

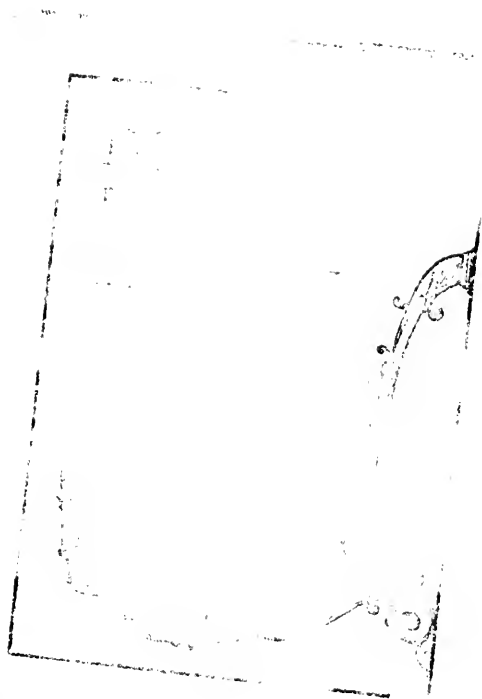
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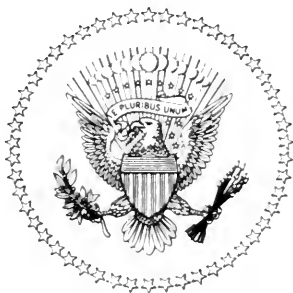
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# Economic Report of the President



Transmitted to the Congress  
January 1979

TOGETHER WITH  
THE ANNUAL REPORT  
OF THE  
COUNCIL OF ECONOMIC ADVISERS

UNITED STATES GOVERNMENT PRINTING OFFICE  
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**ECONOMIC REPORT  
OF THE PRESIDENT**



## ECONOMIC REPORT OF THE PRESIDENT

*To the Congress of the United States:*

Two years ago when I took office our economy was still struggling to recover from the deep recession of 1974–75. Unemployment was widespread, and a substantial part of our industrial capacity stood idle.

Today 7 million more Americans are at work, and factories across the country have regained high levels of output. Family incomes, after adjustment for inflation, have risen handsomely and so have business profits.

The task now confronting us is to manage an economy operating at close to its capacity—to sustain prosperity and extend its benefits more widely among our citizens.

Under the best circumstances, designing economic policies to carry out that task calls for restraint and careful choices. Developing such policies has been made more complex by the acceleration of inflation last year and the declining growth of productivity that was partly responsible for it.

My economic and budgetary program deals forthrightly with the economic realities we face today. It is based on four principles.

First, reducing inflation must be our top economic priority. Inflation endangers the gains in employment and income that we have made during the past 2 years. We must act forcefully and effectively to combat inflation, and we must persist until the battle is won.

Second, government must do its job better. Reducing inflation will require budgetary austerity and moderation of economic growth. With productivity growth at a low ebb, living standards will not rise as fast as they have in the past 2 years. In such a climate, waste, inefficiency, or misplaced priorities are particularly intolerable. It is now more essential than ever that our government, in both its budgetary and regulatory programs, make the best use of the resources at its disposal and seek better, less costly means to achieve our national objectives.

Third, we will not reduce inflation at the expense of the most vulnerable members of our society—the poor, the elderly, and those who have difficulty finding jobs even in a high-employment economy. Ours is a compassionate Nation, dedicated to a sense of fairness. We will not lose sight of those who most need our help.

Fourth, our policies must reflect the fact that the United States is a very important part of a closely related world economy. We will continue to pursue domestic policies and undertake other actions as necessary and appropriate to foster a strong and stable dollar, and we will join with other countries to promote an open and growing world economy.

In the months ahead, I will work closely with the Congress to ensure that the policies adopted by this government are consistent with these four precepts. The budget for 1980 must be very tight, and I intend to make sure that a fiscal policy of firm and measured restraint is maintained. But the budget must continue and strengthen our most essential programs, and I have supported such programs strongly. In order to further the fight against inflation, I will seek prompt adoption of my real wage insurance program and my proposals for hospital cost containment and regulatory reform.

I will continue to seek the cooperation and support of the American people in the fight against inflation. Last October, I proposed to the Nation a program of price and pay standards designed to brake the price-wage spiral that has beset our economy for more than a decade. This program has received substantial support from the American people, and I will make every effort to enlist the broadest possible cooperation with it in the year to come.

The pay and price standards ask every American to exercise restraint. Every American should therefore expect the government to ensure that its own actions will contribute to, not undermine, the voluntary effort to reduce inflation. Steadfast pursuit of fiscal and monetary discipline and limits on the inflationary impacts of other government actions are crucial to the success of the anti-inflation program. Together, the actions of government and the private sector can lay a new foundation for a durable prosperity.

#### *Progress and Problems in 1978*

Among my first actions in office were steps to strengthen economic growth and speed the return to a high-employment economy. Those actions paid generous dividends. In 1977 our rate of economic growth increased by nearly a full percentage point over the prior year, and in 1978 the Nation's output of goods and services advanced by a healthy 4¼ percent. Today our Nation is using its industrial capacity more fully than a year ago.

Last year 3 million new jobs were created. A larger proportion of our people is at work now than at any other time in our history. Gains

in employment during the past 2 years have been especially strong among women and members of minority groups.

Unemployment declined to less than 6 percent of the labor force during 1978. Nearly 1½-million fewer Americans were unemployed in December 1978 than 2 years earlier. Unemployment among minority groups has also begun to decline from the very high levels that persisted earlier in the recovery, but these groups still bear a disproportionate share of the burden of unemployment.

Gains in employment and output produced strongly rising incomes for most Americans during 1978. Disposable personal income, adjusted for inflation, rose by more than 3 percent over the 4 quarters of last year. The income of our country's farmers, which was severely depressed in 1976 and 1977, showed a marked recovery.

Business profits rose more than 10 percent in 1978, thereby promoting conditions for the continued growth in investment needed for productivity improvement and healthy economic expansion. Business investment in new plant and equipment also strengthened in 1978, raising the proportion of our national output devoted to capital formation to the highest level in 4 years.

On most counts, the prosperity of our Nation rests on a solid base. Our economy at the end of last year was still growing strongly. The momentum of expansion will be sustained early this year by the reductions in taxes on individual incomes and corporate profits that were provided in the Revenue Act of 1978. Last year, as in the earlier years of the recovery, the process of economic expansion remained relatively well balanced. Business inventories are lean. Industrial firms and financial institutions are in good financial condition. Shortages and speculative buying generally are absent. But inflation does pose a serious threat to the Nation's continued economic health. If we make progress in reducing inflation, the prospects are good for a successful transition from a period of economic recovery to a period of moderate but sustained growth.

For more than 10 years, our country, like many other nations, has faced stubborn inflation. During the course of 1978 our inflation problem worsened. Consumer prices rose by about 9 percent, a large acceleration from the 6¾ percent rate of inflation in 1977. Increases in wages also were larger and, since productivity gains declined sharply, costs of production moved up much more strongly.

The anti-inflation effort was given top priority in 1978. In May, I recommended that the Congress reduce by \$5 billion and delay 3 months the tax cut that had been proposed earlier. In October, I set forth a strong

and comprehensive program to combat inflation. Shortly thereafter, in cooperation with other countries, the Nation undertook a series of measures to strengthen the dollar abroad and further contribute to a reduction of inflation at home.

### *Inflation in 1978*

Rising inflation last year stemmed from several sources. Cold winter weather affected food supplies and prices. Depreciation of the dollar in foreign exchange markets added to prices of imports and to prices of goods produced by U.S. firms that compete with imported products. Costs of land and building materials were driven up by exuberant demands for new homes, and the rise of mortgage interest rates added to the costs of buying a home. At the same time, the cumulative effects of government legislation and regulation over recent years gave further impetus to cost pressures.

A large part of the worsening of inflation last year, however, stemmed from poor productivity. Over the past decade or more, the rate of growth in our productivity has been slowing. In late 1977 and throughout 1978, the slowdown in productivity growth reached serious proportions. Last year the productivity of our economy increased by less than 1 percent.

The reasons for the weakening of productivity growth in our country, especially its poor performance last year, are complex and are not fully understood. But the consequences are well known. With slower productivity growth, our living standards individually and as a Nation cannot rise as fast. Slower productivity growth means that the resources available for carrying out governmental programs become scarcer. It means that large increases in wages and other incomes put greater upward pressure on costs and prices. If we ignore the realities of slower productivity growth—if governments continue to press forward with unabated claims on resources, and private citizens continue to demand large gains in money incomes—our inflationary problem will worsen.

### *Dealing with Inflation*

Inflation injures every person in our country. It means that paychecks do not go as far as they once did. It means that savings accumulated for retirement or for a child's education become inadequate. Many poor and elderly persons see prices they pay for food, shelter, and heat rise rapidly while their incomes rise slowly or not at all. These problems are so acute that they demand an all-out effort to reduce inflation. Yet rising prices and costs have additional and very serious effects on our economy as a whole.

Inflation drives up interest rates. It undermines the competitiveness of our industries and the value of our dollar abroad. Confidence of businesses in the future is reduced and investment plans are upset. Consumers' confidence in their own future is sapped. Sooner or later, these effects of inflation will undermine the basis for economic expansion and make sustained prosperity impossible.

Finally, the corrosive effects of inflation eat away at the ties that bind us together as a people. One of the major tasks of a democratic government is to maintain conditions in which its citizens have a sense of command over their own destiny. During an inflation individuals watch in frustration as the value of last week's pay increase or last month's larger social security check is steadily eroded over the remainder of the year by a process that is beyond their individual control. All of us have to plan for the future when we lend or borrow, save for a child's education, change a job, buy a home, or choose a career. The future is uncertain enough in any event, and the outcome of our plans is never fully within our own control. When the value of the measuring rod with which we do our planning—the purchasing power of the dollar—is subject to large and unpredictable shrinkage, one more element of command over our own future slips away. It is small wonder that trust in government and in social institutions is simultaneously eroded.

It is for all of these reasons that reducing inflation must now be the primary concern of economic policy.

### *Policies to Control Inflation*

Firm, sustained and carefully applied fiscal and monetary restraint must be the first element in our effort to reduce inflation. We have entered a period in which the high rate of economic growth that we experienced when the margin of unused resources was larger no longer is appropriate. We will apply the needed restraint and stick with it.

We will *not* try to wring inflation out of our economic system by pursuing policies designed to bring about a recession. That course of action would be unfair. It would put the heaviest burden of fighting inflation on those who can least afford to bear it. It also would be ineffective. Twice in the past decade inflation has accelerated and a recession has followed, but each recession brought only limited relief from inflation. The underlying pressures behind rising prices and costs continued to be strong, and inflation eventually accelerated again when recovery began. Stop-and-go policies do not work. A successful anti-inflation program must be durable to deal with a long-run inflation problem. Our program meets that test.

When I announced my anti-inflation initiatives last October, I pledged to pursue a restrained budgetary policy in fiscal year 1980. I have kept that pledge. The central element of my fiscal program is tight control over Federal spending:

- Growth in Federal spending will be curtailed. As in 1979, Federal outlays in the next fiscal year will increase in real terms by significantly less than 1 percent.
- The share of the Nation's output accounted for by Federal spending will be reduced to about 21 percent in fiscal 1980, a full year ahead of the schedule that I had earlier announced.

Restricted growth in Federal spending, combined with the revenues yielded by a moderately growing economy, will reduce the budget deficit to \$29 billion in fiscal 1980, less than half its size in the year before I took office. This course of fiscal policy will exert the measured restraint that is needed. Excessive demands upon the Nation's resources will be avoided. Growth in economic activity will slow to a little below the rise in the Nation's economic potential.

These measures of fiscal policy are being complemented by firm and careful monetary restraint on the part of the Federal Reserve Board. In this way, monetary and fiscal policy are supporting each other to combat inflationary pressures and foster a healthy and stable economy.

#### *Other Governmental Actions*

I am taking other steps to reduce the inflationary effects of government actions. I have directed the agencies of the executive branch to pay special attention to ensuring that the regulations they issue do not impose unnecessary burdens on the public, and I shall continue the efforts that got under way in 1978 to improve the regulatory process.

Last year the deregulation of the airline industry brought American consumers the benefits of substantially lower prices and better service. This year I intend to seek congressional approval of legislation to increase the role of competitive forces in the trucking and railroad industries. I will submit to the Congress legislation to reform the process by which regulations are developed by Federal agencies, and to increase the emphasis on a careful balancing of costs and benefits. And I am taking steps to reduce the burden of paperwork imposed by the government on the private sector.

Government must set a clear example in the fight against inflation. For that reason, I ordered last year that the rate of pay increase for Federal workers be held to 5.5 percent and that sharp limitations be imposed on new Federal hiring.



Although these actions by government will not, by themselves, bring inflation to an end, they are indispensable. They can create an environment that encourages voluntary cooperation with the pay and price standards. Without restraint by government, the pressures of an overheated economy easily could render meaningless the best efforts of businesses and workers to reduce price and wage increases. However, it will take broad cooperation from the private sector if the voluntary effort is to succeed in reducing inflation.

### *Voluntary Wage and Price Standards*

The voluntary wage and price standards call for an average rate of pay increase of 7 percent or less this year. I also have asked businesses to hold their average rate of price increase to at least one-half percentage point below the average rate of increase in 1976-77. Where such price deceleration is not possible, the standards provide for limitations on profit margins.

To meet these standards, both workers and businesses must exercise restraint. But they are fair and flexible standards. If they are widely observed, as I believe they will be, we can reverse the momentum of the price-wage cycle and gradually bring down the rate of inflation.

I recognize that cooperation with this program entails uncertainties for workers who comply with the wage standards. They may lose if others do not comply, or if forces beyond anyone's control cause prices to rise unexpectedly. In order to provide them some assurance that those who cooperate will not suffer as a result, and thus to motivate wider observance of the standards, I have proposed to the Congress a program of real wage insurance. Under this program, if inflation increases by more than 7 percent this year, groups of workers that meet the 7 percent pay standard will receive a tax credit at a rate equal to the difference between the actual inflation rate and 7 percent. This credit will insure workers' real wages over a range of inflation as high as 10 percent this year, far higher than is expected to occur.

The elements of my anti-inflation program are mutually supportive and designed to mount a sustainable attack on our long-run inflation problem. Voluntary cooperation with the pay and price standards is essential to reversing the momentum of inflation. Government needs to take strong action to avoid contributing to inflationary pressures in order to ensure that the benefits of voluntary restraint are fully realized. Together, these policies offer our best opportunity to win the fight against inflation.

My anti-inflation program will support the health of our economy in 1979 in two respects. First, the rate of inflation should slow this year—to about 7½ percent over the year as a whole, and to somewhat below 7 percent by the end of the year. Second, moderation of inflation will help us avoid a recession and improve the prospects for sustained economic growth in 1980 and beyond.

Over the 4 quarters of 1979, the Nation's output should rise by about 2¼ percent, somewhat less than the economy's potential growth. This should create an economic climate in which the wage and price standards have good prospects for success. The labor force will continue to expand strongly and most new workers will find jobs.

Further progress in reducing inflation can be expected in 1980 as the effects of the anti-inflation program begin to cumulate. Moderate growth in the year ahead, combined with substantial progress against inflation, will lay the basis for an enduring prosperity.

In the years beyond 1980, as we are successful in containing the growth in Federal spending and bringing down the rate of inflation, we can look toward reductions in Federal taxes. Rising real income and inflation, even at a reduced pace, push taxpayers into higher tax brackets and thereby raise the average effective tax rate. Both to sustain economic growth and to relieve citizens from unwarranted tax burdens, tax reductions will, from time to time, be highly desirable.

It would be unwise—and, indeed, very dangerous—to commit ourselves now to any mechanical formula for future reductions. No such formula will pass the test of budgetary responsibility. Our knowledge of future economic conditions and developments affecting the rate of inflation is too limited to make such decisions at this time. There is simply no substitute for the difficult process of matching our overall budgetary policies year by year to the economic requirements of the Nation.

#### *Policies to Meet the Nation's Needs*

In a period when the overall growth of budgetary resources must be tightly restrained, budget decisions take on special importance. Some real growth in our defense budget is essential to meet our national security needs and keep our international commitments in the face of the growing military strength of our potential adversaries.

Within the domestic budget I have given special priority to the needs of the poor and the disadvantaged. I have recommended substantial funding for programs that address their needs for assistance in

health care, education, employment and training, and basic subsistence. The 1980 budget directs the resources of those programs more carefully toward those most in need. Similarly I have sought to maintain and, in some cases, expand the assistance provided to our financially troubled cities and counties. I have paid particular attention to the need to move ahead with the development of alternative energy sources, including solar energy, and to spur basic research and development, which has been lagging in our country.

We cannot be satisfied with the condition of our economy while many of our disadvantaged citizens, especially among minorities, are unable to find work even in periods of prosperity. In 1978, the Congress enacted with my support the Full Employment and Balanced Growth Act. That act restates and amplifies the responsibilities of economic policy that have faced our Nation in recent decades. The act challenges us to provide the fullest possible opportunities for useful employment, to rely on the private sector as the principal provider of jobs, and to create an environment of price stability that will make it possible to sustain prosperity. These are very ambitious goals that challenge us as a Nation to set our sights high. The act also establishes important new procedures for moving toward the realization of full employment and price stability.

Neither can we rest while large numbers of Americans still live in poverty. This Nation has made a concerted effort to provide for those in our society who are in need. We have assisted the poor to acquire the basic necessities of life. We have taken steps to assure adequate incomes and medical care for the elderly. And we have helped to assure better health care, nutrition, and education for the young. My budget for 1980 continues to respond to the challenge that poverty sets before our Nation.

Each of these challenges calls for action by the government. In a period of inflation, however, our ability to act is limited. We cannot do everything, but we must do what we can and do it well. That is the framework within which I have constructed my budgetary program for 1979 and 1980. This budget provides a carefully balanced spending plan which will ensure that the activities of the Federal Government are well administered and effective, and that we continue to respond to the important needs of the country.

My 1980 budget provides important building blocks for the future in many areas:

- *Health programs*, which I have expanded substantially during my first 2 years in office, will be maintained at those levels and in some cases increased. In addition, consistent with the development of a

National Health Plan, new resources have been provided for the Child Health Assessment Program, which will extend Medicaid benefits to over 2 million low-income children. Funds have also been provided for extending Medicaid coverage to 100,000 low-income pregnant women not now eligible.

- *Authority for new spending for education* is maintained at the level that I provided in my budget last year. This program will support spending nearly 20 percent greater, in real terms, than 2 years ago.
- *Publicly assisted housing* will be provided through subsidies for 325,000 new units for families with low or moderate incomes.
- *Job-related programs* will include funds that will support an average of 546,000 public service jobs, phasing down to 467,000 jobs by the end of 1980. These jobs have been targeted more tightly to serve the structurally unemployed. Another 424,000 training opportunities also will be provided for the structurally unemployed. Programs to provide employment and training opportunities for youths remain a high priority. More private sector job opportunities will be made available through the new private sector initiative and the targeted employment tax credit.
- *A welfare reform program*, to take effect in 1982, will expand aid to families with dependent children, increase the earned income tax credit for low-wage workers, substantially improve employment opportunities for the Nation's neediest citizens, and provide fiscal relief to State and local governments with severe welfare burdens. Important reforms in the administration of the program will make America's welfare system easier to operate.
- *Aid to our cities and counties* will continue to be provided through revenue sharing, community development block grants, urban mass transit assistance, and urban development action grants. My budget provides new resources for the National Development Bank and requests funding in fiscal 1979 and 1980 for a new program of special fiscal assistance to cities and counties with severe unemployment problems.

This spending program provides for our Nation's vital needs, while remaining within the constraints required by today's inflationary economy.

### *The International Economy*

Developments last year reminded us once again of the interdependence of our economy and those of other nations around the world. Our trading partners are looking at our ability to deal with our economic problems at home as an indicator of the strength and leadership they can expect from the United States. We will not disappoint them.

Nineteen hundred and seventy-eight was a year of significant progress in the world economy. Real output began to pick up in industrial countries other than the United States. Important initiatives in the international arena occurred in trade policy, in balance of payments adjustment, and in financial markets—all influenced by the cooperation shown at the Bonn Summit.

Late 1978 and early 1979 will mark the culmination of the Tokyo round of Multilateral Trade Negotiations. These historic negotiations—which began in 1975 and were intensified in 1977—should lead to the first comprehensive overhaul of the rules of international trade since the 1960s.

The need for a revamping of the trading system is clear. Our large foreign trade deficit stems in part from a loss of American vitality in world markets. But it has also resulted from the tariff and nontariff barriers of our trading partners. Over the coming years, under a final multilateral trade agreement, barriers at home and abroad will be reciprocally dismantled.

During 1979 I will be working closely with the Congress to adopt the final multilateral trade agreement, along with implementing legislation, that will foster robust export growth and free and fair competition in world trade under rules that are both equitable and economically sensible. These measures will provide a framework for trade that will enhance our living standards in the decade to come.

In recent years, the United States has had a serious balance of payments deficit. Our imports surged as we grew rapidly and drew heavily on imported oil. Our exports lagged because of slow economic growth abroad. These factors contributed to a trade deficit rising from about \$10 billion in 1976 to an annual rate of almost \$45 billion in early 1978. As a result of the sharp increase in our external deficit and the acceleration of inflation in the United States, the value of the dollar in foreign exchange markets fell substantially last year.

