School, Working Paper No. 9-585-142, (1985).

2. James A. Gentry, Paul Newbold and David T. Whitford, "Classifying Bankrupt Firms with Funds Flow Components," Journal of Accounting Research, forthcoming Vol. 23 (Spring 1985).

3. Michael R. Leenders and James A. Erskine, The Case Writing Process, Research and Publications Division, The University of Western Ontario, 1978.

4. Verlyn D. Richards and Eugene J. Laughlin, "A Cash Conversion Cycle Approach to Liquidity Analysis," Financial Management, Vol. 9, No. 1 (Spring 1980), pp. 32-38.

5. Bernell K. Stone, "The Payment Pattern Approach to the Forecasting and Control of Accounts Receivable," Financial Management, Vol. 5 (Autumn 1976), pp. 65-82.

EXHIBIT 1
INPUTS TO SHORT-RUN FINANCIAL MANAGEMENT MODEL

MONTHLY INPUTS

Beginning$_{(t-1)}$ and Forecasted Variables

- Sales
  - Unit price
  - Growth rate of unit price
  - Units
- Production
  - Cost per unit
  - Growth rate of cost
  - Variable overhead per unit
  - Fixed overhead per period
  - Inventory$_{t-1}$ (units)
  - Inventory$_{t-1}$ (cost)
- Fixed Assets
  - Beginning
  - Additions
  - Cost of retired assets
  - Fixed assets$_{t-1}$
  - Accumulated depreciation$_{t-1}$
- Tax Rate
- Interest Rate on M/S
- Interest Rate on S. T. Debt
- Interest Rate on L. T. Debt
- All Balance Sheet Items$_{t-1}$
- Collection Experience
  (Cash, 30, 60, 90, bad debt)
- Payment Pattern
  (Cash, 30, 60, 90 days)
- Purchase Discount
  (Cash, 30, 60, 90 days)

Policy Variables

- Sales Discount
- Discount Period
- Percent of Sales$_{t+1}$ in Ending Inventory
- Depreciation Rate
- Minimum Cash
- Minimum M/S

MONTHLY OUTPUTS

- Cash Budgets
- Income Statements
- Balance Sheets
- Fund Flows Analysis (Cash Based)
- Ratio Analysis
  - DuPont analysis
  - Profitability
  - Liquidity
  - Debt management
- Common Size Income Statements
- Common Size Balance Sheets
- Cash Conversion Cycle
- Causes of Changes in Receivables
  - Sales effect
  - Collection effect
  - Joint effect