We have taken important steps to correct the deficit:

- In late 1978, Congress enacted the National Energy Act, the first comprehensive legislation for dealing with our energy problems. The effect will be to reduce our oil imports in 1985 by 2.5 million barrels per day.
- In 1978, I announced the first phase of a National Export Policy. By setting up a framework to increase support for exports and reduce disincentives to export, we can begin to increase our share of world commerce. Fundamental improvement in our trade position is critical to a healthy dollar.

- A strong and effective anti-inflation program has been put into place. An integral part of that program consists of monetary and fiscal policies that will moderate the rate of economic expansion. These actions will help reduce our large foreign trade deficit.

These policies were beginning to bear fruit by the end of 1978. Exports today are growing more rapidly than the domestic economy. The merchandise trade deficit declined from a \$38-billion annual rate in the first half of last year to about \$32 billion in the latter half of the year. Narrowing of the deficit should continue and we foresee a marked improvement in the more comprehensive current account measure.

Nineteen hundred and seventy-eight was also a year of unusual instability in international financial markets. In the fall, movements in the exchange value of the dollar became very disorderly, and its decline became clearly excessive.

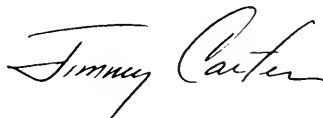
On November 1, I announced a series of steps to restore order to the foreign exchange markets and to correct the excessive decline of the dollar. Up to \$30 billion in foreign exchange resources were assembled by the United States, to be used in coordination with other countries utilizing their own resources, to protect the dollar's value in currency markets. Domestic interest rates were raised significantly to help reduce inflation and strengthen the dollar in exchange markets. And the United States underlined its commitment to deal with its inflation problem and strengthen its underlying economic position.

These actions have improved the tone of the exchange markets and contributed to a rise in the value of the dollar. More importantly for the longer term, they are helping to create more stable conditions in the exchange markets, in which the value of the dollar can better reflect the fundamental strength of the U.S. economy.

Progress also was made in 1978 in achieving closer economic cooperation among the leading industrial nations. I met in Bonn with the leaders of the six major industrial countries to discuss major economic problems facing us. Out of this came a concerted action program to restore greater balance and confidence in the international economy and in world financial markets. Together, we took the necessary steps to achieve those ends—the United States committed itself to combat inflation and reduce oil imports, Germany and Japan to increase growth and reduce trade surpluses, others to take measures on trade or inflation. Only through continued economic cooperation and sound policies can we attain the goal of full employment and price stability that is our ultimate objective.

*Building for the Future*

During this coming year, we as a Nation have an opportunity to strengthen our economy and lay the basis for continuing prosperity. The gains of the last 2 years have been notable. We have made great progress at home in recovering from the recession, and we have strengthened the stature of the United States in the world economy. In the year ahead, we can secure and extend those gains by working together to moderate inflation. I am confident that we will rise to the challenge.

A handwritten signature in cursive script that reads "Jimmy Carter". The signature is written in black ink and is positioned to the right of the main text block.

*January 25, 1979*





**THE ANNUAL REPORT  
OF THE  
COUNCIL OF ECONOMIC ADVISERS**



LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,  
*Washington, D.C., January 24, 1979.*

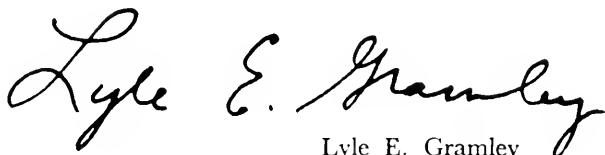
MR. PRESIDENT:

The Council of Economic Advisers herewith submits its 1979 Annual Report in accordance with the provisions of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Cordially,



Charles L. Schultze  
Chairman



Lyle E. Gramley



William Nordhaus



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## CHAPTER 1

# Progress and Problems in 1978

**T**HE U.S. ECONOMY LAST YEAR maintained substantial momentum in its fourth year of expansion. Output and employment rose and unemployment fell. But the year was marred by a serious acceleration in the rate of inflation and a decline in the value of the dollar that was sharper than fundamental economic conditions warranted. Although economic growth slowed from 5½ percent over the 4 quarters of 1977 to 4¼ percent during 1978, real income rose in all sectors, and all demographic groups experienced employment gains. A reasonable balance was maintained among sectors of real spending. Business fixed investment grew vigorously and residential construction remained strong despite sharply rising interest rates.

During the years immediately preceding 1978, the rapid growth associated with economic recovery had absorbed many of the capital and labor resources idled by the 1974-75 recession. Thus it became appropriate that growth should slow to a pace more in line with the long-term potential of the economy. The decline in the growth rate during 1978 was the first step in that transition.

Much remains to be done to provide adequate employment opportunities for those who cannot find jobs even in a high-employment economy. This task cannot be accomplished solely through aggregate demand policy, however, without risking further acceleration of inflation. Aggregate demand management must now aim at a more moderate rate of economic expansion to combat inflation while structural measures are developed to attack remaining pockets of unemployment.

### AN OVERVIEW OF THE YEAR

The quarterly pattern of growth during the year was once again uneven. Unusually severe winter weather and a major strike in coal mining reduced output growth to zero in the first quarter. Both consumer spending and construction activity were curtailed by the adverse weather. In the second quarter, both of these sectors rebounded strongly, and virtually all of the sales and production lost in the first quarter were regained. Taking a 2-quarter average, real gross national product (GNP) rose at a 4¼ percent annual rate in the first half of the year. In the second half of the year, there was again substantial disparity between the 2 quarters. Growth slowed

in the third quarter and accelerated in the final quarter. Over the 2 quarters together the annual rate of growth of real GNP averaged  $4\frac{1}{4}$  percent, the same as for the first half.

The increase in employment over the 4 quarters of last year was slightly less than in 1977—3.3 million compared to 3.9 million. It remained very large by historical standards, however, as the growth of productivity slowed significantly. The unemployment rate continued the marked decline begun in the latter part of 1977, falling from 6.6 percent in the fourth quarter of 1977 to 5.8 percent by the final quarter of 1978.

All sectors achieved further increases in real income in 1978. Aside from the farm sector, however, the gains were more modest than in the previous 3 years of stronger fiscal stimulus and rapid recovery in real output. The growth of real per capita disposable income, for example, slowed from 4.6 percent in 1977—a year when personal income taxes were reduced—to 2.5 percent over the 4 quarters of 1978. During the 3 years since the first year of cyclical recovery from the 1974–75 recession, the growth rate has averaged 3.2 percent, slightly above the  $2\frac{1}{2}$  percent trend for the two decades from 1953 through 1973. Corporate profits, in 1972 dollars, rose moderately further in 1978, following larger gains earlier in the recovery. Rising capacity utilization has lifted real profits at an average annual rate of 18 percent since the cyclical low in 1975. Both the rise in capacity utilization and the improvement in profitability helped to spur a recovery of business capital investment to a 10 percent share of GNP.

Farm income is, of course, less sensitive to fluctuations in overall economic growth but very sensitive to other factors such as weather, foreign demand, and agricultural policy. Farm income rose to an exceptionally high peak in 1973–74 from which it drifted down until 1977. A sharp recovery occurred last year, with farm proprietors' income reaching \$25.1 billion for the year as a whole (national income and product accounts basis). In 1972 dollars, farm income in 1978 was \$16.5 billion, or 14 percent higher than a year earlier.

The division of income among employee compensation and other shares has remained relatively constant during the most recent 3 years of expansion, as shown in Table 1. The share received by employees as wages and fringe benefits has risen slightly from the earlier part of the decade and is up substantially from the 1960s. The corporate profits share has improved significantly from recession lows although it remains well below the high level of the preceding decade.

One of the most discouraging developments of 1978 was the very slow growth of productivity. Output per hour in the private nonfarm business sector grew by only three-fourths of 1 percent during the year. (The reasons are explored in Chapter 2.) Weakness in productivity growth did much to exacerbate inflation. Since increases in nominal wage costs were offset to a lesser degree by productivity gains, unit labor costs rose more rapidly than was anticipated, and prices were pushed up faster. Furthermore, labor de-

TABLE 1.—Shares of national income, 1959–78

[Percent]

Item	1959–68 average	1969–73 average	1974–78 average <sup>1</sup>	1976	1977	1978 <sup>1</sup>
Compensation of employees.....	71.2	75.3	76.5	76.3	76.1	76.4
Proprietors' income: <sup>2</sup>						
Farm.....	2.3	2.0	1.6	1.4	1.3	1.5
Nonfarm.....	8.1	6.2	5.2	5.2	5.2	5.2
Corporate profits <sup>2</sup> .....	12.3	9.4	8.8	9.3	9.5	9.4
Other <sup>3</sup> .....	6.1	7.0	7.9	7.9	7.8	7.6

<sup>1</sup> Preliminary.<sup>2</sup> With inventory valuation and capital consumption adjustments.<sup>3</sup> Rental income of persons (with capital consumption adjustment) and net interest.

Note.—Detail may not add to 100 percent because of rounding.

Source: Department of Commerce, Bureau of Economic Analysis.

mand strengthened more rapidly than it would have done if productivity growth had been better, and this may have been a factor in the acceleration in hourly earnings early in the year.

Unlike earlier years of the recovery, when price indexes excluding food and energy rose at a fairly steady rate of around 6 to 6½ percent, 1978 witnessed a pervasive acceleration of prices and labor compensation. Compensation per hour in the fourth quarter of last year was almost 10 percent higher than a year earlier, in contrast to the 8 to 8½ percent rate of increase during the preceding 3 years. And price increases were larger in 1978 than in earlier years for almost all categories of goods and services. The GNP deflator increased 8.3 percent over the 4 quarters of 1978, compared to 6.1 percent in 1977. The consumer price index (CPI) rose by 9.2 percent over the 12 months ending in November compared with 6.8 percent in 1977. This more rapid rise of prices, especially consumer prices, was attributable not only to poor productivity performance but also to adverse developments in particular markets.

Food prices rose sharply, since supplies of red meats were even more limited than had been expected and adverse weather damaged fruit and vegetable crops. Moreover, the substantial depreciation of the dollar in international exchange markets was accompanied by higher prices of imports and of competing domestic products.

In view of the worsening of inflation, the Administration in May postponed the effective date for its proposed tax reduction from October 1978 to January 1979 and reduced the proposed cut from \$25 billion to about \$20 billion. Growth in Federal outlays was also slower than had been estimated. For fiscal 1978, unified budget outlays were \$12½ billion below the estimate contained in last January's budget, and the estimate for fiscal 1979 has been revised down by \$7.6 billion. Real purchases of goods and services by all levels of government rose 2 percent over the 4 quarters of 1978, in contrast to the 3¾ to 4¼ percent that had been anticipated at this time last year.

Both domestic and international conditions in 1978 also prompted a more restrictive monetary policy. The Federal funds rate increased from 6½ percent to about 10 percent during the year. Other short-term interest rates rose commensurately. As is typical, long-term rates rose less than those on short-term securities.

Tightening fiscal and monetary policies were one cause of the slower economic growth in 1978 than in 1977. The postponement of the tax cut and slower growth of Federal purchases contributed to a more moderate rise in consumer incomes and expenditures during 1978 than had been foreseen a year earlier. The inflation itself also played a part in slowing growth. Increases in food and import prices siphoned purchasing power away from most domestic consumers.

The largest single reason for the slower growth in 1978 than in 1977 was the leveling out of residential construction after a prolonged rise in housing starts beginning early in 1975. This leveling may have been partly the result of the increased restraint that developed in financial markets over the year. The more important influences were probably a filling of backlogs of demand and the fact that the home-building industry was operating at nearly full capacity.

The economy at the end of 1978 still showed substantial momentum, but the serious inflation problem and its interaction with the international value of the dollar have created a marked degree of uncertainty. Nominal interest rates are approaching historically high levels, to some extent as a result of the necessary steps taken at the beginning of November as part of the dollar support package. Financial restraint has not yet had significant adverse effects on spending, but it is difficult to predict how consumers and businesses will respond to rising interest rates in the current environment. Furthermore, the continuation of inflation casts a shadow on the economic horizon. Compliance with the anti-inflation program announced by the President in October is fundamental to maintaining a strong economy. This program is discussed in detail in Chapter 2.

If success is achieved in containing inflation this year, the prospects are favorable for maintaining a satisfactory growth rate and avoiding a recession. There are no major imbalances plaguing us. Capacity bottlenecks are relatively rare; capacity has been growing at a sustainable pace; inventories in most lines of business are reasonably balanced with sales; and liquidity positions, although declining, are not severely strained. The international trade position has been improving.

Continued strength in the near term seems assured. Employment and output rose strongly in the fourth quarter. Orders for durable goods have increased substantially. And the January 1 tax cut will help to sustain consumer spending early in the year. But the outlook for the latter part of 1979 will depend heavily on moderating inflation and on careful coordination between fiscal and monetary policies.

# THE MAJOR SECTORS OF AGGREGATE DEMAND IN 1978

Private demand sustained the economic expansion through its fourth year. The continued strength of business fixed investment last year was a notable aspect of the composition of demand (Table 2). Housing starts demonstrated remarkable resilience; despite tightening credit conditions they remained near the high level that had been reached at the end of 1977. Consumption expenditures grew somewhat faster than disposable income during the year, and the saving rate declined from its already relatively low level at the end of 1977. In contrast, growth in State and local spending over the 4 quarters of 1978 was at a slower pace than in 1977; the effects of the 1977 economic stimulus measures—many channeled through the State and local sector—gradually diminished. Federal purchases in real terms declined slightly due to a variety of special factors.

TABLE 2.—*Growth in the major components of real gross national product, 1975–78*

[Percent change, seasonally adjusted annual rate]

Component	1975 IV to 1976 IV	1976 IV to 1977 IV	1977 IV to 1978 IV <sup>1</sup>	1977 IV to 1978 II	1978 II to 1978 IV <sup>1</sup>
Gross national product.....	4.6	5.5	4.3	4.2	4.3
Personal consumption expenditures.....	5.7	4.8	3.8	2.2	5.4
Nonresidential fixed investment.....	8.6	9.1	8.3	12.4	4.3
Residential investment.....	23.6	15.3	- .8	-1.3	- .3
Government purchases:					
Federal.....	.2	6.3	- .3	<sup>2</sup> -12.2	13.2
State and local.....	-2.7	4.3	3.5	4.6	2.3
Domestic final sales <sup>3</sup> .....	5.0	5.7	3.7	2.2	5.2

<sup>1</sup> Preliminary.

<sup>2</sup> Largely attributable to fluctuations in Commodity Credit Corporation expenditures.

<sup>3</sup> Gross national product excluding change in business inventories and net exports of goods and services.

Source: Department of Commerce, Bureau of Economic Analysis.

## PERSONAL CONSUMPTION EXPENDITURES

Personal consumption is typically a major source of stimulus in the early stages of recovery. The current expansion is no exception. Between mid-1975 and the end of 1976 the personal saving rate declined substantially, and the fraction of disposable income spent on durable goods rose. Consumption subsequently became a less important source of stimulus, but it remained an expansionary factor in 1978. The increase in consumption came to 3.8 percent in real terms during the last year, one-half percentage point more than the increase in real disposable income.

Since 1975 the household sector has significantly increased its stocks of durable goods. In the process, outstanding consumer debt rose enough to lift the ratio of debt repayments to disposable income from a 1975 low of 15.6 percent to 16.8 percent at the end of 1977. It is therefore not surprising that the rate of growth of spending (in 1972 dollars) for durable goods declined substantially to 5.0 percent in 1978, compared to 11.3 per-

cent in 1977. Nonetheless, durable goods purchases in real terms held at about 15 percent of real disposable income, the level reached late in 1977. Auto sales remained at a high rate of 11¼ million units a year but did not rise further. Despite steep price increases for foreign cars, the foreign car share of the new car market declined relatively little during the year.

With durable goods sales remaining comparatively high, the volume of outstanding consumer installment credit rose substantially further in 1978; during the year the net increase amounted to \$44 billion. In the fourth quarter, repayments of consumer installment debt had reached 17.7 percent of disposable personal income, four-tenths of a percentage point above the 1971 peak (the earliest available data for the present series). Total repayments, including mortgage repayments, amounted to almost 23 percent of disposable income in the third quarter.

The high fraction of consumers' income absorbed by debt repayment has created some concern that a downturn in consumer demand might ensue. Survey data on the use of consumer installment credit suggests, however, that the increase in the ratios of installment credit extensions and repayments to disposable income may have been due to rapid growth in the number of households in the age bracket associated with relatively heavy credit usage. Rapid growth has occurred in the number of young adults in the 18- to 34-year age bracket; this group uses credit the most heavily. An absence of excessive debt burdens is also suggested by the fact that delinquency rates on installment loans did not rise during the year.

At the start of last year the Administration forecast a rise of real consumption of about 4½ percent, measured fourth quarter to fourth quarter, or about three-fourths percentage point more than the 3.8 percent actually realized. The reason for this difference was slower growth of real disposable income. This slowdown, in turn, is partly explained by the postponement of the effective date of the proposed tax cut from October 1, 1978, to January 1, 1979. A more important cause, however, was the increase in the rate of inflation that occurred during the course of 1978. Effective tax rates were increased as households were moved into higher tax brackets. Furthermore, the 11 percent rise in food prices reduced the growth of real incomes for most consumers, as did the price increases associated with the decline of the dollar's value in foreign exchange markets.

In the past, sharp unexpected increases in the rate of inflation have increased the personal saving rate. Inflation generally tends to raise the cost of borrowing and curtail the growth of real wealth. In addition, consumers may become less confident of their future prospects. In contrast, the saving rate declined in 1978. The continued strength of consumer expenditures in the face of high actual inflation rates and rising nominal interest rates may to some extent have stemmed from anticipatory buying in advance of expected price increases. Evidence from surveys suggests that some consumers considered the present time to be propitious for buying because they expected

prices to rise further. This may have helped sustain the already high level of durable goods purchases.

Relative price changes appear to have contributed to changes in the composition of consumption during 1978. For example, real purchases of transportation services and clothing and shoes rose more sharply than total consumption. In these areas, price increases were below the average for all consumer goods and services. A shift in the composition of food consumption, as a result of the rapid rise in food prices, was probably the major reason for the decline in the measured real value of food consumption. Whenever food prices rise steeply consumers tend to shift toward less costly foods, although they do not necessarily eat smaller quantities of food. For example, the sharp reduction in supply and sharp increase in the price of red meats generated a significant shift of consumption to poultry and dairy products.

## HOUSING

Housing activity remained on a plateau throughout last year, following nearly 3 years of steady advance. Real residential construction, on a calendar year basis, was 3.5 percent above that in 1977, and there were 2.0 million housing starts last year. The number of single-family starts was just below the 1½-million record level of 1977, while multiunit starts rose to 592,000. Over the 4 quarters of 1978, however, residential construction in real terms declined slightly, in contrast to a rise of 15 percent in the previous 4 quarters. This flattening out of residential investment outlays was a dominant element in the slower growth of real GNP in 1978.

In the first quarter, housing starts fell about 20 percent as a result of the inclement winter in the North Central and Northeast regions. The shortfall was largely made up in the second quarter; then housing starts leveled out at an annual rate of around 2 million units.

This leveling of housing starts and residential construction in 1978 was not surprising. Three years of strongly rising building activity had filled backlogs of demand created by the depressed level of new construction during the 1973-74 period of credit restraint and low income. Moreover, the sharp rise in prices of a wide range of building materials suggests that the building industry was operating at close to capacity in 1978. Indeed, the striking feature of the housing sector last year was its continued high level of activity in the face of sharply rising interest rates.

The resilience of housing in a year of tightening financial markets is largely attributable to the ability of specialized mortgage lenders to compete more effectively for savings. Beginning in June, new regulations permitted commercial banks and thrift institutions to issue 6-month certificates of deposit on which rates paid are tied to those on 6-month Treasury bills. These new money market certificates sustained the supply of mortgage credit, but they did not prevent interest rates on mortgages from rising along with other rates. The national average effective mortgage rate for new houses

reached 10 percent by the end of the year. The strength of demand, particularly for single-family units, in the face of such high mortgage interest rates results partly from the large number of people who were born in the baby boom of 1946-57 and are now reaching age brackets where the rate of homeownership is traditionally high. Demand may also be stimulated by the expectation that houses will continue to be a good inflation hedge. Over the past 7 years purchase prices for new homes, adjusted for changes in quality and size, have risen at an annual rate about one-third faster than other prices. The tax deductibility of mortgage interest and the favorable tax treatment of capital gains from home sales add to the attractiveness of such investment.

Multifamily housing starts rose 2.9 percent in 1978. They were still about 400,000 below the 1972 peak of 1 million, which included close to 200,000 publicly subsidized starts. The number of subsidized starts last year was almost 165,000, up substantially from the lows of 1975 and 1976. For all rental housing the vacancy rate remained close to 5 percent through the third quarter of last year, a historically low figure. Rents rose 7.3 percent, almost 1 percentage point more than in 1977. This probably contributed to an improvement in profits and helped to stimulate multiunit building.