EXHIBIT 2
KEY LINKAGES IN THE SRFMM

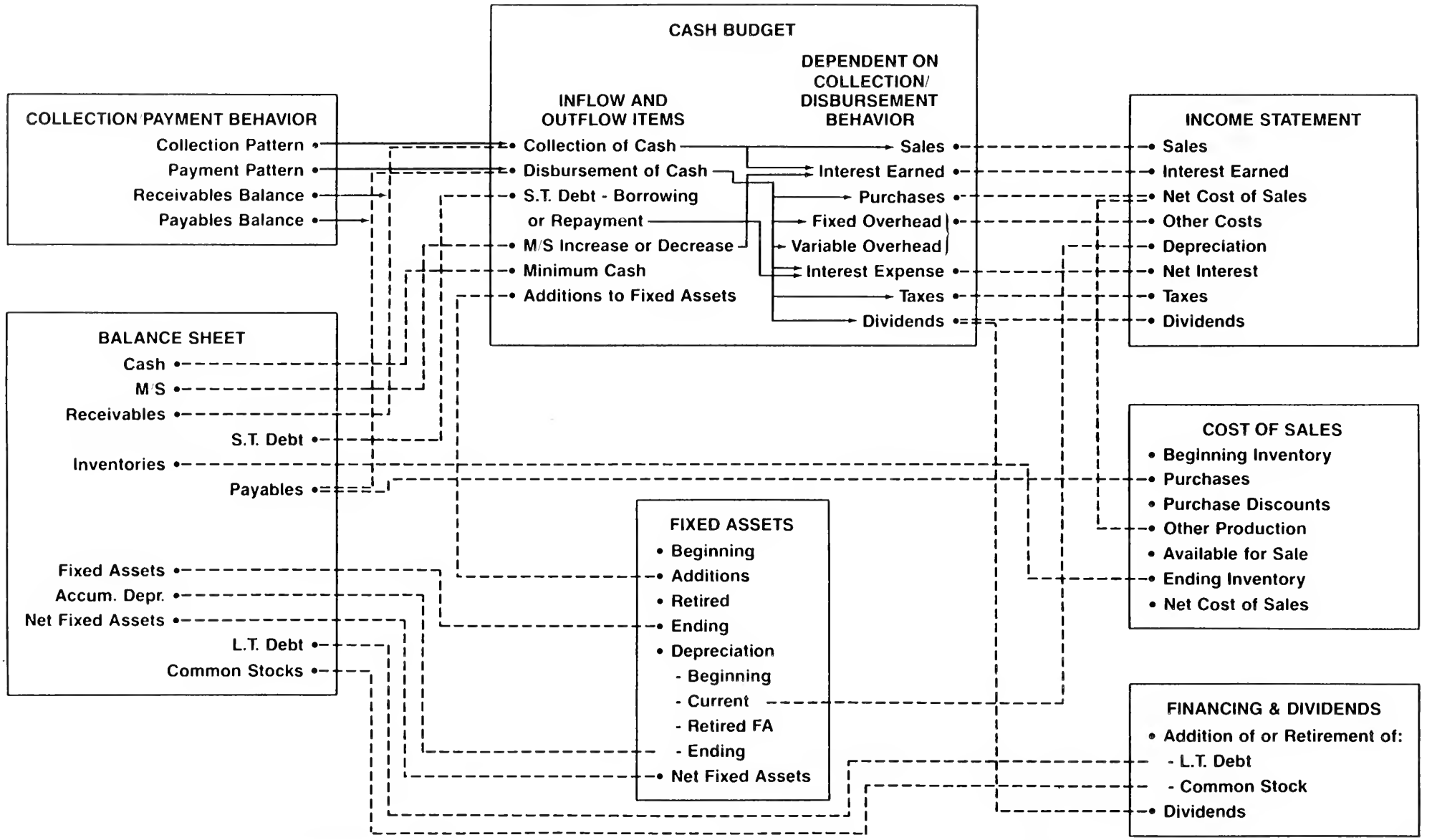

EXHIBIT 3

COLLECTION AND PAYMENT PATTERN INPUTS

HISTORICAL COLLECTION EXPERIENCE

	-3	-2	-1	0
GROSS SALES	2500.0	2200.0	2400.0	2000.0
CASH	5%	5%	5%	5%
30 DAYS	30%	30%	30%	30%
60 DAYS	20%	20%	20%	20%
90 DAYS	42%	42%	42%	42%
BAD DEBT	3%	3%	3%	3%

SALES DISCOUNT

CASH	2%	2%	2%	2%
30 DAYS	2%	2%	2%	2%
60 DAYS	0%	0%	0%	0%
90 DAYS	0%	0%	0%	0%

HISTORICAL PAYMENT PATTERN

	-3	-2	-1	0
GROSS PURCHASES	1600.0	1503.0	1950.0	1830.0
CASH	10%	10%	10%	10%
30 DAYS	50%	50%	50%	50%
60 DAYS	30%	30%	30%	30%
90 DAYS	10%	10%	10%	10%

PURCHASE DISCOUNT

CASH	1%	1%	1%	1%
30 DAYS	0%	0%	0%	0%
60 DAYS	0%	0%	0%	0%
90 DAYS	0%	0%	0%	0%

COLLECTION EXPERIENCE

	1	2	3	4	5	6	7	8	9	10	11	12
GROSS SALES	3000.0	3300.0	3300.0	3000.0	3000.0	3000.0	3000.0	2700.0	2700.0	2700.0	3000.0	3000.0
CASH	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
30 DAYS	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
60 DAYS	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
90 DAYS	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%
BAD DEBT	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

SALES DISCOUNT

CASH	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
30 DAYS	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
60 DAYS	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90 DAYS	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

PAYMENT PATTERN

	1	2	3	4	5	6	7	8	9	10	11	12
GROSS PURCHASES	747.4	1224.5	1122.1	1081.2	1101.0	1127.0	1994.2	1949.1	1768.5	2142.0	2201.5	1411.4
CASH	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
30 DAYS	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
60 DAYS	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
90 DAYS	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%

PURCHASE DISCOUNT

CASH	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
30 DAYS	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60 DAYS	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90 DAYS	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

EXHIBIT 4

SALES, PRODUCTION, AND INVENTORY FORECASTS

SALES FORECAST	1	2	3	4	5	6	7	8	9	10	11	12
NUMBER OF UNITS	100.0	110.0	110.0	100.0	100.0	100.0	100.0	90.0	90.0	90.0	100.0	100.0
PRICE PER UNIT	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
FORECASTED GROSS SALES	3000.0	3300.0	3300.0	3000.0	3000.0	3000.0	3000.0	2700.0	2700.0	2700.0	3000.0	3000.0
EXPECTED SALES DISCOUNT	-21.0	-23.1	-23.1	-21.0	-21.0	-21.0	-21.0	-18.9	-18.9	-18.9	-21.0	-21.0
EXPECTED BAD DEBT	-90.0	-99.0	-99.0	-90.0	-90.0	-90.0	-90.0	-81.0	-81.0	-81.0	-90.0	-90.0
NET SALES	2889.0	3177.9	3177.9	2889.0	2889.0	2889.0	2889.0	2600.1	2600.1	2600.1	2889.0	2889.0
PRODUCTION SCHEDULE (UNITS)												
DESIRED ENDING INVENTORY	77.0	77.0	70.0	70.0	70.0	70.0	63.0	63.0	63.0	70.0	70.0	77.0
BEGINNING INVENTORY	140.0	77.0	77.0	70.0	70.0	70.0	70.0	63.0	63.0	63.0	70.0	70.0
CHANGE IN INVENTORY	-63.0	0.0	-7.0	0.0	0.0	0.0	-7.0	0.0	0.0	7.0	0.0	7.0
FORECASTED SALES	100.0	110.0	110.0	100.0	100.0	100.0	100.0	90.0	90.0	90.0	100.0	100.0
PRODUCTION	37.0	110.0	103.0	100.0	100.0	100.0	93.0	90.0	90.0	97.0	100.0	107.0
PRODUCTION COSTS ($)												
NUMBER OF UNITS	37.0	110.0	103.0	100.0	100.0	100.0	93.0	90.0	90.0	97.0	100.0	107.0
COST PER UNIT	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.7	21.9	22.1	22.3	22.5
TOTAL PRODUCTION COSTS	747.4	2244.2	2122.4	2081.2	2102.0	2163.0	1994.2	1949.1	1968.6	2143.0	2231.3	2411.4
ENDING INVENTORY												
NUMBER OF UNITS	77.0	77.0	70.0	70.0	70.0	70.0	63.0	63.0	63.0	70.0	70.0	77.0
WEIGHTED AVERAGE COST PER UNIT	20.0	20.2	20.3	20.7	20.9	21.1	21.3	21.5	21.7	21.9	22.2	22.4
ENDING INVENTORY	1543.2	1559.5	1431.9	1446.6	1461.2	1475.9	1341.2	1354.8	1368.5	1536.3	1551.4	1723.9