#### BUSINESS FIXED INVESTMENT

A year ago there was widespread concern that business fixed investment was not demonstrating its usual cyclical response to improvement in such basic determinants as the rate of growth of output, business profits and cash flow, and the cost of capital. In fact, revised data for 1977 that became available last July showed a much stronger rise of investment than had appeared earlier, and growth last year continued to be relatively strong. The rate of real growth of business fixed investment over the 4 quarters of last year was 8.3 percent (Table 3). For the year as a whole investment rose to 10 percent of GNP, close to its share in the high investment periods of the 1960s and early 1970s.

Investment in structures, which had been disturbingly weak earlier in the recovery, climbed 12.7 percent in 1978, and by year-end it ex-

TABLE 3.—Changes in real business fixed investment, 1975-78

[Percent change, fourth quarter to fourth quarter]

Component	1975	1976	1977	1978 <sup>1</sup>
Nonresidential fixed investment	-9.9	8.6	9.1	8.3
Structures	-7.2	3.0	7.0	12.7
Producers' durable equipment	-11.2	11.4	10.1	6.4
Autos and trucks	2.9	21.5	27.0	11.0
Other	-14.8	8.3	4.2	4.5

<sup>1</sup> Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.



ceeded its previous peak reached in the fourth quarter of 1973. Growth of real spending for producers' durable equipment, on the other hand, slowed to 6.4 percent during the year, in contrast to 10.1 percent during the preceding year. Business purchases of autos and trucks grew much less rapidly than earlier. Strength in investment was greatest in durable goods manufacturing—particularly in machinery and in stone, clay, and glass—and also in electrical utilities and petroleum refineries.

The increased strength in investment during the past 2 years reflected a response to growth in profits and increases in capacity utilization in manufacturing during the course of the recovery. Corporate profits (with inventory valuation and capital consumption adjustments) rose 6.7 percent over the 4 quarters ending in the third quarter of last year and amounted to  $7\frac{3}{4}$  percent of GNP at the end of the period. This shows a substantial improvement from the 6 percent average ratio in 1974–75 though little change from 1977.

Capacity utilization in manufacturing rose from 83 percent in the latter part of 1977 to almost 86 percent at the end of 1978. In general, utilization rates were higher in the primary processing industries than in the advanced processing industries. Utilization in basic metals industries, which had been relatively low at the beginning of the year, rose dramatically and greatly improved profits in those industries.

Thus the rate of investment has been relatively high in the past 2 years, and the structure of investment has begun to shift toward longer-lived assets. Nevertheless, a further rise in the share of GNP directed to business fixed investment would be desirable, in order to maintain growth of the capital stock in line with the rapidly rising labor force and to meet environmental and other regulatory requirements. This issue is discussed further in Chapter 3.

## NET EXPORTS

Real net exports fell substantially during the first 2 years of the current expansion. During 1977 net exports in 1972 dollars appeared to be leveling out at about \$11–\$12 billion, a little less than 1 percent of real GNP. Late in 1977 and early last year, however, our net export position deteriorated further, although the magnitude of this deterioration was exaggerated by the effects of the East Coast dockworkers' strike.

Throughout much of the 1977–78 period exports grew slowly while imports of both oil and other goods increased sharply. By mid-1978, however, reversals of these trends became evident; net exports in 1972 dollars in the last half of 1978 were \$3 billion higher than in the first half.

Agricultural products were once again one of the leading export sectors. Agricultural exports, in 1972 dollars, reached a relatively high level of \$15.8 billion in 1978, well above the \$12.9-billion average in 1977. Poor crops in the Southern Hemisphere last spring and income growth in the rest of the

world were the main reasons for the increased demand for U.S. farm products.

The volume of nonagricultural exports in the second quarter rebounded from depressed levels early in the year and continued to rise strongly through the rest of 1978. Accelerating growth in other countries made a significant contribution to this advance. The depreciation of the dollar in late 1977 and early 1978, which lowered U.S. export prices in foreign currencies, also encouraged exports, but its principal effect on exports will occur in 1979.

Import volume grew at an annual rate of 11.6 percent from the beginning of the expansion until the end of 1977. This is somewhat more rapid than past experience would suggest, given the growth of U.S. income. That trend has since been reversed. Oil imports were 5.6 percent lower in 1978 than in the year before. The startup of 1.2 million barrels per day of Alaskan oil production displaced imported oil and more than offset the increase in U.S. oil consumption last year. The volume of non-oil merchandise imports grew more slowly during 1978 than in 1977, because of less rapid U.S. growth and higher import prices due to dollar depreciation.

#### INVENTORY ACCUMULATION

The cautious inventory policy that has characterized the current expansion continued in 1978. This caution was reinforced by sharply rising short-term interest rates, which increased the cost of holding inventories. The rate of inventory accumulation in 1972 dollars last year was about three-fourths of 1 percent of GNP. The ratio of inventories to final sales (in 1972 dollars) for the nonfarm sector was nearly constant. The stability of the inventory-to-sales ratio is especially noteworthy in the face of the 10 percent share of GNP absorbed by business fixed investment. Such a high investment share tends to raise the ratio of stocks to sales by virtue of its significant contribution to inventories of work in progress.

One exception to this stability of inventory-to-sales ratios was at general merchandise stores. The ratio of real inventories to sales in this sector, which has shown a slight uptrend in the past decade, appeared to be moving up sharply during the summer and early fall months. A stronger pace of sales at these stores late in the year helped to alleviate this problem.

#### GOVERNMENT SPENDING

Government purchases rose less during 1978 than was expected a year ago. In real terms the actual increase was 2.0 percent.

Slower than expected growth was confined principally to the Federal sector, where the real value of purchases declined 0.3 percent. Commodity Credit Corporation purchases had been expected to decline. The shortfall in other purchases was about evenly divided between delays in the buildup of the Strategic Petroleum Reserve and shortfalls in numerous other categories of nondefense purchases, which rose, in nominal terms, 4 percentage

points less than anticipated. The slow accumulation of petroleum reserves meant lower oil imports and, on balance, had no effect on aggregate demand, in contrast to the other shortfalls.

State and local government purchases, in real terms, grew rapidly in the first half of last year but slowed in the second half. From the second quarter of 1977 through the second quarter of 1978—a common fiscal year for these units of government—the real value of State and local purchases rose by 4.9 percent. This was a significant contrast to the virtual stability in 1975–77. In nominal terms compensation of employees rose by 10.2 percent over this period while other purchases rose by 16.4 percent. Construction activity in this sector (about one-third of other purchases) had been declining in real terms between the last quarter of 1975 and the first quarter of 1977, but it appears to have risen substantially in 1978. In the 3-month period ending in October the real value of street and highway construction was 5 percent higher than a year earlier, sewer system construction was up 14 percent, and water supply construction was up 33 percent.

The acceleration of spending by State and local governments in 1977–78 primarily reflects two forces: the rise in revenues during the economic expansion and a sharp increase in Federal aid. A substantial part of the 1977–78 stimulus package was funneled through State and local governments, augmenting special countercyclical programs that had been initiated earlier. The principal components of the package were an expansion of public service employment, authorization of a second round of local public works grants, and expansion of antirecession fiscal assistance grants to State and local governments. Public service employment exceeded its target of 725,000 jobs by the spring of 1978 and subsequently declined somewhat. Local public works grants were fully committed by the end of 1977, but the expanded value of outlays followed with a lag. Distribution of antirecession fiscal assistance peaked in the third quarter of 1977 and ended a year later.

Real growth slackened in the second half of last year, in part because States and localities entered new fiscal years in an environment influenced by public sentiment for tax reductions and restraint in government spending.

As a result of the increased growth in purchases and the pressure for tax reduction, the aggregate budget surplus in the State and local sector declined sharply in 1978. The surplus on current and capital account (but excluding social insurance trust accounts) fell from a peak of \$12.8 billion (annual rate) in the third quarter of 1977 to \$1.8 billion a year later. Of the \$7.5-billion decline that occurred between the second and the third quarters, roughly \$5¾ billion is attributable to California's Proposition 13, which mandated a reduction of about 50 percent in local property taxes, or about one-fourth in total local revenues. This local tax cut was followed by a substantial redistribution of funds from the State government, which had been incurring a surplus, to the local governments.

Proposition 13 and similar measures in other States suggest the likelihood of significantly slower growth in State and local spending in the near future and an approximate balance or a deficit in the aggregate current and capital account of this sector. In the fall elections, 11 States had proposals on their ballots that would immediately limit State and local taxes or expenditures or both. Such measures passed in eight of these States. Referenda mandated substantial reductions of property taxes in Idaho and personal income taxes in North Dakota. The measures in other States differ in their form and the degree to which they will constrain taxes and expenditures, but their enactment—by large margins in some cases—clearly indicates public sentiment for budgetary restraint. This is likely to put downward pressure on both spending and the current and capital account surplus.

Movements in this aggregate State and local surplus or deficit are dominated by national trends but conceal great diversity across States and among cities and areas within States. Per capita personal income—perhaps the best single measure of taxable resources—varies widely among States, but the growth trends in various regions have been narrowing these differentials throughout the twentieth century. The regions with the highest income levels have tended to experience the slowest growth. These same regions have the highest per capita public sector expenditures, the highest tax effort, and the highest level of per capita Federal aid. Many forces help to create this pattern: high-income localities may choose to spend more on public services as well as on private goods and services; where the cost of living is high, more must be spent to obtain the same level of services; and some high-income areas also contain significant concentrations of poverty and have greater needs. Extreme care must therefore be used in drawing general conclusions about the fiscal condition of the State and local sector, or of individual areas within it, from the aggregate surplus or deficit.

The social insurance accounts of State and local governments continued to show a moderately growing surplus throughout last year. By the end of the year the surplus had risen to \$22.8 billion, up \$3.7 billion from a year earlier. Growth in this surplus has been augmented by strong earnings on investments as well as the excess of contributions over benefit payments. Continued growth in this surplus is likely as States and localities move to provide actuarially sound funding of these trusts.

## LABOR MARKET DEVELOPMENTS

Demand for labor continued to be unusually strong in 1978. Despite another sharp increase in the labor force participation rate, the creation of new jobs exceeded the growth of the labor force by a substantial margin, and the rate of unemployment declined further. The proportion of the working-age population employed continued to climb in 1978, reaching 59.0 percent in the fourth quarter.

The civilian labor force rose by  $2\frac{3}{4}$  million over the 4 quarters of 1978. This is a 2.8 percent annual growth rate, well above the long-term trend rate of  $2\frac{1}{4}$  percent per year, which results from population growth and a long-term upward drift in labor force participation rates.

Women, teenagers, and blacks contributed most to the growth of the labor force; their participation rates rose to new highs. The participation rate for adult women increased 1.5 percentage points to 50.1 percent, passing the 50 percent mark for the first time. The teenage participation rate jumped 1.6 percentage points to 58.5 percent, and that for blacks and other racial minorities increased 1.2 percentage points to 62.0 percent.

Employment increased by 3.3 million from the fourth quarter of 1977 to the fourth quarter of 1978, a smaller gain than in 1977 but still large by historical standards. The growth in employment was surprisingly large in relation to the rise in real GNP, reflecting the year's poor productivity performance. The employment gain was broadly based across industries, with service-oriented and typically cyclical industries showing the largest gains.

Among manufacturing establishments, most nondurable goods industries showed little or no growth in employment. Employment was reduced in such industries as apparel, textiles, leather products, and tobacco manufactures. Some of the durable goods industries—particularly those related to construction and transportation—showed sizable gains. Among these were nonferrous primary metals, fabricated metal products, nonelectrical machinery (particularly construction and related equipment and computers) and aircraft.

Employment also increased in other major sectors during the year. Of these, construction employment grew at the fastest pace, with gain of 11.6 percent. Other large gains in employment were registered by finance, insurance, and real estate (5.3 percent); retail trade (4.1 percent); and services (4.4 percent).

Employment gains were greatest among women, blacks, and teenagers, the groups that led the labor force expansion. The employment increase among adult women (aged 20 and over) accounted for more than half of the total; the percentage increase in their employment was more than double that of their male counterparts. Blacks and members of other racial minorities filled about one-third of the new jobs. Employment in these groups grew more than twice as fast as that of whites.

Overall, unemployment declined from 6.6 percent of the labor force in the final quarter of 1977 to 5.8 percent in the fourth quarter of 1978. Most of the decline occurred early in the year. The unemployment rate for adult white women fell to 5.0 percent, but the white teenage unemployment rate showed little change, since in that age bracket the growth in the labor force was as rapid as the rise in employment (Table 4).

Earlier in the recovery the unemployment rate for blacks had declined more slowly than that for whites, widening the gap between the two. In

TABLE 4.—*Unemployment rate and growth in employment and labor force, by demographic group, 1978*

Group	Unemployment rate (percent) <sup>1</sup> 1978 IV	Employment	Civilian labor force
		Percent change from 1977 IV to 1978 IV <sup>2</sup>	
Total.....	5.8	3.6	2.8
White.....	5.1	3.2	2.5
Both sexes 16-19 years.....	14.0	1.8	2.0
Males 20 years and over.....	3.5	2.1	1.4
Females 20 years and over.....	5.0	5.2	4.4
Black and other.....	11.5	7.0	5.2
Both sexes 16-19 years.....	35.3	12.1	6.0
Males 20 years and over.....	8.3	6.1	4.7
Females 20 years and over.....	10.2	7.3	5.5

<sup>1</sup> Percent of civilian labor force in group specified; seasonally adjusted.

<sup>2</sup> Adjusted for the increase of about 250,000 in employment and labor force in January 1978 resulting from changes in the sample and estimation procedures introduced into the household survey.

Source: Department of Labor, Bureau of Labor Statistics.

1978 some progress was made in reversing that pattern. The unemployment rate for blacks declined by 1.7 percentage points to 11.5 percent, compared to the 0.5 percentage point decline for whites to 5.1 percent.

Since mid-1975 there has been a fairly steady reduction in the percentage of unemployed persons who report job loss as the reason for their unemployment. The percentage of unemployed who are reentrants to the labor force has been increasing fairly rapidly, while the percentage who are new entrants and the percentage who quit their last job have both increased moderately. These typical cyclical patterns continued in 1978.

## PRICES AND WAGES IN 1978

Price developments last year were a major source of disappointment and concern. The consumer price index rose by 9.0 percent from November 1977 through last November; producer prices of finished goods rose by 9.1 percent from December 1977 to December 1978, and the GNP deflator rose by 8.3 percent during the 4 quarters of the year. In all cases the increases were considerably greater than in each of the preceding 2 years.

As shown in Table 5, the acceleration of prices was widespread. Energy prices, which had been a major factor contributing to high inflation rates in the 1973-75 period, did not play a large role last year. Food prices, however, were once again an important influence. Even if one eliminates food and energy prices from the price indexes—thus removing the effects of external shocks to supply—the remaining prices show an acceleration in 1978.

The upward movement in these other prices was a response to a wide variety of forces—including the pass-through of higher import prices associated with depreciation of the dollar, the effects on home prices of in-

TABLE 5.—*Alternative measures of inflation, 1976-78*

[Percent change, December to December, except as noted]

Measure	1976	1977	1978 <sup>1</sup>
<b>Consumer price index:<sup>2</sup></b>			
All items.....	4.8	6.8	9.0
Food.....	.6	8.0	11.3
Energy <sup>3</sup> .....	6.9	7.2	7.0
All items less food and energy.....	6.1	6.4	8.6
<b>Producer price index for finished goods:</b>			
All finished goods.....	3.3	6.6	9.1
Consumer goods.....	2.1	6.4	9.5
Foods.....	-2.5	6.6	11.9
All other.....	4.9	6.1	8.3
Capital equipment.....	6.4	7.2	8.0
<b>Implicit price deflator for gross national product<sup>4</sup></b>			
Food consumption.....	.7	5.7	11.7
Other goods and services.....	5.3	6.2	7.9

<sup>1</sup> Consumer price changes are from November 1977 to November 1978. Changes for price deflators are preliminary.<sup>2</sup> Data beginning January 1978 relate to all urban consumers; earlier data relate to urban wage earners and clerical workers.<sup>3</sup> Gas (piped) and electricity; fuel oil, coal, and bottled gas; and gasoline, motor oil, coolant, etc.<sup>4</sup> Changes are from fourth quarter to fourth quarter.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

centives to invest in land and houses as an inflation hedge, and some supply bottlenecks in construction materials. A particularly troublesome phenomenon, however, was the slow growth in productivity. This added directly to costs of production and may indirectly have affected wage rates by increasing the demand for labor.

Table 6 shows the acceleration in hourly earnings and in total compensation per hour, the slower growth in productivity for the nonfarm private business sector, and the effects of both of these forces on unit labor

TABLE 6.—*Measures of wage rates and costs, 1973-78*

[Percent change, fourth quarter to fourth quarter, except as noted]

Item	1973	1974	1975	1976	1977	1978 <sup>1</sup>
Adjusted hourly earnings index <sup>2</sup> .....	6.4	9.1	7.5	7.4	7.5	8.2
Union wage changes (total effective adjustment) <sup>3</sup> .....	7.0	9.4	8.7	8.1	8.0	7.5
Private nonfarm business sector, all persons:						
Compensation per hour.....	8.2	10.9	8.6	8.5	7.6	9.8
Contribution of:						
Wages and salaries and private fringes.....	( <sup>4</sup> )	10.0	8.0	7.7	6.9	8.7
Employer payments to social insurance.....	( <sup>4</sup> )	.9	.6	.8	.7	1.1
Productivity.....	- .7	-3.4	4.4	2.6	1.3	.8
Unit labor costs.....	9.0	14.9	4.0	5.8	6.3	8.9

<sup>1</sup> Preliminary.<sup>2</sup> Adjusted for overtime in manufacturing and for interindustry employment shifts.<sup>3</sup> Agreements covering 1,000 workers or more. Changes are for the four quarters ending in December through 1977 and ending in September for 1978.<sup>4</sup> Not available.

Source: Department of Labor, Bureau of Labor Statistics.

costs last year. Table 7 indicates that the rise in prices in the nonfinancial corporate sector was less than the increase in unit labor costs. Nevertheless profits per unit of output still continued to increase, although much less rapidly than in 1977.

TABLE 7.—*Changes in price, costs, and profits, per unit of output, private nonfinancial corporate sector, 1973–78*

[Percent change, fourth quarter to fourth quarter, except as noted]

Item	1973	1974	1975	1976	1977	1978 <sup>1</sup>
Labor costs.....	8.6	16.3	2.1	7.3	5.6	8.7
Nonlabor payments.....	2.2	8.6	18.7	1.5	6.1	3.3
Corporate profits.....	-6.3	-26.0	66.9	.5	16.4	1.2
Other nonlabor costs <sup>2</sup> .....	6.3	23.1	6.5	1.9	2.1	4.2
Implicit price deflator.....	6.4	13.8	7.3	5.3	5.8	6.8

<sup>1</sup> Changes are measured from third quarter 1977 to third quarter 1978.

<sup>2</sup> Interest, rent, depreciation, and indirect business taxes.

Source: Department of Labor, Bureau of Labor Statistics.

Chapter 2 develops in considerably more detail the relation between wages, productivity, and prices. The following sections describe some of the special factors adding to inflation last year.

#### FOOD PRICES IN 1978

Retail food prices for the 12 months ending in November 1978 rose 11.3 percent—well above the 8.4 percent increase for all items excluding food. Most of the increase in food prices occurred during the first half of the year and was very broadly based. Prices for meats, poultry, fish, and eggs rose 18.9 percent (Table 8), and the index for fruits and vegetables was up 11.5 percent. The index for all food consumed at home was 12.0 percent higher. Prices of imported food rose less than in 1977, however, because coffee prices declined from the record highs of 1977.

TABLE 8.—*Changes in retail food prices, 1977–78*

[Percent change, seasonally adjusted annual rate]

Consumer price index component	1978				Nov. 1977 to Nov. 1978 <sup>2</sup>
	I	II	III	IV <sup>1</sup>	
All food.....	12.4	20.0	7.0	6.8	11.3
Food away from home.....	10.7	10.9	10.8	7.9	10.0
Food at home <sup>3</sup> .....	13.7	24.2	5.2	6.3	12.0
Meats, poultry, fish, and eggs.....	28.4	46.8	-4.9	11.2	18.9
Dairy products.....	2.5	15.8	12.3	7.4	9.5
Fruits and vegetables.....	12.2	22.6	14.3	6.7	11.5
Sugar and sweets.....	14.0	22.4	11.7	-1.8	11.6

<sup>1</sup> Based on October–November data.

<sup>2</sup> Based on unadjusted data.

<sup>3</sup> Includes items not shown separately.

Note.—Data beginning 1978 relate to all urban consumers; earlier data relate to urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.



Increases of this magnitude in food prices were not anticipated as the year began, and price forecasts for food had to be revised repeatedly in the following months. There were a number of reasons for the unfavorable developments: hog production failed to expand despite favorable grain prices; cattle marketings continued to decline; adverse weather curtailed some crops here and abroad; government farm programs and price support levels were changed; prices of major grains rebounded from abnormally low levels in 1977; costs of food processing and marketing went up; and the increase in the minimum wage raised labor costs both for food marketing and for restaurant meals.

The cattle cycle has always been a major determinant of U.S. meat prices. When ranchers become optimistic about future beef prices, they hold back cows and heifers for breeding purposes. Over a period of years, cattle numbers rise until overexpansion of the herd occurs and the large supplies lead to a fall in beef prices. The cycle then enters its liquidation phase until the herd is reduced enough to make the longer-term price outlook more promising. At that point the cycle begins again.

The past 4 years have witnessed a prolonged liquidation phase. The number of cattle and calves on farms in the United States declined from 132 million head in January 1975 to about 111 million head at the end of last year. This represents a 16 percent drop, the sharpest ever recorded. With fewer cattle available in 1978, slaughter was down by 5 percent, and per capita beef consumption declined by more than 4 percent to 120 pounds.

It was expected that lower beef production in 1978 would be largely offset by a higher output of pork and poultry. Analysis of the intentions of hog producers in late 1977 indicated a probable 10 percent increase in pork production in the following year, but the severe winter weather radically changed the outlook. Conception rates fell, abortions increased, and the average number of pigs per litter dropped 6 percent below normal. Disease, rising feed costs, uncertainty over government regulation of feed additives and use of nitrites in processing, and structural changes in the industry also kept hog production from reaching expected levels. When it became evident that pork production was not expanding, meat prices began to rise very rapidly, with strong consumer demand adding further pressure.

Adverse weather in 1978 also affected other food prices. Heavy rains in California delayed spring plantings last year and fresh vegetable prices rose dramatically. Most fruit crops were also reduced by bad weather, apples being the only major exception. In December 1978, freezing temperatures in southern California and Arizona once again hurt citrus and fresh vegetable crops.

In contrast, weather conditions during the growing season for grain were very favorable in the major producing areas. The corn crop reached a record of 7.1 billion bushels, and the national average corn yield exceeded 100 bushels per acre for the first time in history. Other major grain harvests were also fairly ample.

Changes in government farm programs and increased price support levels for agricultural products also led to retail price increases for some food products in 1978. In January, import fees on foreign sugar were raised in order to guarantee the effectiveness of the domestic price support program. In March, land diversion programs were expanded to improve grain prices. The grain reserve programs, which were instituted last year to provide some insurance against the price-raising consequences of a crop failure, led to higher wheat and flour prices while the reserves were being built up. Dairy price support levels rose automatically in April and October, as required by statute, but lower production and strong demand kept prices of milk and dairy products above those higher support levels.

Increasing costs and prices in the rest of the economy also affected food prices. The value of farm commodities, together with the cost of imported foods such as coffee and cocoa, accounts for 43 percent of retail food expenditures. The other 57 percent represents the cost of transporting, processing, and marketing the commodities. Thus, when the costs of labor, transportation, packaging, and other inputs increased last year, the food sector was affected as were other sectors. Approximately one-half of the food price increase in 1978 was attributable to higher prices for these marketing services.

The 15.2 percent increase in the (nonfarm) minimum wage at the beginning of 1978 may have had a particularly large effect on restaurant and institutional food prices and on food marketing costs. Since many workers in these industries are paid the minimum wage, an increase in that wage would quickly translate into higher costs. For food consumed away from home, which represents about one-fourth of total food consumption, prices rose 10 percent during the year.

#### DEPRECIATION OF THE DOLLAR

Another source of inflationary pressure in the U.S. economy during 1978 was the decline in the value of the dollar relative to other currencies. An index of the value of the dollar relative to the currencies of 10 other industrial countries—computed by using the percentage of world trade of each country as its weight (multilateral basis)—shows a 13.8 percent decline in the dollar from September 1977 to September 1978. Weighted by each country's share of U.S. trade (bilateral basis), the decline was 8.9 percent. The difference between the two indexes is largely caused by the high share of Canadian trade in the latter index and by the 8.0 percent decline of the Canadian dollar relative to the U.S. dollar.

Changes in the relative value of the dollar affect the price of imported goods and thus the cost of living. Over the 4 quarters of 1978, prices of non-fuel imports rose 15½ percent. This was substantially less than the 24.3 percent rise in foreign prices in dollar terms in the 10 largest countries of the Organization for Economic Cooperation and Development (OECD). The difference between these two price movements indicates that foreign producers absorbed a substantial amount of the fall in the dollar by reducing

their profit margins on exports. Such behavior is consistent with historical experience.

The rise in the prices of imported goods has a further effect on domestic prices by raising wage demands and by allowing price increases for goods that compete with imports. The econometric evidence suggests that over a 2-year period these indirect effects might amount to about twice the direct effects on prices of final products. A 10 percent depreciation will generally result in a roughly 1½ percent increase in prices by the end of a 2- to 3-year period, with approximately half of the effect coming in the first year.

The impact of the decline of the dollar on domestic prices is limited by the denomination of oil prices in dollars. As a result, the price of imported fuel does not rise as the dollar falls. In addition, the Organization of Petroleum Exporting Countries (OPEC) did not raise its prices in 1978. The large increase in OPEC prices announced on December 17 for 1979 means that this moderating influence will not be repeated this year.

Inflation affects the depreciation of the dollar as well as being affected by it. Countries with low inflation rates tend to have strong currencies, and the appreciation of their currencies helps to hold down the rise of their domestic price levels (Table 9). Relative inflation rates are by no means the only factors that influence the relative value of currencies. Indeed, in the short run, factors such as relative interest rates, differences in real growth, the size of the current account balance, and expectations of traders in foreign exchange markets are likely to be dominant influences.

TABLE 9.—Changes in currency values and consumer prices, by country, third quarter 1977 to third quarter 1978

(Percent change)

Country	Dollar exchange rate	Consumer price index
Canada.....	-6.4	9.3
France.....	11.6	9.3
Germany.....	15.0	2.4
Italy.....	5.4	11.9
Japan.....	38.1	4.0
United Kingdom.....	11.3	7.8

Sources: Board of Governors of the Federal Reserve System and Organization for Economic Cooperation and Development.

## HOUSING COSTS

Housing is the largest single component of the consumer price index, comprising over one-third of the expenditures covered by this measure. This component encompasses many items, such as rent, utilities, and home purchase costs. Most of these costs have been rising very rapidly.

Housing is one sector in which a classical demand-pull inflation seems to have been occurring in 1978. The strong demand for houses has raised the price of both land and materials. The average price of a new single-

family house rose by 13½ percent in the 12 months ending in October. Demands for construction materials have strained the capacity of some supplying industries, and prices of building materials have risen strongly. Lumber prices, for example, have risen 33 percent in the last 2 years, and shortages of gypsum products have been common. The increase in energy prices since 1974 has also affected prices of building materials, particularly the prices of insulation and asphalt products such as shingles.

If housing starts taper off this year as expected, some of these problems should become less severe. Energy conservation tax credits enacted late in 1978, however, may keep pressure on prices of insulation.

Some have questioned whether the widely used consumer price index appropriately measures the real burden of rising housing costs in periods of rapid inflation. Capturing the magnitude of rising housing costs in the index is indeed difficult. Rental costs in multifamily dwellings are, in principle, fairly easy to measure. Owner occupancy poses different problems, however, because of the distinction between the costs of owning a house and the costs of using its services.

During the most recent revision of the consumer price index, the Bureau of Labor Statistics reviewed the conceptual basis for the home purchase portion of the index. In principle, there are two ways to measure the cost of owner-occupied housing. The first is to measure the home prices, mortgage interest rates, and other cost elements faced by those buying a home during the period in question. This is the method that has been used historically in the CPI. A second approach would be to price the flow of services from housing, using rents on equivalent units as a measure of the true cost of living in a house. This method is used in the national income and product accounts and in the implicit deflators for GNP and its components.

When home prices move up, rents on comparable units will tend to rise. Unless vacancy rates are very low, however, rents will adjust upward only gradually to a level that fully reflects the new and higher price of homes. Rent controls in some areas may contribute to the slowness of the process of adjustment. Consequently in a period when housing prices are rising rapidly the measurement technique now used in the CPI will show a faster increase in the cost of home-ownership than the alternative index based on equivalent rents. Conversely, when the increase in home prices slows, rents may keep rising for some time in order to close the gap, and the current CPI technique will show a slower price increase than the alternative.

Under either method of measurement, however, a period of rapid rise in housing prices would increase the housing cost index faster than the rise in out-of-pocket costs paid by homeowners who had earlier purchased their homes at lower prices and contracted for mortgages at lower interest rates. An important part of the total rise in the CPI last year stemmed from the homeownership component. New home prices rose by 11 percent and mort-

gage interest rates by 9 percent. Only about 10 percent of homeowners—those who actually bought a house last year—were directly affected by the resulting increases in the cost of homeownership.

## MEDICAL CARE

Medical care costs have added significantly to inflation for most of the past decade. Except for the period of mandatory wage-price controls from 1971 through early 1974, medical care costs have risen much more rapidly than other prices. From 1973 through 1977 the cost of medical care rose at an average annual rate of 10.2 percent, compared to 7.7 percent for the total consumer price index. During 1978 the increase in medical care prices slowed to 8.8 percent, about the same rate as the total CPI.

The reason for this moderation is not completely clear. Prospects for mandatory cost containment legislation may have been partly responsible; the success of some of the State cost containment programs may also have been influential. It should be noted, however, that total hospital expenditures continued to increase as a share of GNP since the deceleration early in 1978 in the prices of many hospital services was partially offset by greater use of these services. A significant reacceleration of hospital costs also occurred late in 1978. These developments point out the need for some more permanent means of containing the rise of hospital costs. The Administration will resubmit legislation with this aim in 1979.

## AGGREGATE DEMAND MANAGEMENT IN 1978

The focus of aggregate demand policy changed during the past year, as inflation accelerated and unemployment fell faster than had been expected. The acceleration of inflation in the context of continued large employment gains prompted a lowering of the target for output growth. Fiscal and monetary policies shifted toward restraint.

In the fourth quarter of 1977, during the budget planning period, the unemployment rate stood at 6.6 percent. With normal increases in productivity a 1978 economic growth rate well above the long-run trend would have been needed to achieve a further significant reduction in unemployment. Fiscal policy was designed to meet that objective by continuing, though gradually reducing, the stimulative effects of the Federal budget.

The stimulus measures adopted in 1977 were expected to have a dwindling effect in the course of 1978. A reduction in income taxes, to take effect in the final quarter of the year, was proposed to offset the dampening effect on real growth of increases in social security taxes and of the higher effective tax rates resulting from inflation. Some normal cyclical rise in interest rates was anticipated, but it was expected that monetary policy would be generally accommodative.

During the early months of the year, however, it became apparent that the slow growth in productivity, and the associated sharp increases in the

demand for labor, were contributing to a serious acceleration of inflation. For this reason, it became appropriate to slow the growth of the economy to preclude the emergence of excess demand. This slowing would provide an environment in which structural anti-inflation measures and the dollar support program could be effective.

## FISCAL POLICY

Shifts in the high-employment budget offer a useful way to summarize changes in fiscal policy. The adjustments made to obtain the high-employment budget remove from actual receipts and expenditures the effects of fluctuations in the economy. Consequently, this budget shows the surplus or deficit as it would be if the economy were moving smoothly along its potential growth path. Changes in the high-employment surplus or deficit reflect the effects on receipts attributable to inflation and to growth in potential real GNP as well as to discretionary changes in Federal expenditures and tax rates. Short-run changes in the high-employment surplus or deficit are relatively insensitive to assumptions regarding the level of potential GNP.

Table 10 shows that fiscal policy shifted toward restraint in 1978. For the calendar year as a whole, the high-employment deficit was reduced by almost one-half from 1977 and declined continuously through 1978. The tax cut at the beginning of 1979 will temporarily increase the high-employment deficit, but the high-employment budget will be about in balance by mid-1980.

The 1978 reduction in the high-employment deficit occurred for four reasons. First, the effects of the 1977-78 stimulus package gradually dissipated: public service employment peaked slightly above 725,000 jobs in the spring,

TABLE 10.—*Actual and high-employment Federal receipts and expenditures, national income and product accounts, calendar years 1973-78*

[Amounts in billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Actual				High-employment			
	Receipts	Expenditures	Surplus or deficit (-)		Receipts	Expenditures	Surplus or deficit (-)	
			Amount	Percent of GNP			Amount	Percent of GNP <sup>1</sup>
1973.....	258.3	265.0	-6.7	-0.5	256.8	265.1	-8.4	-0.6
1974.....	288.6	299.3	-10.7	- .8	301.1	298.6	2.6	.2
1975.....	286.2	356.8	-70.6	-4.6	320.5	350.1	-29.6	-1.8
1976.....	331.4	385.2	-53.8	-3.2	356.9	380.3	-23.4	-1.3
1977.....	374.5	422.6	-48.1	-2.5	394.5	419.0	-24.6	-1.3
1978 <sup>2</sup> .....	431.6	461.0	-29.4	-1.4	446.6	459.6	-12.9	-.6
1977: III.....	374.3	430.7	-56.4	-2.9	392.2	427.4	-35.3	-1.8
IV.....	385.5	444.1	-58.6	-3.0	403.4	441.4	-38.0	-1.9
1978: I.....	396.2	448.8	-52.6	-2.6	417.5	447.0	-29.5	-1.4
II.....	424.7	448.3	-23.6	-1.1	438.1	447.1	-9.0	-.4
III.....	441.7	464.5	-22.8	-1.1	455.2	463.0	-7.9	-.4
IV.....					475.8	481.2	-5.4	-.2

<sup>1</sup> High-employment surplus or deficit as percent of high-employment gross national product.

<sup>2</sup> Preliminary.

Note.—Detail may not add to totals because of rounding.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, Office of Management and Budget, and Council of Economic Advisers.

and antirecession fiscal assistance to State and local governments ceased at the end of the third quarter. Second, inflation and real growth moved individuals into higher tax brackets during the year.

Third, Federal spending rose less rapidly than had been anticipated. The increase in total expenditures as measured in the national income and product accounts was \$38.2 billion from the end of 1977 to the end of 1978. This increase amounts to only 8.6 percent in nominal terms in a period when the GNP deflator rose 8.3 percent. The substantial shortfall in fiscal 1978 from the rate of spending anticipated in the January budget came to \$12½ billion on a unified budget basis, or 2.8 percent of total outlays. The prospect of a shortfall became apparent fairly early last year, but no attempts were made to offset it, since additional fiscal restraint was a desirable outcome in view of unfolding economic circumstances.

For fiscal 1979, which began last October, budget projections were similarly scaled down; on a unified basis, fiscal 1979 Federal spending is now expected to be \$493.4 billion or \$7.6 billion below the original estimates made last January (adjusted to include earned-income tax credits in excess of taxpayers' liabilities, which are now treated as outlays).

The fourth element in the shift toward fiscal restraint was the President's decision to revise his tax reduction proposal. Originally the Administration had requested a \$25-billion tax reduction effective on October 1, 1978. In May the President asked that the net reduction be scaled back to \$20 billion and its effective date postponed to January 1, 1979. Reduction was still needed to offset the fiscal drag stemming from the changes in effective tax rates occasioned by inflation and real growth, from increases in social security taxes previously enacted, and from the \$6.6-billion increase in social security taxes legislated in 1977 to take effect in 1979. Nevertheless, a smaller and later reduction appeared appropriate in view of the need for greater fiscal restraint. The Congress ultimately enacted a \$20.6-billion reduction of personal and business taxes plus a \$0.7 billion increase in outlays for the earned income tax credit. This package yields a net revenue loss of \$18.9 billion when allowance is made for the expiration of \$2.5 billion in employment tax credits. These tax measures are discussed in Chapter 3.

These adjustments to fiscal policy moved the budget more quickly toward two previously stated objectives of the Administration: reducing Federal outlays to 21 percent of GNP and achieving a balanced budget in the context of reasonable economic growth (Table 11). Fulfillment of these objectives is a major challenge because it will require offsetting the upward pressure on Federal outlays from rising prices and from automatic increases in entitlement programs under current law.

## MONETARY POLICY

Two major developments dominated monetary and financial conditions during 1978. The first was a substantial rise in interest rates. The second was the introduction of new financial instruments through which thrift

TABLE 11.—*Federal unified budget outlays as percent of gross national product, and budget surplus or deficit, fiscal years 1955–80*  
[Current dollars]

Fiscal years	Budget outlays as percent of GNP			Budget surplus or deficit (—) (billions of dollars)
	Total <sup>1</sup>	Income security	National defense	
1955–59 average.....	18.3	3.0	10.0	–2.3
1960–64 average.....	19.2	4.1	8.8	–4.2
1965–69 average.....	19.9	4.0	8.5	–7.2
1970–74 average.....	20.3	5.6	6.7	–13.8
1975.....	22.4	7.5	5.9	–45.2
1976 <sup>2</sup> .....	22.5	7.8	5.4	–63.5
1977.....	22.0	7.5	5.3	–45.0
1978.....	22.1	7.2	5.1	–48.8
1979 (estimate).....	21.6	6.9	5.0	–37.4
1980 (estimate).....	21.2	7.1	5.0	–29.0

<sup>1</sup> Includes other outlays not shown separately.

<sup>2</sup> Transition quarter averaged with fiscal year 1976.

Sources: Department of Commerce, Department of the Treasury, Office of Management and Budget, and Council of Economic Advisers.

institutions could continue to attract funds, an innovation that moderated significantly the degree to which high short-term interest rates depressed housing construction.

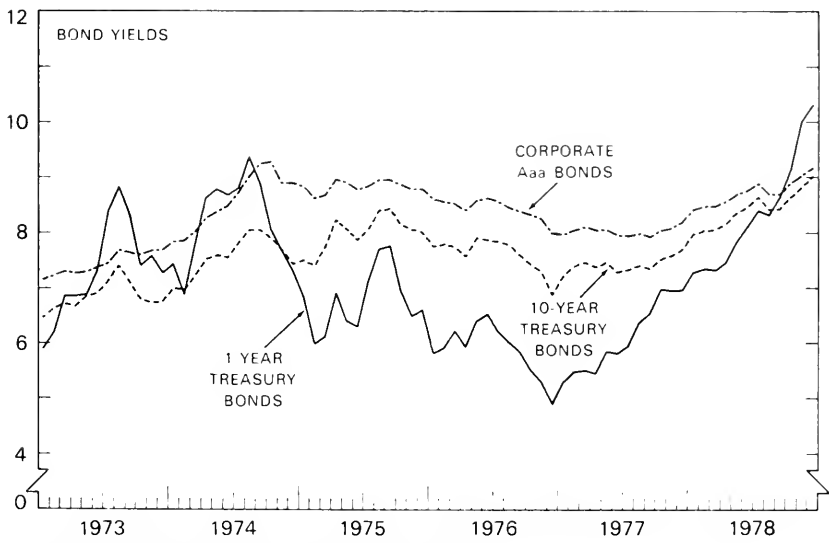
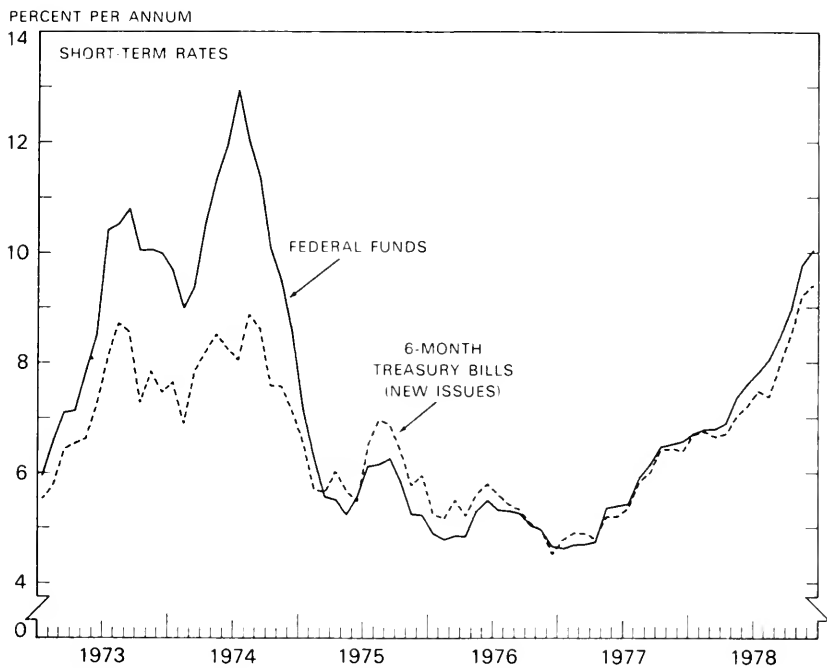
Chart 1 shows the rise in both short- and long-term interest rates. These increases came in several phases. A small upward movement in short-term rates occurred early in the year after the Federal Reserve raised the discount rate in January in response to international developments. This was followed by a period of relative stability through mid-April as the slow pace of economic activity in the first quarter led to quite moderate growth in the monetary aggregates. Very rapid growth in the aggregates began in the second quarter and persisted into the summer. The efforts of the monetary authorities to moderate the growth of the aggregates resulted in substantial increases in short-term interest rates. The Federal funds rate rose by 2 percentage points between March and the middle of October. Most other short-term rates rose in an approximately parallel fashion. Measures to defend the dollar, announced at the beginning of November, prompted a further dramatic increase in rates. The discount rate was raised by a full percentage point, from 8½ to 9½ percent, on November 1; between then and the end of the year the Federal funds rate rose by another three-fourths of a percentage point to about 10 percent.