EXHIBIT 5

CASH BUDGET

CASH BUDGET

PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
CASH INFLOWS												
NET CASH COLLECTIONS	2139.0	2451.7	2571.9	3037.2	3075.0	3015.0	2869.9	2874.3	2786.1	2726.1	2614.8	2703.0
INTEREST FROM M/S	12.3	0.7	0.7	0.7	0.7	0.7	1.0	0.7	0.7	3.2	0.7	0.7
SALE OF COMMON STOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISSUANCE OF LT DEBT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROCEEDS FROM SALE OF FA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
TOTAL CASH INFLOWS	2151.3	2452.4	2572.6	3037.9	3075.7	3015.7	2890.0	2875.0	2786.8	2779.3	2615.5	2703.7
CASH OUTFLOWS												
NET PAYMENT TO SUPPLIERS	2239.0	1630.9	1836.4	2015.3	2109.9	2097.8	2097.7	2037.2	1993.0	1980.6	2077.9	2194.2
VARIABLE OVERHEAD	70.0	77.0	77.0	70.0	70.0	70.0	70.0	63.0	63.0	63.0	70.0	70.0
FIXED OVERHEAD	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
ST BORROWING INTEREST EXPENSE	12.1	10.2	7.3	4.9	6.9	4.1	0.0	5.3	1.0	0.0	3.4	1.6
LT DEBT INTEREST EXPENSE	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
LT DEBT RETIREMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADDITION TO FIXED ASSETS	200.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	300.0	0.0	0.0
DIVIDEND	1000.0	0.0	0.0	1000.0	0.0	0.0	1000.0	0.0	0.0	1000.0	0.0	0.0
TAX	240.5	263.4	254.3	309.9	198.5	191.0	183.4	140.1	133.1	102.0	141.1	131.3
CHANGE IN OTHER ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHANGE IN OTHER LIABILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL CASH OUTFLOWS	3676.5	2096.5	2290.2	3615.1	2502.2	2477.9	3586.0	2360.5	2292.1	3560.6	2417.4	2513.4
NET CASH FLOW	-1525.3	355.8	282.3	-477.2	573.4	537.7	-676.1	514.5	494.7	-781.3	198.1	191.3
BEGINNING CASH	710.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0
SUB-TOTAL	-1015.3	855.8	782.3	22.8	1073.4	1037.7	-176.1	1014.5	994.7	-281.3	698.1	691.3
MINIMUM CASH REQUIREMENT	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0
SURPLUS OR SHORTAGE OF CASH	-1515.3	355.8	282.3	-477.2	573.4	537.7	-676.1	514.5	494.7	-781.3	198.1	191.3
BEGINNING MARKETABLE SECURITIES	1838.0	100.0	100.0	100.0	100.0	100.0	144.8	100.0	100.0	477.9	100.0	100.0
MINIMUM M/S REQUIREMENT	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SURPLUS OR SHORTAGE OF M/S	1738.0	0.0	0.0	0.0	0.0	0.0	44.8	0.0	0.0	377.9	0.0	0.0
M/S USED TO MEET MIN CASH	1515.3	0.0	0.0	0.0	0.0	0.0	44.8	0.0	0.0	377.9	0.0	0.0
CASH USED TO MEET MIN M/S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CASH SHTGE NOT MET BY EXCESS M/S	0.0	0.0	0.0	477.2	0.0	0.0	631.2	0.0	0.0	403.4	0.0	0.0
M/S SHTGE NOT MET BY EXCESS CASH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADDITION TO ST BORROWING	0.0	0.0	0.0	477.2	0.0	0.0	631.2	0.0	0.0	403.4	0.0	0.0
REDUCTION IN ST BORROWING												
USE OF SURPLUS CASH	0.0	355.8	282.3	0.0	573.4	437.7	0.0	514.5	116.8	0.0	198.1	191.3
SALE OF M/S NOT NEEDED FOR	222.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCR IN M/S FROM SURPLUS FUNDS	0.0	0.0	0.0	0.0	0.0	44.8	0.0	0.0	377.9	0.0	0.0	0.0
ENDING ST BORROWING	1017.3	661.5	939.1	1416.3	842.9	0.0	631.2	116.8	0.0	403.4	195.3	4.1
ENDING M/S	1838.0	100.0	100.0	100.0	100.0	144.8	100.0	100.0	477.9	100.0	100.0	100.0
ENDING CASH	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0

EXHIBIT 6

INCOME STATEMENTS

INCOME STATEMENTS

PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
REVENUE												
GROSS SALES	3000.0	3300.0	3300.0	3000.0	3000.0	3000.0	3000.0	2700.0	2700.0	2700.0	3000.0	3000.0
EXPECTED SALES DISCOUNTS	-21.0	-23.1	-23.1	-21.0	-21.0	-21.0	-21.0	-18.9	-18.9	-18.9	-21.0	-21.0
EXPECTED BAD DEBT	-90.0	-99.0	-99.0	-90.0	-90.0	-90.0	-90.0	-81.0	-81.0	-81.0	-90.0	-90.0
INTEREST REVENUE	12.3	0.7	0.7	0.7	0.7	0.7	1.0	0.7	0.7	3.2	0.7	0.7
TOTAL REVENUE	2901.3	3178.6	3178.6	2889.7	2889.7	2889.7	2890.0	2600.8	2600.8	2603.3	2889.7	2889.7
COST OF SALES												
BEGINNING INVENTORY	2300.0	1543.2	1559.5	1431.9	1446.6	1461.2	1475.9	1341.2	1354.8	1368.5	1536.3	1551.4
PRODUCTION	747.4	2244.2	2122.4	2081.2	2102.0	2123.0	1994.2	1949.1	1968.6	2143.0	2231.3	2411.4
AVAILABLE FOR SALE	3047.4	3787.4	3682.0	3513.1	3548.6	3584.2	3470.0	3290.3	3323.5	3511.5	3767.6	3962.8
ENDING INVENTORY	1543.2	1559.5	1431.9	1446.6	1461.2	1475.9	1341.2	1354.8	1368.5	1536.3	1551.4	1723.9
COST OF GOODS SOLD	2004.2	2227.9	2250.1	2066.5	2087.4	2108.4	2128.9	1935.5	1955.0	1975.2	2216.2	2238.9
EXPECTED PURCHASE DISCOUNTS	-0.7	-2.2	-2.1	-2.1	-2.1	-2.1	-2.0	-1.9	-2.0	-2.1	-2.2	-2.4
NET COST OF GOODS SOLD	2003.4	2225.7	2248.0	2064.4	2085.3	2106.2	2126.9	1933.5	1953.0	1973.1	2214.0	2236.4
GROSS MARGIN	897.8	952.9	930.6	825.2	804.4	783.4	763.1	667.2	647.8	630.2	675.7	653.2
VARIABLE OVERHEAD EXPENSE	70.0	77.0	77.0	70.0	70.0	70.0	70.0	63.0	63.0	63.0	70.0	70.0
FIXED OVERHEAD EXPENSE												
DEPRECIATION	178.0	178.0	178.0	179.0	179.0	179.0	179.5	179.5	179.5	180.5	180.5	180.5
OTHER FIXED EXPENSES	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
EARNINGS BEFORE INTEREST AND TAX	569.8	617.9	595.6	496.2	475.4	454.4	433.6	344.7	325.3	306.7	345.2	322.7
G/L FROM SALE OF FIXED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-50.0	0.0	0.0
INTEREST EXPENSE	47.1	45.2	42.3	39.9	43.7	39.1	35.6	40.3	36.0	35.0	38.4	36.6
EARNINGS BEFORE TAXES	522.7	572.7	553.3	456.3	431.5	415.3	398.6	304.5	289.3	221.7	306.8	286.1
TAX	240.5	263.4	254.5	209.9	198.5	191.0	183.4	140.1	133.1	102.0	141.1	131.6
NET INCOME	282.3	309.2	298.8	246.4	233.0	224.3	215.2	164.4	156.2	119.7	165.7	154.5

EXHIBIT 7

PRODUCTION, FIXED ASSET, LIQUIDITY AND FINANCING INPUTS

HISTORICAL INFORMATION	-3	-2	-1	0
DOLLAR AMOUNT OF SALES	2530.0	2200.0	2400.0	2000.0
DOLLAR AMOUNT OF PROD.	1600.0	1500.0	1750.0	2330.0
SALES PRICE IN t=0				30.0
UNIT COST OF PROD IN t=0				20.0
# UNITS IN INV AT t=0				140
WEIGHTED AVERAGE COST OF INV				20.0

PRODUCTION VARIABLES	1	2	3	4	5	6	7	8	9	10	11	12
ENDING INV AS % OF t+1 SALES	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
VAR OVERHEAD PER UNIT	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
FIXED OVERHEAD PER PERIOD	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
DEPRECIATION RATE PER PERIOD	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
TAX RATE	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%
SALES FORECAST FOR t=13	110											

FIXED ASSETS ASSUMPTIONS

ADDITIONS TO FIXED ASSETS	200.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	300.0	0.0	0.0
PROCEEDS FROM SALE OF F/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
COST OF RETIRED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	200.0	0.0	0.0
ACC. DEPR OF RETIRED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	100.0	0.0	0.0

OTHER ASSETS / LIABILITIES

CHANGE IN OTHER ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHANGE IN OTHER LIABILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LIQUIDITY ASSUMPTIONS

MINIMUM CASH REQUIREMENT	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0
MINIMUM M/S REQUIREMENT	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INTEREST RATE VARIABLES

INTEREST RATE ON M/S	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
INTEREST RATE ON ST BORROWINGS	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
INTEREST RATE ON LT DEBT	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%

INFLATION ASSUMPTIONS

MONTHLY INFLATION OF SALES PRICE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MONTHLY INFLATION OF PROD COST	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

CHANGES IN LONG-TERM FINANCING

PAYMENT OF LT DEBT PRINCIPAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISSUE OF NEW LT DEBT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALE OF NEW COMMON STOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DIVIDEND PAYMENT

DIVIDEND	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0

EXHIBIT 8

FIXED ASSET SCHEDULE

CALCULATION OF ENDING FIXED ASSETS

PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
BEGINNING FIXED ASSETS	17600.0	17800.0	17800.0	17800.0	17900.0	17900.0	17900.0	17950.0	17950.0	17950.0	18050.0	18050.0
ADDITIONS TO FIXED ASSETS	200.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	300.0	0.0	0.0
COST OF RETIRED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	200.0	0.0	0.0
ENDING FIXED ASSETS AT COST	17900.0	17800.0	17800.0	17900.0	17900.0	17900.0	17950.0	17950.0	17950.0	18050.0	18050.0	18050.0
BEG. ACC. DEPRECIATION	9870.0	10048.0	10226.0	10404.0	10583.0	10762.0	10941.0	11070.5	11250.0	11429.5	11510.0	11690.5
DEPRECIATION EXPENSE	178.0	178.0	178.0	179.0	179.0	179.0	179.5	179.5	179.5	180.5	180.5	180.5
ACC. DEPR OF RETIRED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	100.0	0.0	0.0
ENDING ACC. DEPRECIATION	10048.0	10226.0	10404.0	10583.0	10762.0	10941.0	11070.5	11250.0	11429.5	11510.0	11690.5	11871.0