The movement of long-term interest rates was determined by current developments in short-term rates, by anticipations of future interest rate and price developments, and by supply and demand considerations in capital markets. Long-term rates drifted up somewhat during the first quarter, when demands for business credit remained strong, but leveled out subsequently as expectations developed that rates might be nearing cyclical peaks. With short-term rates continuing to increase, the yield curve by October had become inverted; that is, long-term rates were below short-term rates.



Chart 1

# Selected Interest Rates and Bond Yields



NOTE TREASURY BONDS ARE CONSTANT MATURITIES  
SOURCES DEPARTMENT OF THE TREASURY BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM AND MOODY'S INVESTORS SERVICE

During the first half of the year the behavior of the monetary aggregates paralleled fluctuations in the real economy. Growth of  $M_1$  (demand deposits and currency) and  $M_2$  (including, in addition to  $M_1$ , time and savings deposits other than negotiable certificates at large commercial banks) was quite slow in the first quarter and much faster in the second quarter. Growth of these two monetary aggregates continued to be relatively strong in the third quarter, despite rising interest rates and slowing growth of real GNP.

Between the final quarter of 1977 and the third quarter of last year,  $M_1$  grew at an 8.2 percent annual rate, well above the upper end of the Federal Reserve's long-term target growth range of 4 to 6½ percent. Studies that relate the real value of  $M_1$  to real GNP and to short-term interest rates indicate that the usual historical relationship held up fairly well through this period. The continuation of rapid growth of the monetary aggregates through the third quarter appears to have been largely attributable to the rapid increases in nominal GNP which raised transactions demands. There was virtually no growth in  $M_1$  during the fourth quarter when interest rates were rising sharply.

In the latter half of the year, two major innovations in financial markets tended to change the usual relation between the monetary aggregates on the one side and economic activity and interest rates on the other. The first innovation was the new regulation permitting commercial banks and nonbank thrift institutions on June 1 to begin issuing money market certificates (MMCs) of 6-month maturity in minimum denominations of \$10,000. Commercial banks were permitted to pay a maximum yield on these certificates equal to the discount rate on 6-month Treasury bills, but interest could be compounded if the bank chose to do so. The maximum rate for nonbank thrift institutions is one-fourth of a percentage point above the rate payable by commercial banks.

The second innovation, introduced on November 1, was a regulation permitting commercial banks to offer individual customers an automatic transfer service whereby funds are automatically transferred from a customer's savings account to cover needs for funds in the customer's checking account. By the end of the year it is estimated that there were \$3.2 billion in 420,000 accounts covered by this service. Use of these services can be expected to grow over the future.

The introduction of MMCs influenced the growth of  $M_2$  by enabling banks to retain time and savings deposits that they would otherwise have lost. Growth in  $M_2$  remained very strong in the third quarter, at a 10.8 percent annual rate, but slowed significantly in the fourth quarter to 4.5 percent.

The introduction of the automatic transfer service began to have a significant effect on the growth of  $M_1$  in the last 2 months of 1978. During November and December,  $M_1$  declined \$0.6 billion. In the absence of the new deposit services,  $M_1$  probably would have risen by about \$1 billion.

In response to this effect on the behavior of the conventional aggregates, the Federal Reserve defined a new aggregate,  $M_1 +$ . It includes, in addition to  $M_1$ , all passbook savings accounts at commercial banks and all checkable deposits at nonbank thrift institutions (negotiable order of withdrawal accounts, demand deposits at mutual savings banks, and share draft accounts at credit unions). This aggregate thus includes all transactions accounts plus those accounts from which transfers to the automatic transfer service accounts are most likely to occur. The annual rate of growth of this aggregate dropped from 6.1 percent in the first half of 1978 to 2.4 percent in the second half.

### *Role of MMCs in Monetary Restraint*

The new money market certificates played a critical role in the way the economy responded to monetary restraint in 1978. Experience would have led one to expect that the large rise in interest rates would sharply curtail the availability of mortgage credit during 1978, with strongly adverse effects on home building. The growth of mortgage credit did taper off somewhat during the year and residential construction activity did flatten out. The magnitude of these responses was very small, however, compared with past periods of tight financial markets.

In previous periods of sharply rising market interest rates, individuals began at some point to divert funds from deposits in thrift institutions to market securities because of the low ceiling rates on deposit instruments. The growth of thrift deposits usually slowed to a 4-6 percent range in such periods, and net new inflows (excluding crediting of interest) fell to around zero. This necessarily slowed the acquisition of mortgages by these institutions, and consequently housing credit dried up.

During late 1977 and early 1978 this same pattern began to emerge. After the introduction of MMCs in the middle of the year, however, the pattern was dramatically reversed. As a result, mortgage acquisitions declined much less than in previous periods of rapidly rising market interest rates.

The introduction of these instruments does not wholly resolve the disintermediation problem or entirely buffer the housing market from credit restraint. Home buyers are affected by the higher *cost* of credit, although they are affected much less than before by the reduced *availability* of credit. Furthermore, since mortgage rates do not rise commensurately with short-term rates, the thrift institutions are confronted with reduced cash flow for two reasons. First, the spread between the cost of new deposits and the return from new mortgages narrows. Second, the composition of deposits becomes more heavily weighted by the higher-interest certificates. Since this is occurring faster than the mortgage portfolio is rolled over, the average cost of deposits is rising relative to the average yield on mortgages. In early 1978, however, the spread between the return on the mortgage portfolio and the cost of deposits had become quite large and the narrowing that occurred

in the second half of the year was relatively small. Therefore—barring a prolonged period of very narrow spreads between mortgage rates and short-term rates—savers, the thrift institutions, and the housing market will all benefit from the new instrument.

The reduced sensitivity of mortgage credit availability to rising market interest rates smooths the adjustment of the economy to credit restraint. It also implies, however, that interest rates must move through somewhat larger cyclical swings to achieve the effect on aggregate demand that would formerly have resulted from variations in both credit availability and interest rates. Such a change also means that the distribution and timing of the response of the economy to monetary restraint will be different. The period ahead will require adroit reading of the signals to judge the degree of restraint that is occurring and is appropriate.

#### CREDIT FLOWS IN 1978

Credit flows had been very strong at the end of 1977 and remained so through the first part of last year. The ratio of total funds raised in credit markets (exclusive of corporate equities) to GNP reached a record peak in the third quarter of 1977 and moved only slightly lower in the following 2 quarters. Some decline developed in the second and third quarters of last year. The ratio of total private funds raised to private GNP remained on a record high plateau from the third quarter of 1977 through the first quarter of last year but then began to decline.

The composition of credit flows shifted during the year. Mortgage credit flows peaked late in 1977 and then moderated somewhat. With the dollar value of residential construction continuing to rise, the ratio of net home mortgage extensions to household investment in residential construction turned downward last year from a very high peak. The large volume of mortgage credit that was being used in late 1977 and early 1978 relative to residential construction suggested that homeowners were realizing capital gains on houses when ownership changed hands and were using the funds to finance other types of expenditures.

Consumer credit continued to grow strongly through the first half of the year, reflecting the strength of new car sales and sales of other durables. The rate of installment credit extensions leveled out, however, in the second half of the year on a plateau slightly below the June peak.

Federal Government borrowing also declined relative to the total of funds raised in credit markets. The moderation in Federal borrowing from domestic sources resulted from the shift in fiscal policy previously discussed and also from an increase in official foreign purchases of U.S. securities with dollars obtained through intervention in foreign exchange markets.

The nonfarm, nonfinancial corporate business sector borrowed heavily in the fourth quarter of 1977 and the first quarter of last year. Indeed, credit market funds raised in the first quarter were more than a third greater than

a year earlier. The amount of funds raised leveled out subsequently at an annual rate below this peak but exceeded all previous years except 1974. Business borrowing from commercial banks, in particular, was exceptionally heavy in the first half but slowed in the second half of the year. The strength of capital spending relative to internal funds is the primary reason for the rapid growth in business credit demands. The ratio of external funds raised to capital expenditures rose to slightly under one-half in 1978, which is a high though not unprecedented figure.

### *Efficiency of Financial Markets*

Both of the innovations in financial markets described above work to provide individuals with a competitive return on their savings. The automatic transfer services perform another valuable function: they reduce the loss of efficiency associated with substantial shifts of funds from one type of deposit to another in response to interest rate differentials. Furthermore, to preserve the competitive position of nonbank thrift institutions, the Federal Home Loan Bank Board is considering giving nonbank thrift institutions authority to receive deposits from which third-party payments may be made. Such a move might further stabilize their deposit flows.

These changes, however, entail cumbersome bookkeeping and transactions procedures. A further consolidation of the institutional changes initiated this year would be to move toward a uniform structure for commercial banks and nonbank thrift institutions under which all of these institutions would have authority to accept household checking deposits and to pay interest on them. The bill proposed by the Administration in the last Congress to authorize negotiable order of withdrawal accounts for all U.S. banks and thrift institutions was one approach to this reform.

## CHAPTER 2

# Reducing Inflation

**E**CONOMIC POLICY IN THE UNITED STATES faces a formidable challenge in the years immediately ahead. Inflation must be brought under control if the strength of the economy is to be maintained and if the significant gains in employment and output over the past 4 years are not to be jeopardized. Unwinding an inflation that has been building for more than a decade will require monetary and fiscal restraint to moderate the pace of economic growth. We will have to learn to achieve social objectives within the constraints of tight government budgetary policies. Widespread compliance with the President's standards for wage and price behavior will be essential.

This chapter presents a diagnosis of our inflationary problem and explains what the Administration is doing about it. Special factors were partly responsible for the acceleration of inflation during 1978, as Chapter 1 indicated, but there was also a substantial increase in the underlying rate of inflation. Unit labor costs rose sharply, reflecting some acceleration of wage inflation and a deterioration in the growth of productivity. These developments, along with their important implications for economic policy, will be analyzed in the following discussion.

### THE 1978 ACCELERATION OF INFLATION

The current inflation has been gathering momentum for over 10 years. The acceleration began in the late 1960s, when the economic stimulus of the Vietnam war added pressures to an economy already approaching high employment. With the economy operating at very high rates of resource utilization, the rate of inflation rose from less than 2 percent in 1965 to about 6 percent in 1969.

In 1969, policies of monetary and fiscal restraint were applied to cool the overheated economy, but the results were disappointing. The economy headed into recession, and unemployment rose from 3½ percent of the labor force in 1969 to over 6 percent by the end of 1970. Nevertheless, inflation continued at a rapid pace. The rise of consumer prices, excluding food, continued unabated in 1970, and the rate of increase of average hourly earnings remained unchanged. When inflation failed to respond significantly to macroeconomic policy, a 90-day wage and price freeze was announced on

August 15, 1971; it was followed by a period of mandatory wage and price controls.

Relaxation of the controls began in 1973 in response to distortions and inequities that had begun to develop in the economy. The relaxation coincided with a second acceleration of prices, which was in part a consequence of rapid economic growth. Between the fourth quarter of 1971 and the first quarter of 1973, real gross national product (GNP) increased at an annual rate of  $7\frac{3}{4}$  percent, unemployment dropped sharply, and capacity utilization rose. The major inflationary pressures, however, came from a series of large external shocks to the American economy. A simultaneous expansion in virtually all the industrial countries and the 20 percent depreciation of the dollar between mid-1971 and mid-1973 raised the cost of foreign goods. A worldwide crop shortage caused food prices to soar. Finally, the oil embargo by the Organization of Petroleum Exporting Countries (OPEC) and the subsequent rise in oil prices contributed to a nearly 60 percent increase in the energy component of the consumer price index (CPI) from the end of 1972 to the end of 1975.

In early 1975 the rate of inflation fell substantially from the double-digit rate of 1974. The severity of the 1974–75 recession was partly responsible. But smaller increases in food and energy prices and the end of the price bulge associated with the lifting of controls were important contributing factors. By the middle of 1975 the underlying rate of inflation was down to the 6 to  $6\frac{1}{2}$  percent range. There was no further improvement during the early stages of the recovery, despite continued high unemployment and much excess capacity.

Each of the two major episodes of accelerating inflation in the last decade was fed in part by relatively stimulative fiscal and monetary policies, and each was followed by a recession stemming in part from more restrictive policy actions. But in neither case did the increases in unemployment and excess capacity bring inflation down to the levels that preceded the acceleration.

Once under way, a high rate of inflation generates responses and adaptations by individuals and institutions that perpetuate the wage-price spiral, even in periods of economic slack. Expectations develop that wages and prices will continue to rise at a rapid rate. In response, an increasing proportion of income is adjusted to inflation by indexation arrangements. Employee groups attempt to match the wage gains of other workers in order to avoid declines in their own relative earnings. And multiyear collective bargaining agreements, which now cover over 97 percent of the workers in large collective bargaining units, provide pay increases that are more likely to reflect past conditions than the actual economic environment prevailing during the term of the agreement.

The formal and informal adaptations to a long-standing inflation exert a powerful force tending to sustain inflation even after the originating causes have disappeared. Braking the momentum of past inflation would therefore

have been a serious problem for economic policy makers even without the acceleration of prices and wages during 1978. The price and wage developments of this past year have made the task even more difficult.

## INFLATION IN 1978

The rate of price increase rose markedly in 1978. Some of the acceleration was the result of special factors discussed in the previous chapter: the sharp rise in food prices early in the year and the fall in the value of the dollar that exceeded the depreciation warranted by underlying economic conditions. A minor offset to this was the stability of world oil prices after OPEC elected not to raise oil prices in the face of the sluggish world economic recovery and the consequently weak demand for oil.

The larger part of the 1978 acceleration, however, came from an unexpected increase in the underlying rate of inflation. The rise in consumer prices, excluding food and energy, quickened from 6.4 percent in 1977 to 8.6 percent in 1978, as shown in Table 12. This is the development that has posed the most serious challenge to economic policy.

The behavior of the underlying rate of inflation is related to movements in costs. In 1978 the increase in unit labor costs in the private nonfarm sector stepped up considerably, from 6.3 percent in 1977 to 8.9 percent

TABLE 12.—*Annual rate of change in selected consumer and producer prices and employment costs, 1960-78*

[Percent <sup>1</sup>]

Item	Relative importance, December 1977 (percent)	1960 to 1965	1965 to 1970	1970 to 1975	1976	1977	1978 <sup>2</sup>
<u>Consumer prices</u>							
All items .....	100.0	1.3	4.5	6.9	4.8	6.8	9.0
Food .....	17.7	1.5	3.7	9.4	.6	8.0	11.3
Energy .....	8.6	.4	2.5	10.9	6.9	7.2	7.0
All items less food and energy .....	73.7	1.4	5.0	5.7	6.1	6.4	8.6
<u>Producer prices for finished goods</u>							
All finished goods .....	100.0	.6	2.8	8.6	3.3	6.6	8.7
Finished goods less foods .....	75.1	( <sup>3</sup> )	( <sup>3</sup> )	7.6	5.5	6.6	7.8
<u>Private nonfarm business, all persons</u>							
Compensation per hour .....		4.0	6.4	8.2	8.5	7.6	9.8
Contribution of:							
Wages and salaries and private fringes .....		3.8	5.9	7.3	7.7	6.9	8.7
Employer contributions to social insurance .....		.2	.5	.9	.8	.7	1.1
Output per hour .....		3.9	1.1	1.6	2.6	1.3	.8
Unit labor costs .....		.0	5.2	6.5	5.8	6.3	8.9
Implicit price deflator .....		1.1	4.2	6.6	5.2	5.9	7.9

<sup>1</sup> Preliminary.

<sup>2</sup> Through 1977, changes are measured from December to December for prices and from fourth quarter to fourth quarter for private nonfarm business data. For 1978, changes are from November to November for prices and from fourth quarter to fourth quarter for private nonfarm business data.

<sup>3</sup> Not available.

Sources: Department of Labor (Bureau of Labor Statistics) and Council of Economic Advisers.



in 1978. Both of the determination factors of unit labor costs contributed to the acceleration. Compensation per hour went up from a 7.6 percent rate of increase in 1977 to a 9.8 percent rate during 1978. Productivity, which had risen only 1.3 percent for nonfarm business in 1977, advanced even more slowly—at a 0.8 percent rate in 1978.

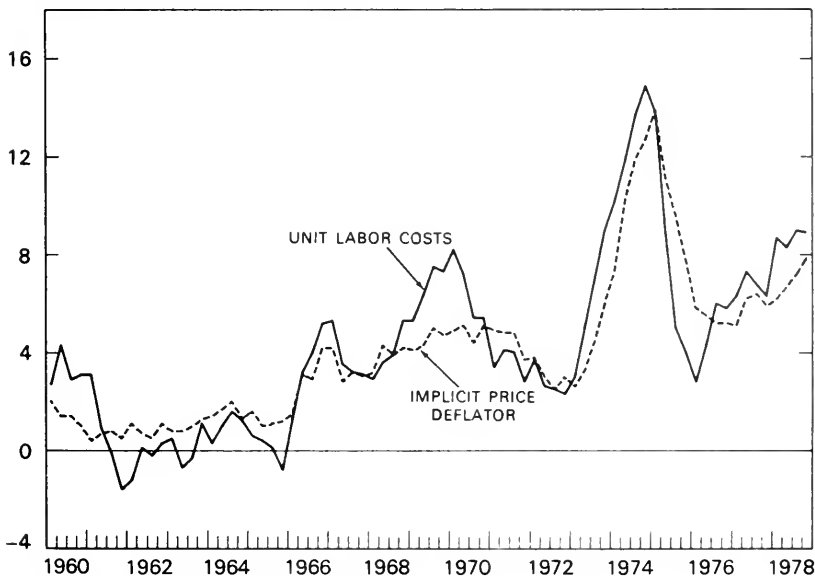
The acceleration of cost pressures during 1978 was unevenly distributed. In manufacturing, unit labor costs, which had risen 5.8 percent in 1977, increased at an annual rate of 6.0 percent in 1978. Productivity in manufacturing rose more rapidly in 1978 than in 1977 (3.5 compared to 3.0 percent in 1977). However, the most substantial rise in the rate of increase of unit labor costs was in nonmanufacturing, where productivity actually declined.

Most econometric analyses of the relation between prices and wages conclude that fluctuations in productivity growth that are expected to be temporary are not usually translated into similar fluctuations in prices. For that reason price movements in the nonfarm sector are less volatile than year-to-year changes in unit labor costs. And in 1978 the sharp acceleration in unit labor costs, stemming in part from the very poor productivity record, was not fully matched by an acceleration in prices charged by nonfarm producers. Even so, the rise in unit labor costs was still a major factor in the acceleration of inflation (Chart 2).

Chart 2

## Unit Labor Costs and Deflator, Nonfarm Business

PERCENT CHANGE FROM YEAR EARLIER



NOTE: DATA RELATE TO ALL PERSONS

SOURCE: DEPARTMENT OF LABOR

The worsening in the underlying rate of inflation during 1978 raises a fundamental question for macroeconomic policy: Has the U.S. economy reached full employment of its labor and capital resources? The question involves three issues concerning demand and unit cost pressures that are analyzed in the remainder of this section. The first is whether capacity utilization became so tight that there was excess demand in product markets, driving up prices relative to costs. The second has two aspects: How much did the wage acceleration that occurred in 1978 reflect excess demand in labor markets, and do those markets now approximate conditions in which further reductions in aggregate unemployment would raise the inflation rate? The third issue relates to productivity: To what extent is the recent disappointing behavior an aberration and to what extent does it reflect a more fundamental slowdown in the potential growth of the economy during the years immediately ahead?

### *How Tight Were Product Markets in 1978?*

During the course of the recovery, rates of capacity utilization have increased significantly, and they rose still further in 1978. At the end of 1978 the 86 percent rate of capacity utilization in manufacturing indicated by the Federal Reserve index was still well below the highs of the early 1950s and mid-1960s, and somewhat below the highs of the 1972-74 period (Chart 3). In the materials-producing industries, where high rates of capacity utilization in 1973 were an important source of inflation, current rates of utilization have remained substantially below the 1973 peaks (Chart 3).