RETIREMENT OF ASSETS

PROCEEDS FROM SALE OF F/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
COST OF RETIRED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	200.0	0.0	0.0
ACC. DEPR OF RETIRED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	100.0	0.0	0.0
BOOK VALUE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
F/A GAIN OR LOSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-50.0	0.0	0.0

EXHIBIT 9

BALANCE SHEETS

BALANCE SHEETS

PERIOD	0	1	2	3	4	5	6	7	8	9	10	11	12
CURRENT ASSETS													
CASH	710.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0
MARKETABLE SECURITIES	1838.0	100.0	100.0	100.0	100.0	100.0	144.5	100.0	100.0	477.9	100.0	100.0	100.0
ACCOUNTS RECEIVABLE	4465.0	5236.0	5997.0	6630.0	6510.0	6324.0	6189.0	6180.0	5895.0	5700.0	5565.0	5841.0	6036.0
ALLOW. FOR DISCOUNT	-12.0	-18.0	-19.3	-19.8	-18.0	-18.0	-18.0	-18.0	-16.2	-16.2	-16.2	-18.0	-18.0
ALLOW. FOR BAD DEBT	-273.0	-288.0	-321.0	-348.0	-378.0	-378.0	-369.0	-360.0	-351.0	-342.0	-333.0	-333.0	-342.0
NET ACCOUNTS RECEIVABLE	4180.0	4930.0	5656.2	6262.2	6114.0	5928.0	5802.0	5802.0	5527.8	5341.8	5215.8	5490.0	5676.0
INVENTORY	2900.0	1543.2	1559.5	1431.9	1446.6	1461.2	1475.9	1341.2	1354.6	1368.5	1536.3	1551.4	1723.9
OTHER CURRENT ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL CURRENT ASSETS	9628.0	7073.2	7815.7	8294.1	8160.6	7989.2	7922.7	7743.2	7482.6	7636.2	7252.1	7641.4	7899.9
FIXED ASSETS													
COST	17600.0	17800.0	17800.0	17800.0	17900.0	17900.0	17900.0	17950.0	17950.0	17950.0	18050.0	18050.0	18050.0
ACC. DEPRECIATION	9870.0	10048.0	10226.0	10404.0	10583.0	10762.0	10941.0	11070.5	11250.0	11429.5	11610.0	11690.5	11871.0
NET FIXED ASSETS	7730.0	7752.0	7574.0	7396.0	7317.0	7138.0	6959.0	6879.5	6700.0	6520.5	6540.0	6359.5	6179.0
OTHER ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL ASSETS	17358.0	14825.2	15389.7	15690.1	15477.6	15127.2	14881.7	14622.7	14182.6	14208.7	13792.1	14000.9	14078.9
CURRENT LIABILITIES													
ACCOUNTS PAYABLE	3480.0	1987.7	2598.8	2382.6	2946.5	2936.5	2959.7	2854.2	2764.2	2750.8	2911.0	3062.2	3277.1
ALLOW. FOR PUR DISCOUNT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NET ACCOUNTS PAYABLE	3480.0	1987.7	2598.8	2382.6	2946.5	2936.5	2959.7	2854.2	2764.2	2750.8	2911.0	3062.2	3277.1
S-T BORROWING	1450.0	1227.3	871.5	889.1	1286.0	492.9	0.0	631.2	116.8	0.0	403.4	195.0	4.0
OTHER CURRENT LIAB.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL CURRENT LIAB.	4930.0	3214.9	3470.2	3471.7	4232.5	3429.4	2959.7	3485.4	2881.0	2750.8	3314.4	3257.2	3281.1
LONG TERM DEBT	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0
OTHER LIABILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EQUITY													
COMMON STOCK	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0	2600.0
RETAINED EARNINGS	6328.0	5511.3	5819.5	6118.3	6364.7	6597.7	6822.0	6037.2	6201.7	6557.9	4477.6	4643.7	4797.8
TOTAL EQUITY	8928.0	8111.3	8419.5	8718.3	8964.7	9197.7	9422.0	8637.2	8801.7	9157.9	7077.6	7243.7	7397.8
TOTAL LIAB. AND EQUITY	17358.0	14825.2	15389.7	15690.1	15477.6	15127.2	14881.7	14622.7	14182.6	14208.7	13792.1	14000.9	14078.9

EXHIBIT 10

FUNDS FLOW ANALYSIS (PAGE 1)

FUNDS FLOW ANALYSIS	1	2	3	4	5	6	7	8	9	10	11	12
OPERATING INFLOWS												
NET SALES	2889.0	3177.9	3177.9	2889.0	2889.0	2889.0	2889.0	2600.1	2600.1	2600.1	2889.0	2889.0
INTEREST REVENUE	12.3	0.7	0.7	0.7	0.7	0.7	1.0	0.7	0.7	3.2	0.7	0.7
TOTAL OPERATING INFLOWS	2901.3	3178.6	3178.6	2889.7	2889.7	2889.7	2890.0	2600.8	2600.8	2603.3	2889.7	2889.7
OPERATING OUTFLOWS												
NET COGS	2003.4	2225.7	2248.0	2064.4	2085.3	2106.2	2126.9	1933.5	1953.0	1973.1	2214.0	2236.4
OTHER FIXED EXPENSE	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
VARIABLE OVERHEAD EXP	70.0	77.0	77.0	70.0	70.0	70.0	70.0	63.0	63.0	63.0	70.0	70.0
LOSS ON SALE OF FIXED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
TAX	240.5	263.4	254.5	209.9	198.5	191.0	183.4	140.1	133.1	102.0	141.1	131.6
TOTAL OPERATING OUTFLOWS	2393.9	2646.1	2659.5	2424.3	2433.8	2447.3	2460.2	2216.6	2229.1	2268.0	2505.1	2518.0
NET OPERATING FUND FLOW	507.4	532.5	519.1	465.3	455.9	442.4	429.7	384.2	371.7	335.2	384.5	371.6
WORKING CAPITAL INFLOWS												
DEC. IN A/R	0.0	0.0	0.0	145.2	186.0	126.0	0.0	274.2	186.0	126.0	0.0	0.0
DEC. IN INV.	1256.8	0.0	127.7	0.0	0.0	0.0	134.7	0.0	0.0	0.0	0.0	0.0
INC. IN A/P	0.0	611.1	383.8	63.9	0.0	23.1	0.0	0.0	0.0	160.2	151.2	214.8
DEC. IN OTHER CA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INC. IN OTHER CL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL W.C. INFLOWS	1256.8	611.1	411.5	212.1	186.0	149.1	134.7	274.2	186.0	286.2	151.2	214.8
WORKING CAPITAL OUTFLOWS												
INC. IN A/R	750.0	726.2	606.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	274.2	186.0
INC. IN INV.	0.0	16.3	0.0	14.7	14.6	14.7	0.0	13.7	13.7	167.8	15.1	172.6
DEC. IN A/P	1492.3	0.0	0.0	0.0	9.9	0.0	105.5	90.0	13.4	0.0	0.0	0.0
INC. IN OTHER CA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEC. IN OTHER CL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL W.C. OUTFLOWS	2242.3	742.5	606.0	14.7	24.6	14.7	105.5	103.6	27.0	167.8	289.3	358.6
NET W.C. FUNDS FLOW	-985.6	-131.4	-194.5	197.4	161.4	134.4	29.2	170.6	159.0	118.4	-138.1	-143.7
FINANCIAL INFLOWS												
INC. IN LT DEBT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INC. IN COMMON STOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INC. IN ST BORROWING	0.0	0.0	0.0	477.2	0.0	0.0	631.2	0.0	0.0	403.4	0.0	0.0
TOTAL FIN. INFLOWS	0.0	0.0	0.0	477.2	0.0	0.0	631.2	0.0	0.0	403.4	0.0	0.0
FINANCIAL OUTFLOWS												
DEC. IN LT DEBT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEC. IN COMMON STOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEC. IN ST BORROWING	222.7	355.8	161.3	0.0	573.4	492.9	0.0	514.5	116.8	0.0	208.1	191.3
TOTAL FIN. OUTFLOWS	222.7	355.8	232.3	0.0	573.4	492.9	0.0	514.5	116.8	0.0	208.1	191.3
NET FINANCING FUNDS FLOW	-222.7	-355.8	-232.3	477.2	-573.4	-492.9	631.2	-514.5	-116.8	403.4	-208.1	-191.3
OTHER INFLOWS												
DEC. IN OTHER ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INC. IN OTHER LIAB.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OTHER INFLOWS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER OUTFLOWS												
INC. IN OTHER ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEC. IN OTHER LIAB.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OTHER OUTFLOWS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NET OTHER FUNDS FLOW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FUNDS COVERAGE EXPENSE	47.1	48.1	41.0	38.9	37.9	39.1	38.0	40.3	36.0	38.0	38.4	38.5

EXHIBIT 10

FUNDS FLOW ANALYSIS (PAGE 2)