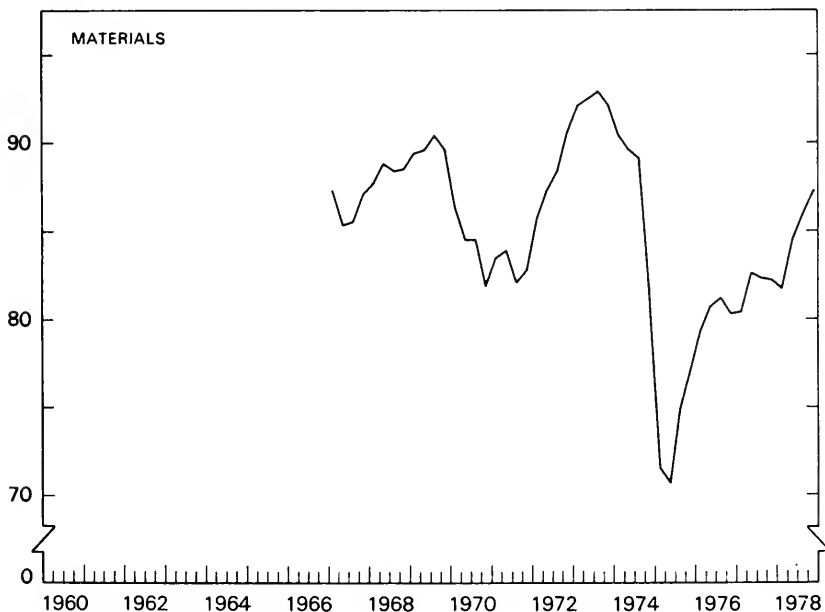
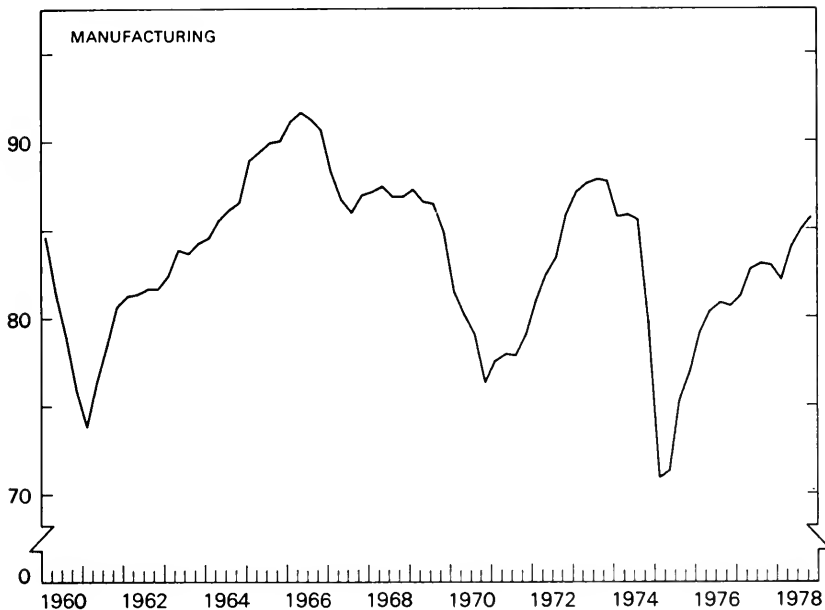
Statistical measures of capacity utilization offer only an imperfect guide to the presence or absence of excess demand in product markets. There is other evidence, however, that industrial capacity was not under severe pressure. Typically, periods of capacity strain lead to sharp increases in unfilled orders, especially in the durable goods industries. But ratios of unfilled orders to shipments have remained far below earlier highs, both for durable goods industries as a whole and for the nondefense capital goods industries (Chart 4).

At the same time, excess demand developed in a few industries. For example, the building materials industry appeared to be under demand pressure because of capacity limitations. The very high and sustained level of single-family home building, combined with a rapid growth in home installation of energy-saving measures, led to a sharp increase in demand for building materials and thus to strained capacity. As a consequence, prices of lumber, wallboard, cement, insulation, and related products rose steeply.

Moreover, although productive capacity was not generally strained over the past year, continued growth of industrial production at rates experienced

### Capacity Utilization Rates

PERCENT ↯

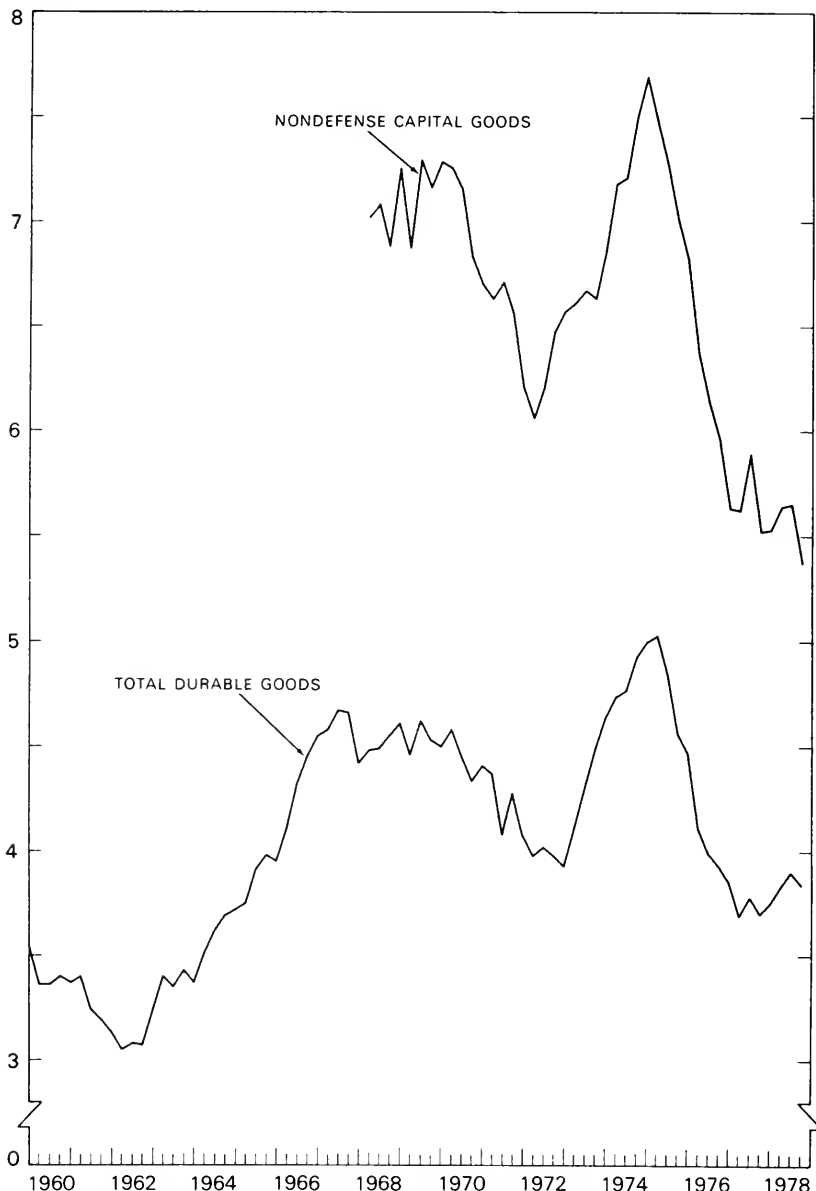


↯ SEASONALLY ADJUSTED.

SOURCE: BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

# Unfilled Orders-Shipments Ratio, Durable Goods Manufacturing

RATIO (SEASONALLY ADJUSTED) √



√ UNFILLED ORDERS-SHIPMENTS RATIO FOR LAST MONTH IN QUARTER

SOURCE DEPARTMENT OF COMMERCE

in 1978 would move utilization rates into the range associated with excess demand pressure on prices.

### *Pattern of Wage Behavior*

Wages began to accelerate early in 1978. The exact quarterly pattern and degree of acceleration vary according to the measure of the rate of wage increase, but all broad indicators show a similar pattern of wage acceleration in late 1977 and early 1978 (Table 13). For the second half of the year, wage increases were lower than in the first, but still above the 1976 and 1977 experience.

TABLE 13.—*Selected measures of the rate of wage increase, private nonfarm economy, 1976-78*

[Percent change; quarterly data are annual rates]

Measure	1976	1977	1978 <sup>1</sup>	1978			
				I	II	III	IV <sup>1</sup>
Average hourly earnings <sup>2</sup> .....	7.6	7.7	8.8	8.4	10.1	7.8	8.9
Adjusted hourly earnings index <sup>2,3</sup> ...	7.4	7.5	8.2	9.2	8.4	7.3	7.9
Employment cost index <sup>4</sup> .....	7.2	7.0	8.0	7.8	8.7	8.2	(*)
Union.....	8.1	7.6	7.9	6.6	8.2	8.7	(*)
Nonunion.....	6.8	6.6	8.0	9.1	9.1	7.8	(*)

<sup>1</sup> Preliminary.

<sup>2</sup> Annual changes are measured from fourth quarter to fourth quarter; quarterly changes for 1978 are from preceding quarter. Data are seasonally adjusted.

<sup>3</sup> This index, unlike the average hourly earnings series above it, excludes overtime pay in manufacturing and is adjusted to eliminate the effects of interindustry employment shifts.

<sup>4</sup> Changes for 1976 and 1977 are measured from December to December; change for 1978 is from September 1977 to September 1978; quarterly changes are within quarter. Data are not seasonally adjusted.

<sup>5</sup> Not available.

Source: Department of Labor, Bureau of Labor Statistics.

The pattern of acceleration and subsequent deceleration in the first 3 quarters of the year was dominated by the behavior of wages of nonunion workers. In early 1978, for the first time in several years, nonunion wage rates increased faster than union rates. This development is normal in labor markets when unemployment falls, and the 15.2 percent increase in the minimum wage for nonfarm workers on January 1, 1978, undoubtedly contribute to the high rate of nonunion wage increases in the first half of the year.

The difference between union and nonunion wage changes in 1978 was also influenced by the collective bargaining calendar: comparatively few major contracts (those covering 1,000 or more workers) were scheduled for renegotiation in 1978. Since increases tend to be largest in the first year of a collective bargaining contract, years of light bargaining generally are years of lower average wage increases for union members. Wage adjustments for union workers may be attributed to three different sources: current settlements, past settlements (those that provide for deferred increases), and automatic cost-of-living escalators (Table 14). For the first 9 months of 1978, the portion attributable to current settlements was down sharply from its

1977 level, while that attributable to past settlements and automatic cost-of-living escalation was greater than in 1977. The decrease in the current settlement portion came about solely because there were fewer new labor agreements, not because the average wage increases granted in new settlements were smaller. As the lower part of Table 14 shows, the new settlements reached in 1978 in major contracts provided for somewhat larger first year increases than settlements in 1977 had done.

TABLE 14.—Mean wage and benefit adjustments in major collective bargaining agreements, 1976–78

[Percent]

Type of change	1976	1977					1978 <sup>1</sup>			4 quarters ended	
		I	II	III	IV	Year	I	II	III	Sept. 1977	Sept. 1978 <sup>1</sup>
<b>Effective wage-rate changes:<sup>2</sup></b>											
Total effective adjustments.....	8.1	1.2	2.9	2.7	1.1	8.0	1.3	2.6	2.5	8.3	7.5
Adjustment resulting from:											
Current settlement <sup>3</sup> .....	3.2	.3	1.0	1.3	.5	3.0	.5	.6	.5	3.5	2.1
Prior settlement.....	3.2	.5	1.4	1.0	.3	3.2	.6	1.4	1.1	3.3	3.4
Escalator provision.....	1.6	.3	.6	.5	.3	1.7	.3	.5	.9	1.7	2.0
<b>Increases in new settlements:<sup>4</sup></b>											
<b>Wage rate settlements (1,000 or more workers):</b>											
First-year adjustment.....	8.4	7.7	7.9	7.8	7.8	7.8	9.9	6.9	7.5	7.7	7.8
Average over life of contract.....	6.4	6.7	5.9	5.5	5.8	5.8	7.3	6.1	6.3	5.6	6.3
<b>Wage and benefit settlements (5,000 or more workers):</b>											
First-year adjustment.....	8.5	9.0	8.9	10.2	9.5	9.6	14.6	6.7	7.0	8.8	9.1
Average over life of contract.....	6.6	7.5	6.0	6.2	6.3	6.2	8.5	5.9	5.7	6.0	6.5

<sup>1</sup> Preliminary.

<sup>2</sup> Effective wage rate changes are wage rate changes actually going into effect per worker under major contracts in the respective quarters. Detail may not add to total because of rounding.

<sup>3</sup> Changes resulting from collective bargaining settlements made that calendar year.

<sup>4</sup> Quarterly data are at annual rates.

Note.—Quarterly data are not seasonally adjusted.

Source: Department of Labor, Bureau of Labor Statistics.

In comparison with 1977 settlements, labor contracts concluded in 1978 show an acceleration in wages over the life of the contract. Wage rate adjustments in new settlements averaged 7.8 percent for the first year and 6.3 percent annually over the life of the contract during the year ending in the third quarter of 1978, compared to 7.7 percent for the first year and 5.6 percent over the life of the contract for the same period a year earlier. (These measures exclude cost-of-living adjustments tied to the future rate of price inflation.)

There is considerable evidence that the responsiveness of wages to overall changes in economic conditions is significantly greater in nonunion than in unionized labor markets. Changes in average wage rates paid to union members are not significantly related to the contemporaneous unemployment rate or alternative measures of labor market pressure, although they are sensitive to price changes because of cost-of-living adjustments. Most of the inertia in average union wages is a by-product of multiyear labor agree-

ments, in which the size of agreed wage increases is more closely tied to economic conditions during and immediately preceding the renegotiation of a contract than to conditions during the term of the agreement.

Wage increases during the first year of a collective bargaining agreement are about as responsive to labor market pressures as nonunion wages. Increases over the life of the agreement, however, are much less strongly related to underlying market pressures prevailing at the time the contract is signed, and deferred increases are essentially independent of prevailing market conditions. Consequently new inflationary pressures show up much more gradually in union than in nonunion wages. Conversely, when the initial causes of inflation subside, the moderating effect is less evident in union wage increases than in nonunion. Multiyear collective bargaining agreements can therefore be an important source of wage inertia.

### *How Tight Were Labor Markets in 1978?*

With unexpectedly slow growth of labor productivity, labor demand was strong, and the reduction in the unemployment rate early in the year exceeded expectations. Nevertheless the 6.2 percent unemployment rate experienced in the first quarter of 1978 was higher than most estimates of the rate of unemployment at which inflation will begin to accelerate. In the remaining quarters of 1978 the rate was lower but relatively stable within a range of 5.8 to 6 percent.

One approach to the question of labor market pressure is to examine how closely labor markets in late 1978 resemble those of earlier periods of accelerating wages. During 1978 the overall unemployment rate was above the levels associated with accelerating wages in the late 1960s and mid-1970s (Chart 5). Such a comparison could be deceptive, however, because the demographic composition of the labor force has changed. Certain demographic groups have higher rates of turnover and therefore higher rates of unemployment, and these groups now make up a larger proportion of the labor force than in the past.

A better indicator of labor-market pressure is a fixed-weight index, constructed so that each demographic group has the same amount of influence in each year as it had in a high-employment period like 1956, when the aggregate unemployment rate was 4.1 percent. The fixed-weight unemployment rate has fallen relative to the official rate over the past decade, but in 1978 the fixed-weight rate was still somewhat above the levels of earlier periods of tight labor markets.

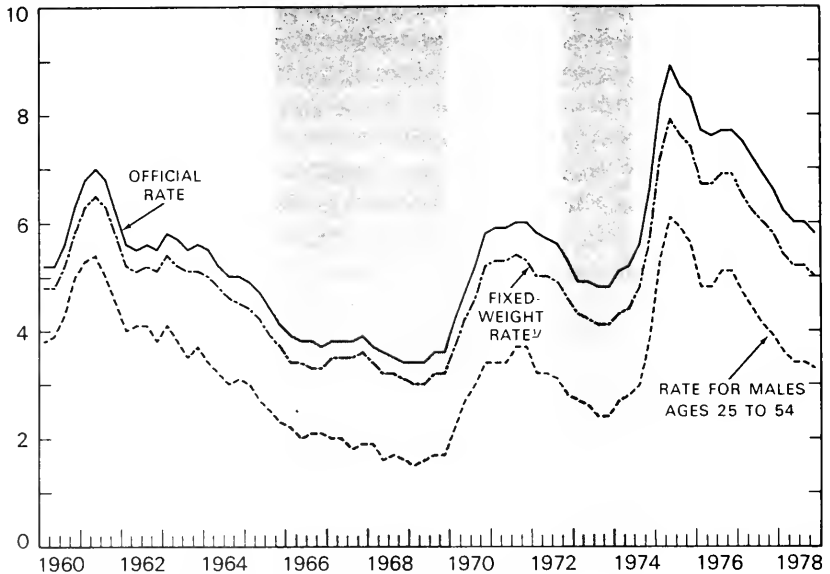
A third measure of labor market pressure is the unemployment rate of a group of experienced workers with continuous labor force attachment, such as the rate for men between the ages of 25 and 54. That rate, too, is still somewhat above the levels associated with prior wage accelerations.

Tight conditions in labor markets also affect labor turnover rates. As the number of job vacancies rises relative to the number of unemployed, employers first call back former jobholders: but when these are no longer avail-

Chart 5

## Selected Unemployment Rates

PERCENT (SEASONALLY ADJUSTED)



THE FIXED-WEIGHT UNEMPLOYMENT RATE IS CONSTRUCTED UNDER THE ASSUMPTION THAT THE COMPOSITION OF THE LABOR FORCE WITH RESPECT TO SEVEN DEMOGRAPHIC GROUPS REMAINS UNCHANGED OVER THE PERIOD SINCE 1956

NOTE SHADING INDICATES PERIODS OF ACCELERATING WAGES

SOURCES DEPARTMENT OF LABOR AND COUNCIL OF ECONOMIC ADVISERS

able, vacancies are filled by hiring from the pool of unemployed and by bidding workers away from other employers with offers of higher wages and other benefits. In response to these incentives, a larger number of workers quit their current jobs and take better-paying ones. As a result, both the new hire and quit rates in manufacturing tend to rise as labor markets tighten and wages accelerate. Both rates have reached postwar peaks in periods of very tight labor markets during the past decade. As seen in Chart 6, however, the rate of new hiring in late 1978 was below these levels.

Over the past decade the composition of the work force has shifted toward young and inexperienced workers, who tend to quit their jobs more frequently in the search for better employment. The quit rate associated with a given degree of labor market pressure has therefore drifted up over the past decade. Although measured quit rates were relatively high in late 1978, they do not necessarily imply as much labor market pressure as they would have done at these levels in the mid-1960s.

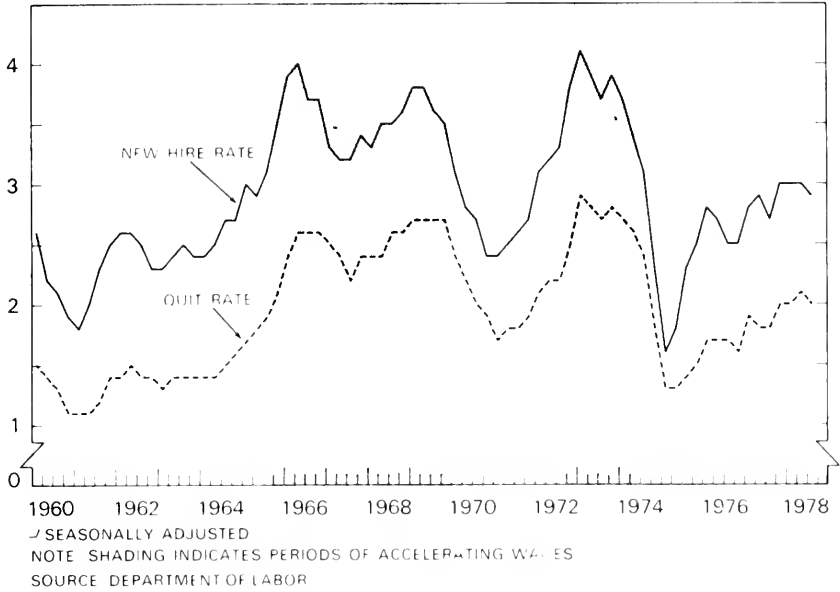
Although the measures of labor market tightness examined above did not reach levels associated with accelerating wages in the past, that fact alone is not sufficient to determine that excess demand was absent from



Chart 6

## New Hire and Quit Rates In Manufacturing

RATE PER 100 EMPLOYEES ↙



labor markets during 1978. There is some evidence, for example, that even the fixed-weight and prime-age male unemployment rates associated with accelerating inflation have moved upward over time (Chart 5). Some analysts have suggested that increases in the level, duration, and availability of unemployment benefits and other transfer payments have raised the unemployment rates for some groups in the labor force by facilitating longer and more frequent periods of job search. These factors, together with changes over time in the structure of labor markets, in rates of productivity growth, and in the reaction of wages to past and expected rates of inflation, make it difficult to estimate the rate of unemployment below which wage acceleration is likely to occur. A number of studies have attempted to determine that rate, but have produced a wide range of results.

Although it is impossible to estimate the precise rate of unemployment below which wages begin to accelerate, an analysis by the Council of Economic Advisers and a review of the available studies do identify a range of estimates that encompasses the consensus of most observers. The evidence suggests that under current labor market conditions the danger of accelerating wages begins to mount as the rate of unemployment falls significantly below 6 percent. During 1978 the unemployment rate moved into the top of the range. The economy also underwent an acceleration of wages. But since the range itself is uncertain, we cannot automatically conclude that the lower unemployment rate caused the acceleration. A more careful look at developments is necessary.

## CAUSES OF WAGE ACCELERATION

The pattern of union and nonunion wage increases in 1978 is consistent with the view that tightening labor markets were a partial source of wage acceleration. But the moderation of the rate of increase in wage rates after the first quarter casts doubt on the hypothesis that the unemployment rate had declined to levels producing a sustained acceleration of wages and prices. It suggests that the acceleration of wages in early 1978 may derive from other factors.

To explore these issues the Council conducted an econometric analysis of several potential explanations for the 1978 wage acceleration. The analysis examined two aspects of labor market pressure: the general balance between the demand for and supply of labor resources represented by the level of the unemployment rate, and the more transitory pressures generated by the rapidity with which unemployment decreases as employment gains exceed labor force growth.

The rapid drop in unemployment in late 1977 and early 1978 was accompanied by a sharp growth of employment. It is quite possible that a very rapid rise in the demand for labor relative to the increase in the labor force may cause an acceleration in wages, even though the level to which unemployment falls does not imply excess demand for labor. A large increase in hiring, occurring in a short period and spread across a large number of industries, causes many workers to leave low-wage jobs as high-wage vacancies appear. Employers in low-wage industries face a special difficulty when they must not only add to their work force but replace those who have quit to accept higher-paying jobs. Wage rate increases may therefore be particularly large in low-wage industries. While ultimately the pool of unemployed might be enough to fill the new jobs without putting added pressure on wage rates, the attempt to hire large numbers of workers quickly sets up temporary imbalances in labor demand and supply that accelerate wage increases.

The Council's analysis confirmed that the *level* of the unemployment rate early in the year played a limited role in the 1978 wage acceleration. However, pressures associated with the *speed* of the decline in unemployment were an important source of increased wage inflation. The rapidity of the reduction in the unemployment rate added about 0.1 percent to the adjusted hourly earnings index during the fourth quarter of 1977 and another 0.3 percent during the first half of 1978, according to estimates made by the Council. During the second half the unemployment rate held fairly steady, and the absence of further pressure from this source contributed to deceleration of wage increases late in the year.

A second important factor in the wage acceleration was the minimum wage increase in January 1978. According to the Council's analysis, between 0.2 percent and 0.4 percent was added to the adjusted hourly earnings index in the first quarter by the change in the minimum wage. If the minimum had not been raised, the index would have risen at an annual rate of around

7.9 percent in the first quarter instead of the 9.2 percent that actually occurred. Thus, over two-thirds of the acceleration of the index in the first half of the year can be explained by the combined effects of the speed with which unemployment declined and the increase in the minimum wage.

In summary, in late 1977 and early 1978 a marked but temporary acceleration of wages followed a rapid fall in unemployment. The acceleration reflected the influence of minimum wage increases and the unusual growth of demand for labor during late 1977 and early 1978. The acceleration also occurred at a time when productivity growth was very low, and the two developments together added strong impetus to cost and price increases. Although the rapidity of the drop in unemployment put some transitory pressure on wage rates, the level of the unemployment rate during that period was still above most estimates of the range associated with a sustained increase in inflation. Later in the year, however, the recovery clearly brought the unemployment rate into the top of that range. In view of the acceleration in inflation which has occurred, a further reduction of the unemployment rate during 1979 would run some risk of generating excess demand and creating inflationary pressures in labor markets.

#### THE PRODUCTIVITY SLOWDOWN

Productivity growth in 1978 showed a very marked slowdown from accustomed rates, adding substantially to inflationary pressures and raising fundamental concerns about underlying trends. With real GNP growth of about 4 percent over the year, exceeding the normal trend rate of growth, most observers expected that productivity in the private nonfarm sector would grow at least 2 percent. Instead, as seen in Table 15, productivity showed essentially no improvement, increasing only 0.6 percent in the course of the year. The slowdown was concentrated in the nonfarm, nonmanufacturing sector, where productivity actually declined 0.3 percent during 1978. Productivity growth in manufacturing, on the other hand, was strong.

The slow productivity growth over the past 2 years adds to the accumulating evidence that the underlying trend in productivity growth since 1973 has been substantially lower than in earlier periods. Between 1948 and 1965, productivity growth in the private nonfarm sector averaged 2.6 percent per year. In 1965-73 this rate declined to 2.0 percent. Since 1973, private nonfarm productivity growth has averaged less than 1 percent per year. In the following examination of recent evidence on productivity growth and the discussion of its implications for the growth of potential output, the key questions raised by recent experience are these: Was the recent poor performance a nonrecurrent extraordinary event, from which we will soon bounce back? Or does the recent lag in productivity indicate that the U.S. economy has entered a period of very slow productivity growth?

## Productivity Determinants

During most of the postwar period the economy produced productivity gains exceeding 3 percent annually, as shown in Table 15. However, a number of the factors generating the strong productivity growth between World War II and the mid-1960s have since been reversed.

TABLE 15.—*Labor productivity growth, 1948-78*

(Percent change per year)

Sector	1948 to 1955	1955 to 1965	1965 to 1973	1973 to 1977	1977 to 1978 <sup>1</sup>
Private business economy.....	3.4	3.1	2.3	1.0	0.4
Nonfarm.....	2.7	2.6	2.0	.9	.6
Manufacturing.....	3.3	2.9	2.4	1.5	2.5
Nonmanufacturing.....	2.4	2.4	1.7	.6	- .3

<sup>1</sup> Preliminary.

Note.—Data relate to output per hour paid for, for all persons.

Source: Department of Labor, Bureau of Labor Statistics.

For example, between 1948 and 1973 high rates of private investment led to a growth in the capital-labor ratio (measured by the ratio of the net nonresidential capital stock to aggregate hours worked in the private non-farm sector) amounting to almost 3 percent per year. Since 1973, as a result of low rates of investment, that growth rate has dropped to 1¾ percent per year. Although the precise effect of slower growth in the capital stock is hard to measure empirically, analytical studies estimate that it could well have reduced productivity growth by up to one-half of a percentage point per year from earlier trends.

Productivity growth has also been reduced by a dramatic shift in the age-sex composition of employment. Starting about 1965, the children of the postwar baby boom attained working age, adding many young and inexperienced workers to the labor force. Rapid increases in the labor force participation of women also added to the supply of less experienced workers. If average earnings of each age-sex group are used as a rough approximation of the relative productivity of its members, losses in productivity growth due to increases in the proportion of young and inexperienced workers in the labor force may be calculated. Such demographic shifts in employment can explain a reduction of 0.4 percentage point in the annual growth rate of productivity between 1965 and 1973. Since 1973 this trend has slowed as the new workers that entered the labor force between 1965 and 1973 have become older; and, for the more recent period, the reduction has been closer to one-third of a percentage point.

Increased economic and social regulation has aggravated the productivity slowdown in a number of ways. Productivity is a measure of output produced per unit of resources used in production. Economic regulation, as in transportation, precludes labor and capital from flowing to those uses that

have a relatively high value. The effects of social regulation are more complicated. The gains from social regulation—in such forms as reduced pollution and greater safety—are generally not included in measured output. When an increasing fraction of society's labor and capital resources is diverted to producing these gains, measured productivity growth is reduced.

In addition, important indirect costs are generated by social regulation. The implementation of new regulatory statutes is often associated with considerable litigation and uncertainty which tends to reduce innovation and investment. Moreover, some regulations specify or suggest the technology to be used to meet new standards, rather than prescribing a level of performance to be attained. As a consequence, innovations that could meet the standards at lower cost are not encouraged.

On an aggregate basis one private study estimates that for 1968–73 the direct costs of compliance with environmental, health, and safety regulations may have reduced the annual growth of output relative to total inputs in the private nonfarm sector by 0.1 percentage point. Similar estimates for 1973–78 are incomplete, because of lags in the compilation of data, but according to preliminary estimates these restrictions may have subtracted an additional 0.3 percentage point from annual growth of output relative to inputs since 1973.

Productivity growth has fallen significantly in many industries over the past several decades. (See Table 16.) The costs of regulations have increased substantially in some of these industries but not in others. For example, from 1950 to 1965 labor productivity in mining grew 4.3 percent per year, but since 1973 it has declined at an annual rate of 6.1 percent. In the late 1960s and early 1970s stringent mine safety laws began to take effect. Some part of the productivity decline in mining can be attributed to other factors, and there have been such measurable benefits as lower accident rates, but regulation has undoubtedly been very costly in terms of real output per hour worked. In the utilities sector, growth in output per hour worked fell successively from 6.1 to 3.5 to 0.2 percent per year in 1950–65, 1965–73, and 1973–77. While a number of influences have been at work to reduce productivity growth in this industry, the increase in environmental regulation had an important bearing.

The loss of productivity growth as a consequence of increasing social regulation does not itself imply that the costs of regulation exceed its benefits. It has already been noted that the output measures generally used to calculate productivity do not include environmental improvements and other benefits of regulation. Nevertheless, the magnitude of the productivity effects does highlight two facts: regulation is very costly; and benefits should be closely compared with costs in the design of regulatory legislation and specific regulations.

Some have suggested that a decline in the intensity of research and development in the United States may be a significant cause of the productivity slowdown. The evidence for such a view lies in the falling ratio of research

and development expenditures to total output; this ratio reached a peak of 3.0 percent in 1964, but has since dropped to an estimated 2.2 percent in 1978. Most of the reduction can be attributed to a substantial cutback in military and space-related research—research that may have a somewhat less direct effect in increasing aggregate output per hour worked in the private sector than basic research or private research and development. Private industry has consistently provided about 1 percent of GNP for research and development since the mid-1960s. In the course of time, however, the direction of industry's research and development activity may have shifted away from basic research and new product development in response to such influences as the changed regulatory environment.

Little of the 1965–73 decline in private nonfarm labor productivity or the further reduction in 1973–78 seems to stem from shifts in the industrial composition of employment. Although movement out of the farm sector added a sizable productivity bonus in the early postwar years, this process had ended by the mid-1960s. Further, even though the proportion of the work force engaged in manufacturing has grown smaller since 1965, the level of manufacturing productivity has been about the same as that of the private nonfarm sector as a whole; the sectors of the economy employing larger proportions of the work force include some with higher and some with lower levels of productivity, and hence the shift has left aggregate productivity more or less unchanged.

#### *Productivity Growth Since 1973*

Productivity growth in the nonfarm business sector since 1973 has been unusually erratic. Although growth during 1976 was in line with the 1965–73 trend, there were abnormally low growth and even declines in 1973–74 and 1977–78. The productivity decline in 1973–74 was particularly striking. Labor productivity in the nonfarm business sector fell in every quarter from the second quarter of 1973 to the fourth quarter of 1974, dropping a total of 4.2 percent in a 7-quarter period. On the basis of the usual relationship between fluctuations in productivity and fluctuations in output, no more than 1 percentage point of that decline could be attributed to the sharp recession during the period. The additional drop of 3.2 percentage points accounts for much of the difference between the expected 2 percent annual growth rate between 1973 and 1977 and the 0.9 percent rate that actually occurred.

In both 1977 and 1978, productivity growth was again disappointing. Although private nonfarm productivity was expected to increase at least 2 percent per year, it grew instead at only 1.3 percent in 1977 and 0.8 percent in 1978. This latest deterioration in productivity indicates that the slowdown in 1973–74 was not just a temporary aberration and adds to the accumulating evidence that the secular trend in productivity growth may be considerably less than 2 percent per year.

Recent deviations of productivity from its postwar trend have been so pronounced that one is tempted to search for the influence of special factors. Some suggest that the oil embargo of 1973-74 and the subsequent quadrupling of oil prices had an adverse impact on productivity growth. However, it is difficult to find a mechanism by which an oil crisis could have such an immediate and severe effect on the economy. Widespread declines in productivity growth rates would only occur as adjustment of production methods to economize on energy took place. Actually, adjustment to the new oil prices has been extremely slow. Moreover other countries in which energy prices rose more than in the United States did not show such large productivity declines. In general, possible productivity-reducing effects occur as firms substitute labor or cheaper fuels for oil, or as energy-inefficient plant and equipment are replaced, but these effects will be spread very gradually over a long period.

There is no obvious set of special factors that could explain the poor productivity record of 1978. Year-to-year variations, however, have always been substantial, and deviations from trend of as much as 1 percentage point are not unusual. If the long-term growth rate of productivity has fallen well below earlier rates, as now seems likely, a year with a very small increase in production should occasion little surprise.

Part of the decline in the growth of private nonfarm productivity between 1965 and 1973 was attributable to reduced productivity gains in the con-

TABLE 16.—*Productivity growth by industry, 1950-77*

[Percent change per year]

Industry	1977 output share (percent) <sup>1</sup>	1950 to 1965	1965 to 1973	1973 to 1977
Agriculture.....	2.9	4.9	3.6	3.0
Mining.....	1.5	4.3	1.9	-6.1
Construction.....	4.3	3.4	-2.1	.3
Manufacturing:				
Nondurable.....	9.9	3.2	3.3	2.2
Durable.....	14.4	2.5	2.2	1.2
Transportation.....	3.9	3.0	2.9	1.0
Communication.....	3.2	5.3	4.6	6.7
Utilities.....	2.3	6.1	3.5	.2
Trade:				
Wholesale.....	7.3	2.6	3.4	-.8
Retail.....	10.0	2.3	2.1	.8
Finance, insurance, and real estate.....	15.4	1.6	.2	2.3
Services.....	12.0	1.2	1.7	-.3
Government.....	12.5	.4	.5	.1
All industries:				
Current weights.....	100.0	2.7	2.0	1.1
Fixed weight (1977 output weights).....		2.6	1.9	1.1

<sup>1</sup> Detail may not add to 100 percent because of rounding.

Note.—Growth data relate to output per hour worked for all persons.

Sources: Department of Commerce (Bureau of Economic Analysis) and Council of Economic Advisers.

struction and financial sectors. Statistics on productivity in these sectors (and those in the government sector) are notoriously bad, and so it could be argued that the apparent reduction in productivity growth during this period was a statistical artifact. However, the further widespread decline since 1973 lends no support to that interpretation.

Table 16 shows the pattern of labor productivity growth (gross product originating per hour worked) for 13 major industries. In almost every sector of the economy the growth of productivity has slowed appreciably. Data for 1978 are not yet available; but, given the aggregate productivity performance last year, sectoral averages for 1973-78 will be even lower than for 1973-77, except perhaps in manufacturing.

## POTENTIAL GNP

### *Behavior Since 1973*

The erratic productivity performance of the last 5 years raises serious questions about earlier estimates of the economy's productive potential. Potential GNP is defined as the level of real output that the economy could produce at high rates of resource utilization. The *level* of potential output is less meaningful than its *rate of growth*. The latter gives the best estimate of how much the economy can actually grow over the next few years without putting additional pressure on labor or product markets. Before making a judgment of the future trend for potential output, it is useful to review the growth of potential over the last 5 years and to examine recent behavior of the unemployment rate.

The Council of Economic Advisers has undertaken several reexaminations of the conceptual as well as the empirical basis of potential output over the last 3 years. These studies led to a significant reduction in 1977 in the estimate of the growth of potential, lowering the estimate to 3½ percent annually for the period from the fourth quarter of 1968 onward. Previously, the growth rate of potential had been estimated to be 4 percent for the period from the fourth quarter of 1968 to the fourth quarter of 1975 and 3¾ percent thereafter. The 1977 revision, discussed in the 1977 and 1978 *Economic Reports*, puts the potential GNP in 1978 at \$1,462 billion (1972 prices), about 5.6 percent higher than actual GNP.

The 1977 and 1978 estimates were based on a higher benchmark unemployment rate and on the optimistic assumption that the productivity decline in 1973-74 was an aberration that would be subsequently corrected. The underlying productivity trend was therefore assumed to be equal to that observed between 1965 and 1973. For that assumption to prove correct, strong increases in productivity would have had to occur since 1974. Productivity growth in 1975 and 1976 did show substantial improvement, keeping open the possibility that productivity would return to the level indicated by the 1965-73 trend; and early in 1978 initial productivity statistics suggested a sizable 3 percent gain for 1977. However, the subsequent down-



ward revision of the productivity statistics for 1977 and the very poor productivity performance of 1978 make the earlier view untenable. It no longer seems reasonable to assume that the exceedingly poor productivity growth in 1973-74 and 1977-78 represented statistical aberrations or one-time events, implying no reduction in the long-term trend. Downward revisions of our estimate of long-term productivity growth and of potential GNP are clearly necessary.

The uncertainty about the growth of potential output over the 1973-78 period requires one to distinguish three factors affecting productivity: its long-term trend, its cyclical movements, and the erratic declines from trend that occurred in 1973-74 and to a lesser extent in 1977-78.

It is possible to place rough bounds on the range in which the 1973-78 trend of productivity growth must lie by examining two separate views. The optimistic view holds that 1973-74 was a period in which productivity and potential output dropped as a result of nonrecurring factors affecting the level of productivity, after which the long-term trend of productivity growth resumed its earlier pace. On this basis we calculate the long-term trend rate of growth in productivity from 1973 to 1978 to be about 2 percent per year and the growth of potential GNP over this period to be 3.5 percent per year. Such a view of productivity behavior interprets the 1977-78 performance as another marked aberration, which has temporarily reduced productivity well below its long-term trend.

The pessimistic view holds that the 1973-74 period was not extraordinary. According to this view long-term productivity growth began to slow substantially after the mid-1960s, although unexpectedly favorable developments in late 1972 and in early 1973 disguised the fact. The poor average performance of productivity since early 1973 reflects that slowdown, and the particularly disappointing episodes in 1973-74 and 1977-78 are fluctuations around a greatly reduced long-term trend. According to this interpretation the estimate of potential should be based on a long-term growth of productivity which follows a much slower pace after 1973. This pessimistic version produces an estimated long-term trend rate of productivity growth during the past 5 years of around 1 percent a year, and a growth of potential GNP of only 2.5 percent annually over the 1973-78 period.

Placing an exact number on recent potential growth is extremely difficult. The growth of potential from 1973 to 1978 probably falls between the two extremes. The 1973-74 productivity shock was to some extent nonrecurrent. But the deceleration in productivity in recent years is too striking to ignore in estimating the long-term trend.

### *Unemployment Forecasts*

Another way of analyzing the growth of potential output over the 1973-78 period is to examine the actual behavior of real GNP and unemployment in this same period. Particularly since mid-1977, the behavior of the unemployment rate has been a puzzle. In the economic forecasts underlying

the 1979 budget, for example, real GNP was forecast to rise 4.7 percent over the 4 quarters of 1978 and an additional 4.7 percent in 1979. On the basis of estimates that assumed a potential growth of 3.5 percent per year, the unemployment rate was forecast to reach 5.8 percent in the fourth quarter of 1979. In fact, it reached that level a year earlier, even though real GNP growth in 1978 was less than expected.

The most common method of forecasting the unemployment rate relates that rate to the gap between actual and potential GNP—the relationship known as Okun's law. Over the postwar period a cyclical coefficient of  $2\frac{1}{2}$  has been observed; that is, a reduction of  $2\frac{1}{2}$  percentage points in the gap between potential and actual GNP could be expected to lower the unemployment rate by about 1 percentage point. Although aggregate data may be unreliable, there is some suggestion that the cyclical coefficient was closer to 3 in early years and may have declined to near 2 in the 1970s.

The use of this relationship and previous estimates of potential GNP produced substantial overestimates of the unemployment rate in 1977 and 1978. For example, from the fourth quarter of 1976 to the fourth quarter of 1977, real GNP grew 5.5 percent, reducing the estimated GNP gap by 2 percentage points under the old definition of potential. The expected reduction in the unemployment rate was 0.8 percentage point; the unemployment rate actually fell by 1.2 percentage points.

Last year produced a similar surprise: a 4.3 percent increase in real GNP with a 3.5 percent growth of potential output should have lowered the unemployment rate from 6.6 to 6.3 percent from the fourth quarter of 1977 to the fourth quarter of 1978. Instead, the unemployment rate was reduced to 5.8 percent, 0.5 percentage point more than expected. Given the unemployment rate at the end of 1976 and the actual path of output since then, unemployment by the end of 1978 was 0.9 percentage point lower than was expected, if it is assumed that potential GNP grew at 3.5 percent per year. By revising downward our estimate of the growth of potential GNP from 3.5 to 3.0 percent per year, about half the unanticipated drop in the unemployment rate can be explained. The remainder is within historical error margins for the output-unemployment relationship.

### *Revised Estimates*

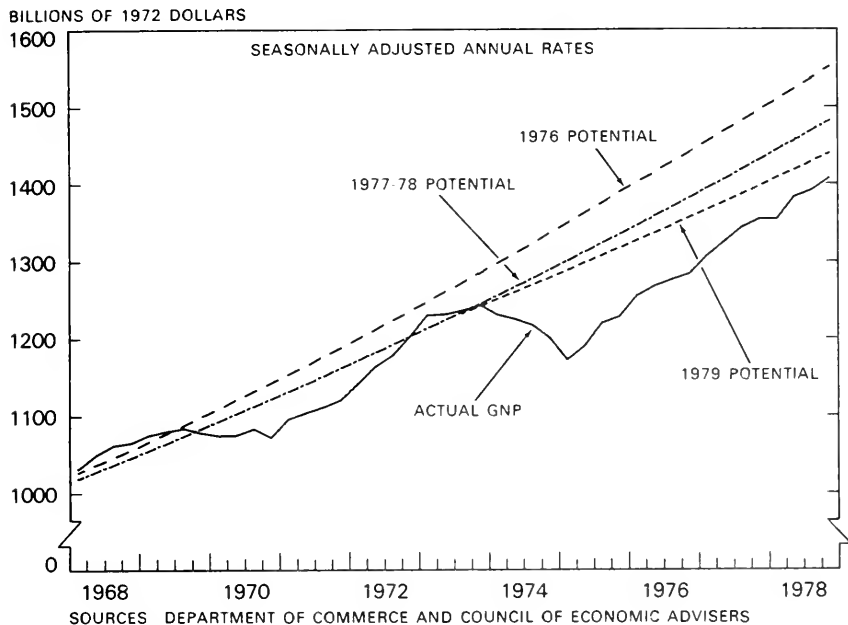
Weighing recent trends in productivity and labor force growth, as well as the unemployment-output relation, one can form a rough judgment about the trend in potential output over the 1973–78 period. Clearly, placing an exact number on potential growth is very difficult. On balance the Council's view is that potential output has grown at an average rate of 3 percent during the last 5 years.