DIVIDEND	1000.0	0.0	0.0	1000.0	0.0	0.0	1000.0	0.0	0.0	1000.0	0.0	0.0
NET INVESTMENT												
ADDITIONS TO FIXED ASSETS	200.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	300.0	0.0	0.0
BOOK VALUE OF DISPOSED ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
NET INV. FUNDS FLOW	-200.0	0.0	0.0	-100.0	0.0	0.0	-100.0	0.0	0.0	-200.0	0.0	0.0
CHANGE IN CASH / NET FUNDS FLOW	-1948.0	.0	.0	.0	.0	44.8	-44.8	.0	377.9	-377.9	.0	.0
BEG. CASH & M/S	2548.0	600.0	600.0	600.0	600.0	600.0	644.8	600.0	600.0	977.9	600.0	600.0
ENDING CASH & M/S	600.0	600.0	600.0	600.0	600.0	644.8	600.0	600.0	977.9	600.0	600.0	600.0
TOTAL FLOW	3712.1	1143.6	930.6	1154.6	641.9	591.5	1240.5	658.4	557.7	1402.8	535.8	586.5
ENDING TOTAL ASSETS	14825.2	15389.7	15690.1	15477.6	15127.2	14681.7	14622.7	14182.6	14208.7	13392.1	14000.9	14178.9
TOTAL FLOW/TOTAL ASSETS	0.2504	0.0743	0.0593	0.0746	0.0424	0.0397	0.0848	0.0464	0.0392	0.1010	0.0383	0.0414
OPERATIONS	0.1367	0.4656	0.5578	0.4030	0.7102	0.7479	0.3464	0.5835	0.6665	0.2390	0.7178	0.6337
ACCOUNTS RECEIVABLE	-0.2020	-0.6350	-0.6512	0.1284	0.2398	0.2130	0.0000	0.4165	0.3335	0.0898	-0.5118	-0.3172
INVENTORY	0.3386	-0.0143	0.1372	-0.0127	-0.0228	-0.0248	0.1086	-0.0207	-0.0245	-0.1196	-0.0282	-0.2942
ACCOUNTS PAYABLE	-0.4020	0.5344	0.3050	0.0553	-0.0155	0.0391	-0.0850	-0.1367	-0.0239	0.1142	0.2822	0.3663
OTHER CURRENT ASSETS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OTHER CURRENT LIABILITIES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S-T BORROWING	-0.0600	-0.3112	-0.3034	0.4133	-0.8934	-0.8333	0.5069	-0.7814	-0.2094	0.2876	-0.3684	-0.3262
OTHER FINANCING	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FIXED COVERAGE EXPENSE	-0.0127	-0.0395	-0.0454	-0.0346	-0.0684	-0.0661	-0.0282	-0.0612	-0.0645	-0.0250	-0.0716	-0.0625
INVESTMENT	-0.0539	0.0000	0.0000	-0.0866	0.0000	0.0000	-0.0806	0.0000	0.0000	-0.1426	0.0000	0.0000
DIVIDEND	-0.2694	0.0000	0.0000	-0.8661	0.0000	0.0000	-0.8061	0.0000	0.0000	-0.7129	0.0000	0.0000
OTHER A & L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHANGE IN CASH	0.5248	.0000	.0000	.0000	.0000	-0.0758	0.0361	.0000	-0.6777	0.2694	.0000	.0000
TOTAL FLOW - INFLOWS												
OPERATIONS	507.4	532.5	519.1	465.3	455.9	442.4	429.7	384.2	371.7	335.2	384.5	371.6
ACCOUNTS RECEIVABLE	0.0	0.0	0.0	148.2	136.0	126.0	0.0	274.2	186.3	126.0	0.0	0.0
INVENTORY	1256.3	0.0	127.7	0.0	0.0	0.0	134.7	0.0	0.0	0.0	0.0	0.0
ACCOUNTS PAYABLE	0.0	611.1	283.8	63.9	0.0	23.1	0.0	0.0	0.0	160.2	151.2	214.8
OTHER CURRENT ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER CURRENT LIABILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S-T BORROWING	0.0	0.0	0.0	477.3	0.0	0.0	631.2	0.0	0.0	403.4	0.0	0.0
OTHER FINANCING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INVESTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER A & L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHANGE IN CASH	1948.0	0.0	.0	.0	.0	0.0	44.8	.0	0.0	377.9	0.0	.0
TOTAL FLOW	3712.1	1143.6	930.6	1154.6	641.9	591.5	1240.5	658.4	557.7	1402.8	535.8	586.5
TOTAL FLOW - OUTFLOWS												
OPERATIONS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACCOUNTS RECEIVABLE	750.0	726.2	606.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	274.2	186.3
INVENTORY	0.0	16.3	0.0	14.7	14.6	14.7	0.0	13.7	13.7	167.8	15.1	172.6
ACCOUNTS PAYABLE	1492.3	0.0	0.0	0.0	6.9	0.0	105.5	50.0	13.4	0.0	0.0	0.0
OTHER CURRENT ASSETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER CURRENT LIABILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S-T BORROWING	222.7	355.8	282.3	0.0	577.4	492.9	0.0	514.5	115.8	0.0	248.1	171.3
OTHER FINANCING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EXHIBIT 10

FUNDS FLOW ANALYSIS (PAGE 3)

FIXED COVERAGE EXPENSE	47.1	45.2	42.3	39.9	43.9	39.1	35.0	40.3	36.0	35.0	38.4	36.6
INVESTMENT	200.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	200.0	0.0	0.0
DIVIDEND	1000.0	0.0	0.0	1000.0	0.0	0.0	1000.0	0.0	0.0	1000.0	0.0	0.0
OTHER A & L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHANGE IN CASH	0.0	.0	0.0	0.0	0.0	44.8	0.0	0.0	377.9	0.0	.0	0.0
TOTAL FLOW	3712.1	1143.6	930.6	1154.6	641.9	591.5	1240.5	638.4	557.7	1402.8	535.8	586.5

EXHIBIT 11

FINANCIAL RATIOS

RATIO ANALYSIS

DUPONT ANALYSIS	1	2	3	4	5	6	7	8	9	10	11	12
PROFIT MARGIN	9.77%	9.73%	9.40%	8.53%	8.07%	7.76%	7.45%	6.32%	6.01%	4.61%	5.73%	5.35%
ASSET TURNOVER	2.34	2.48	2.43	2.24	2.29	2.33	2.37	2.20	2.20	2.25	2.48	2.45
RETURN ON ASSETS	22.85%	24.11%	22.85%	19.10%	18.48%	18.08%	17.66%	13.91%	13.19%	10.34%	14.20%	13.08%
FIN. LEVERAGE MULTIPLIER	1.83	1.83	1.80	1.94	1.85	1.77	1.91	1.82	1.79	1.96	1.93	1.92
RETURN ON EQUITY	41.77%	44.08%	41.13%	37.13%	34.11%	31.95%	33.82%	25.29%	23.86%	20.30%	27.45%	25.06%
PROFITABILITY												
RETURN ON GROSS MARGIN	31.08%	29.99%	29.28%	28.56%	27.84%	27.12%	26.41%	25.66%	24.91%	24.24%	23.39%	22.61%
RETURN ON OPERATIONS	19.72%	19.44%	18.74%	17.18%	16.45%	15.73%	15.01%	13.26%	12.51%	11.80%	11.95%	11.17%
PROFIT MARGIN	9.77%	9.73%	9.40%	8.53%	8.07%	7.76%	7.45%	6.32%	6.01%	4.61%	5.73%	5.35%
LIQUIDITY												
CURRENT RATIO	2.20	2.25	2.39	2.03	2.33	2.68	2.22	2.60	2.79	2.22	2.35	2.44
QUICK RATIO	1.72	1.80	1.98	1.67	1.90	2.18	1.84	2.13	2.30	1.75	1.97	1.91
CASH RATIO	0.19	0.17	0.17	0.15	0.17	0.22	0.17	0.21	0.36	0.18	0.16	0.18
DEBT MANAGEMENT												
DEBT RATIO	45.29%	45.29%	44.43%	48.54%	45.81%	43.41%	47.77%	44.99%	43.99%	49.05%	48.27%	47.83%
TIMES INTEREST EARNED	12.10	13.66	14.09	12.43	10.83	11.62	12.39	8.56	9.04	8.76	9.00	8.81
CASH CONVERSION CYCLE												
ACCOUNTS RECEIVABLE	51.2	53.4	59.1	63.5	61.6	60.2	60.2	63.8	61.6	60.2	57.0	58.9
INVENTORY	23.1	21.0	19.1	21.0	21.0	21.0	18.9	21.0	21.0	23.4	21.0	23.1
	74.3	74.4	78.2	84.5	82.6	81.3	79.2	84.8	82.7	83.5	78.0	82.1
ACCOUNTS PAYABLE	29.8	35.0	38.5	42.8	42.2	42.2	40.3	42.9	42.3	44.3	41.5	44.0
# OF DAYS IN CYCLE	44.5	39.4	39.8	41.7	40.3	39.1	38.9	41.9	40.4	39.3	36.5	38.1

NOTE: ALL RATIO CALCULATIONS ARE BASED ON NET SALES. NET SALES = GROSS SALES - EXPECTED SALES DISCOUNT - EXPECTED BAD DEBT

EXHIBIT 12

RECEIVABLES AND PAYABLES

CALCULATION OF ENDING A/R	1	2	3	4	5	6	7	8	9	10	11	12
BEGINNING ACCOUNTS RECEIVABLE	4150.0	4930.0	5656.2	6262.2	6114.0	5928.0	5802.0	5802.0	5527.8	5341.8	5215.8	5490.0
GROSS SALES	3000.0	3300.0	3300.0	3000.0	3000.0	3000.0	3000.0	2700.0	2700.0	2700.0	3000.0	3000.0
EXPECTED SALES DISCOUNTS	-21.0	-23.1	-23.1	-21.0	-21.0	-21.0	-21.0	-18.9	-18.9	-18.9	-21.0	-21.0
EXPECTED BAD DEBT	-90.0	-99.0	-99.0	-90.0	-90.0	-90.0	-90.0	-81.0	-81.0	-81.0	-90.0	-90.0
SUBTOTAL	7069.0	8107.9	8834.1	9151.2	9003.0	8817.0	8691.0	8402.1	8127.9	7941.9	8104.8	8379.0
GROSS COLLECTION	2229.0	2539.0	2667.0	3120.0	3186.0	3135.0	3009.0	2985.0	2895.0	2835.0	2724.0	2805.0
ACTUAL SALES DISCOUNT	-15.0	-21.3	-23.1	-22.8	-21.0	-21.0	-21.0	-20.7	-18.9	-18.9	-19.2	-21.0
ACTUAL BAD DEBT	-75.0	-66.0	-72.0	-60.0	-90.0	-99.0	-99.0	-90.0	-90.0	-90.0	-90.0	-81.0
NET COLLECTIONS	2139.0	2451.7	2571.9	3037.2	3075.0	3015.0	2889.0	2874.3	2786.1	2726.1	2614.8	2703.0
ENDING ACCOUNTS RECEIVABLE	4930.0	5656.2	6262.2	6114.0	5928.0	5802.0	5802.0	5527.8	5341.8	5215.8	5490.0	5676.0

CALCULATION OF ENDING A/P	1	2	3	4	5	6	7	8	9	10	11	12
BEGINNING ACCOUNTS PAYABLE	3420.0	1987.7	2598.8	2882.6	2946.5	2936.5	2959.7	2854.2	2764.2	2750.8	2911.0	3062.3
GROSS PURCHASES	747.4	2244.2	2122.4	2081.2	2102.0	2123.0	1994.2	1949.1	1968.6	2143.0	2231.3	2411.4
EXPECTED PURCHASE DISCOUNT	-0.7	-2.2	-2.1	-2.1	-2.1	-2.1	-2.0	-1.9	-2.0	-2.1	-2.2	-2.4
SUBTOTAL	4226.7	4229.6	4719.1	4961.7	5046.4	5057.5	4951.8	4801.4	4730.9	4891.7	5140.1	5471.2
GROSS PAYMENTS	2239.7	1633.1	1838.6	2017.3	2112.0	2099.9	2099.7	2039.1	1982.0	1982.8	2080.1	2196.6
ACTUAL PURCHASE DISCOUNTS	-0.7	-2.2	-2.1	-2.1	-2.1	-2.1	-2.0	-1.9	-2.0	-2.1	-2.2	-2.4
NET PAYMENTS	2239.0	1630.9	1836.4	2015.3	2109.9	2097.8	2097.7	2037.2	1980.0	1980.6	2077.9	2194.2
ENDING ACCOUNTS PAYABLE	1987.7	2598.8	2882.6	2946.5	2936.5	2959.7	2854.2	2764.2	2750.8	2911.0	3062.3	3277.1