The 3 percent overall growth rate of potential between 1973 and 1978 can be broken down into the following components: a 2.5 percent annual growth in potential employment, a 0.5 percent per year decline in annual hours per employee, and a 1 percent per year growth in productivity. Reflect-

ing the large decline in 1973-74, the 1 percent productivity growth during the past 5 years was about one-half of 1 percentage point below our estimate of the long-term trend (discussed below). But its effect in depressing potential GNP was offset by an annual growth in the labor force about one-half of 1 percent above its long-term trend.

Chart 7

## Actual and Potential Gross National Product



The latest estimate puts potential GNP at \$1,423 billion in 1978. Chart 7 shows the latest revision of potential output (labeled 1979 potential) along with the two earlier versions. The revised data are in Table 17. Actual GNP in 1978 was only about 23/4 percent below its potential level.

TABLE 17.—Potential gross national product and benchmark unemployment rate, 1973-78

[Billions of 1972 dollars, except as noted]

Year	Potential GNP	Actual GNP	GNP gap (potential less actual)	Benchmark unemployment rate (percent)
1973	1,227.0	1,235.0	-8.0	4.9
1974	1,264.2	1,217.8	46.4	5.0
1975	1,302.1	1,202.3	99.8	5.1
1976	1,341.1	1,271.0	70.1	5.1
1977	1,381.4	1,332.7	48.7	5.1
1978	1,422.9	1,385.1	37.8	5.1

<sup>1</sup> Preliminary.

Sources: Department of Commerce (Bureau of Economic Analysis) and Council of Economic Advisers.

Projecting potential GNP growth into the future is subject to large errors. Growth of the labor force in recent years has varied substantially. In the past 5 years, the surprisingly low productivity growth has been offset, as noted above, by higher than expected increases in the labor force, producing more growth in potential output than would have seemed likely from the low productivity statistics alone.

The wide variation in productivity growth rates since 1973—and our inability to determine precisely the underlying trend of such growth during these years—make predicting future rises in private nonfarm productivity unusually hazardous. Improved growth in investment during the past 2 years should help to improve productivity growth over the next 5 years. At the same time, labor force growth should decline when the young people born in the baby boom have entered the labor force. This demographic reversal should also add to productivity growth, as the drop in the average age and experience of the labor force tapers off. These positive developments, however, may well be offset to some extent by increased regulatory burdens.

Studies by the Council of Economic Advisers indicate that the range of estimates of productivity growth per hour lies between  $1\frac{1}{4}$  and  $2\frac{1}{4}$  percent annually over the next 5 years. These estimates are based on the alternative hypotheses about the 1973–74 period discussed earlier. Taking account of recent disappointing productivity developments, our forecast is for a productivity growth of  $1\frac{1}{2}$  percent annually over the next 5 years. This projection is based on the view that some part—less than half—of the 1973–74 drop in productivity represents nonrecurrent events; in addition, it does not assume any rebound of productivity growth from recent trends back toward those experienced in the 1950s or 1960s.

Other components of anticipated potential growth over the next 5 years are these: an expected fall in hours per employee of one-half of 1 percent annually; an average rise in the labor force participation rate of three-fourths of 1 percent annually; and a rise in the relevant population averaging  $1\frac{1}{4}$  percent annually.

Taken together these components imply a growth in potential output over the 1978–83 period of 3 percent annually, the same as the revised estimate for 1973–78. It is recognized that we are in a period of adjustment to new trends in energy, regulation, and international competition, that an attempt to estimate the underlying trend is therefore extremely hazardous, and that estimates of productivity growth are particularly subject to large margins of error.

## ECONOMIC POLICY IN AN INFLATIONARY ENVIRONMENT

In recognition of the need for a balanced approach to the problem of inflation, the Administration announced a three-part anti-inflation program

in October 1978. The program sets out the basic objectives for economic policy in 1979. As the first element of the program, fiscal and monetary policy will be used to achieve and maintain a balance between aggregate demand and supply that is conducive to a reduction in inflation. The second element is a set of explicit, voluntary wage and price standards designed to reduce inflation. The third consists of an effort to reduce the direct contribution of government to inflation by reducing the cost of regulatory actions. In the remainder of this chapter the policy initiatives associated with each element of the anti-inflation program are discussed.

## AGGREGATE DEMAND POLICY

During the course of an economic recovery, a stage is reached at which the emphasis of macroeconomic policy must switch from efforts to strengthen growth in economic activity to measures that restrain inflation. The U.S. economy passed through that stage during 1978. The disappointing performance of productivity, the related sharp drop in unemployment, and the acceleration of inflation brought the economy to that position somewhat earlier and more abruptly than had been expected. Reducing inflation must be the top priority of economic policy in 1979. Unless we bring inflation under better control, the progress made during the past several years toward recovering full employment of our economic resources will be jeopardized.

Since the trough of the recession in early 1975, total real output of goods and services has grown at an annual rate of 5 percent, or about 2 percentage points per year faster than the economy's long-term potential. The gap between actual economic performance and the level made possible by our resource base has therefore steadily diminished.

Job creation during this recovery has proceeded at an extraordinarily rapid pace, especially during the past 2 years. Overall unemployment has therefore declined substantially despite record increases in the civilian labor force. Nevertheless, unemployment rates remain extremely high for some major segments of the population. Both here and abroad, structural unemployment represents an unacceptable waste of economic resources and a severe social problem. But the problem cannot be dealt with by an expansive aggregate demand policy without generating further inflationary pressures. As pointed out in Chapter 3, the task must be addressed with measures such as targeted employment tax credits and training and jobs programs aimed directly at those who cannot find jobs even in a relatively fully employed economy.

Earlier in this chapter evidence was cited that excess demand pressures in most labor and product markets were not a dominant factor in the recent acceleration of inflation, except for a period in late 1977 and early 1978 when the rapidity of decline in unemployment contributed to an acceleration of wage increases. But the analysis also indicated that the economy has approached the point where the overall margin of unused resources is very slim. By late 1978 the cyclical component of unemployment was down to relatively small proportions, as evidenced by various measures of labor

market tightness, and the gap between the economy's actual and potential output had shrunk from 7.7 percent of potential in 1975 to 1.8 percent in the fourth quarter of 1978. Moreover, the outlook for growth in productivity is very uncertain. Since we are not yet able to say precisely why productivity gains were so weak last year, we cannot be confident that our estimate of the GNP gap and our forecast of growth of potential GNP are correct.

For all of these reasons it is essential that economic policies be restrained. Economic growth must slow to a moderate and sustainable pace—one that avoids adding the effects of excess demand to existing inflationary forces.

As Chapter 3 describes in detail, the Administration is forecasting a growth rate of real GNP amounting to 2¼ percent over the 4 quarters of 1979 and 3¼ percent in 1980. The average growth rate over the 2 years, 2¾ percent, is slightly below the estimated long-term growth potential of 3.0 percent. If growth in the labor force and productivity is about in line with long-term trends, the margin of slack between actual and potential GNP will increase slightly over the next 2 years, and market forces can work together with the pay and price standards announced by the President on October 24 to moderate inflation.

Restrained fiscal and monetary policies are an essential ingredient of the Administration's strategy for combating inflation. Monetary and fiscal restraints alone, however, are not equal to the task of unwinding an inflation that has been under way for more than a decade and has become deeply embedded in expectations and in the normal way of doing business by consumers, workers, labor unions, and business establishments. Experience since the late 1960s, reviewed at the beginning of this chapter, amply bears out that conclusion.

The stubborn resistance of inflation to the traditional remedies reflects the fact that the rate of wage and price increase is relatively inflexible in the face of slack demand. As last year's *Economic Report* discussed in more detail, there is some evidence that wage rates over the past quarter century have become progressively less responsive to the balance between aggregate demand and supply in labor markets. Reductions in output and major increases in unemployment are no longer as effective in slowing the rate of wage and price increase. The resulting loss of output, of jobs, and of human dignity pays only modest dividends in lower inflation.

A political consensus exists in our country today that inflation is the Nation's most serious economic problem, and that fiscal and monetary discipline is needed if inflation is to be reduced. The inflationary problem can be dealt with most successfully by persisting with the discipline of anti-inflation policies for an extended period even if economic growth for a time should fall below the path that is now forecast. The chances of maintaining the necessary consensus long enough to make real gains against inflation will be much greater if we avoid an overdose of restraint that leads to sharp increases in unemployment, reductions in output, and stagnation of investment.

The objective of aggregate demand policies for 1979 and 1980 is thus clear. To avoid creation of excess demand, economic growth needs to slow to a pace at, or somewhat below, the long-term potential rate of expansion. Fiscal and monetary restraint is needed to accomplish that aim. The restraint, however, must be applied in a measured way, to moderate growth without producing a recession.

As Chapter 1 indicated, the course of fiscal policy began to shift toward restraint during 1978. In fiscal 1979, the year beginning in October 1978, the budget deficit will decline to about \$37 billion, or \$11 billion less than in the prior fiscal year. In fiscal 1980 the deficit will drop an additional \$8 billion to a level of \$29 billion. Further reductions are expected in succeeding fiscal years. To reach these results we must keep a very tight rein on the growth of expenditures. In fiscal 1980, Federal outlays will decline to 21 percent of GNP from 22 percent in fiscal 1978.

Given the course of fiscal policy being pursued by the Administration, the task of reducing inflation will not fall on monetary policy alone. Success in the struggle against inflation will require that monetary and fiscal policies work together; the objective of slowing economic growth while avoiding a recession will necessitate very careful coordination and balance between fiscal and monetary policies.

The task of mapping the appropriate course of monetary policy will not be easy. Monetary restraint in 1978 did not affect aggregate demand in the way that past history would have suggested, nor will it do so in 1979 and 1980. As discussed in Chapter 3, institutional changes in financial markets, by altering the availability of credit to private borrowers, have reduced the degree to which changes in monetary policy affect spending. In today's economy, monetary and credit policies increasingly influence private investment and consumption through fluctuations in interest rates and associated movements in financial asset prices, rather than through changes in nonprice terms of credit.

This development has both negative and positive aspects from the standpoint of economic stabilization policy. On the negative side, monetary policy is likely to affect aggregate demand with even longer lags than it once did. Since our ability to forecast future developments is very limited, the task of identifying the appropriate course of monetary policy has become more difficult. On the positive side, however, monetary policy has been changed from a very harsh and selective tool of economic stabilization to one whose influence on aggregate demand is more gradual and evenly distributed. Working together with fiscal policy, monetary restraint, prudently applied, can be used more successfully than before to reduce economic growth to a modest but sustainable pace and thus create a favorable climate for an unwinding of inflation.

The American people and the Administration look forward to a decline in nominal interest rates from their present very high levels. It must be

clearly recognized, however, that a significant and lasting drop in interest rates cannot be expected until inflation begins to recede. When that happens, interest rates can and should decline. In a less inflationary environment it will also be possible to support adequate real growth with a slower expansion in the monetary aggregates than is currently required.

## STANDARDS FOR WAGE AND PRICE BEHAVIOR

General macroeconomic policies can create an appropriate market environment for unwinding inflation. However, 10 years of inflation preclude achievement of a given deceleration of prices solely through aggregate demand policy without much more demand restraint and loss of growth than would have been the case in earlier periods. Unless ways are found to brake the momentum of self-perpetuating wage and price increases that have acquired a prominent place in our private behavior, inflation will continue at an unacceptably high rate.

In recognition of this fact the Administration at the beginning of 1978 called for a slowing of wage and price increases. Each company was asked to hold its 1978 price and wage increases below the average of the prior 2 years. Although some individuals and groups did make an effort to meet the standard, the program was not generally effective. The deceleration standard was not specific enough to provide a clear guide for wage and price decisions.

The Administration therefore incorporated more explicit standards into the anti-inflation program announced in late October. The voluntary program now includes an explicit numerical ceiling for wage and fringe benefit increases as well as a price deceleration standard for individual firms. The potential effectiveness of the program is heightened by expanded monitoring, by relating Federal procurement actions to the standards, and by an innovative program of real wage insurance designed to encourage compliance. The pay and price standards were published in preliminary form on November 7, followed by a 30-day period for public comment. On the basis of the comments offered, and after consultation with business and labor groups, some modifications in the detailed specifications were announced on December 13. The final standards were published in the *Federal Register* on December 28.

The pay standard limits the increase in hourly wages and private fringe benefit payments to a maximum of 7 percent for each employee group in a company. Employee groups subject to the pay standard are: (1) individual groups covered by major collective bargaining agreements; (2) other non-management personnel; and (3) management personnel. This grouping takes account of the differing institutional arrangements for setting wage rates and prevents an inequitable distribution of wage moderation. It also permits considerable flexibility in distributing wage changes among individuals within a group in response to economic circumstances, equity, and other factors, so long as the average increase for the employee group meets the standard.



In collective bargaining situations a newly negotiated contract in which wage and fringe benefit increases average no more than 7 percent annually over the life of the contract is consistent with the pay standard, provided that the increase is no greater than 8 percent in any year of a multiyear agreement. In determining compliance with the pay standard, provisions for cost-of-living adjustments will be cost out on the assumption of a 6 percent annual rate of inflation in the consumer price index over the life of the contract. The standard therefore leaves room for complete flexibility in allocating the pay increase between wage and fringe benefits, and between fixed increases and cost-of-living adjustments. Formal collective bargaining agreements signed before the announcement of the anti-inflation program and (for nonunion employee groups) annual pay plans in operation by October 1, 1978, are not subject to the pay standard.

In determining compliance with the pay standard, employers' contributions that are required to maintain the existing level of health and pension benefits are distinguished from contributions made to improve the level of benefits. Increases above 7 percent in the costs of maintaining existing health benefits are not counted in judging compliance. Special provisions also apply to pension plans that pay specified benefits at retirement. Changes in employers' costs resulting from changes in funding methods, amortization periods, actuarial assumptions, and plan experience are not included as pay-rate changes, but changes in employers' costs resulting from plan amendments, changes in the benefit structure, or the effect of wage and salary changes on benefit levels are included. Further details on the application of the pay standard to various pay plans can be found in the regulations issued by the Council on Wage and Price Stability on December 28, 1978.

In the interest of equity and improved productivity, some exemptions from the pay standard are allowed. First, workers who earned an hourly wage below \$4.00 on October 1, 1978, are exempt from the standard. Second, wage increases in excess of the standard are acceptable if they are offset by explicit changes in work rules and practices that demonstrably improve productivity to a matching or greater degree. Third, wage increases above the standard are justifiable to preserve a historically close tandem relationship with another employee group. Finally, where several explicit and tightly defined criteria show that pay rate increases above the pay standard are necessary to attract or retain employees in a particular job category because of an acute labor shortage, the amount of the excess may be exempted from the standard.

Rates of price increase tend to vary considerably more from industry to industry than rates of wage increase. This occurs because rates of productivity growth and the relative importance of nonlabor costs differ across industries. Realistic standards must recognize this inherent variation and its significance as an allocational device in a market-oriented economy. At the same time, it is important to avoid a variable price standard based upon

a simple pass-through of costs, since such rules can weaken the incentive to improve productivity.

The Administration's approach to the deceleration of inflation avoids these pitfalls. The price standard requires that individual firms limit their cumulative price increases over the next year to one-half of a percentage point below the firm's average annual rate of price increase during 1976-77. Some industries had abnormally high or low rates of price increase during this base period. These extremes are taken into account by limiting the price increase for an individual firm to no more than 9.5 percent, and by regarding any increases of 1.5 percent or less as complying with the standard. If increases in hourly labor costs within a firm decelerate by more than one-half of a percentage point relative to the 1976-77 rate of increase, the deceleration of prices must be commensurately greater to be in compliance with the standard. Certain categories of goods and services, specified in the price standard regulations issued by the Council on Wage and Price Stability, are excluded from the calculation of a company's average price change.

A company that is unable to comply with the price deceleration standard because its average price change cannot be calculated, or because of uncontrollable price increases in the goods and services it buys, is asked to satisfy a two-part profit limitation. The company's profit margin during the program year should not exceed the average profit margin for 2 of the company's last 3 fiscal years prior to October 2, 1978. Besides this, however, program-year profit should not exceed base-year profit by more than 6.5 percent plus any positive percentage growth in physical volume from the base year to the program year.

Finally, a percentage margin standard is available to companies in the wholesale and retail trade and in food manufacturing and processing industries as an alternative to the price standard. Details on this alternative are provided in the regulations issued by the Council on Wage and Price Stability.

### *Real Wage Insurance*

One of the obstacles to the success of voluntary wage and price standards is fear on the part of each group of workers that their observance of the wage standard could lead to a loss of real income if others do not cooperate, or if uncontrollable events, such as a serious crop shortage, result in price increases. Faced with such uncertainty, and basing their price expectations on recent patterns of inflation, many workers might be reluctant to cooperate with the standards program. To improve the acceptability of the standards, the Administration is proposing to the Congress an innovative program of real wage insurance for those who observe them.

Under the real wage insurance proposal, employee groups that meet the 7 percent pay limitation would receive a tax credit if the consumer price index increased by more than 7 percent over the year. The rate of the tax

credit would be equal to the difference between the actual increase in the consumer price index and 7 percent, up to a limit of 3 percentage points (10 percent inflation). This rate will be applied to each employee's wages up to a maximum of \$20,000 per job. Employee groups that are exempt from the pay standard (low-wage workers and those under existing collective bargaining contracts) will qualify for real wage insurance if their average pay rate increase is 7 percent or less during the program year.

The most important factors determining the cost of the wage insurance program are the rate at which workers participate in it and the rate of inflation. Compliance with the standards by firms and employees will reduce labor costs, and price increases should move down correspondingly. But there are other, less predictable factors that influence the overall rate of inflation, such as changes in the prices of food and fuel, in exchange rates, and in productivity. The uncertainty surrounding the behavior of these factors means that the cost of the program itself is uncertain.

With reasonable assumptions concerning participation and the likely behavior of other economic factors influencing inflation, we can arrive at general estimates of the program's cost. Some 87 million workers are potentially eligible for the program, although not all are likely to qualify for the wage insurance. For example, low-wage workers and those covered by existing contracts are exempt from the pay standard. Given expected 1979 wage increases for these groups, most workers who are exempt from the pay standard are unlikely to qualify for real wage insurance. Estimates of the cost of the program thus depend in part on assumptions concerning the likely compliance of workers who are not exempt from the standard.

If three-fourths of those workers are in compliance, the real wage insurance program would result in a budget cost of approximately \$5 billion for each percentage point of inflation in excess of 7 percent. Lower compliance by nonexempt employee groups would raise the expected inflation rate but lower the number of workers eligible for the tax credit. In this sense the potential budgetary impact of the insurance program is self-limiting.

As noted above, the expected budgetary cost of the program will also depend importantly on productivity growth and the behavior of food and energy prices. Estimates of the budgetary impact, adjusted for the expected response of the consumer price index to the oil price decisions reached by the OPEC cartel in December 1978, appear in Table 18.

With three-fourths compliance by employee groups who are not exempt, the expected budgetary cost of real wage insurance would vary principally with productivity and food price developments, as shown in Table 18. With full compliance, the most likely payout would be zero, since price increases should be less than 7 percent under each combination of food price and productivity assumptions in the table. As a result, even without the incentive provided by real wage insurance, substantial compliance with the standards would yield a significant reduction of inflation and a gain in real wages.

TABLE 18.—*Estimated annual budgetary cost of real wage insurance proposal*

(Billions of dollars)

Assumed food price increase	Assumed productivity growth	
	0.6 percent	1.1 percent
8 percent.....	2.5	0
10 percent.....	4.5	2.0

<sup>1</sup> This is the estimate in the fiscal year 1980 budget and is based on the current forecast for food price increases and productivity growth.

Note.—Calculations assume three-fourths compliance by nonexempt employee groups.

Source: Council of Economic Advisers.

Real wage insurance is a novel use of incentives to foster wage and price restraint. The tax credits are not designed to compensate, on a straight dollar-and-cents calculation, those who might have received higher wage increases but chose to observe the standards. Even with real wage insurance in effect, observance of the standards by particular groups of employees requires a recognition of the national interest in individual wage and price decisions and an awareness of the long-run gains that everyone can enjoy if inflation is reduced. Real wage insurance offers to groups of employees not a cash "buy-out" of higher pay increases, but an important protection against the major risks associated with compliance.

Although the proposed program would rely on the tax system to provide refunds if inflation exceeds 7 percent in 1979, it is different in purpose, design, and effect from proposals to index the general revenue system in such a manner that the connection between inflation and tax revenues would be reduced or eliminated. The overriding purpose of the plan is to reduce inflation directly by inducing cooperation with the pay and price standards of the anti-inflation program. Tax indexation proposals, on the other hand, seek to insulate the tax payments of individuals and corporations from the effects of inflation, but they do not reduce inflation.

### *Sectoral Problems*

The pay and price standards are designed to be guides for decision-making agents who have discretionary power in wage and price determination. Even with widespread compliance, however, it will be necessary to supplement the standards with special programs tailored to unique inflationary problems in some sectors.

Prices of health care, for example, have generally outpaced overall inflation, and expenditures for such care constitute a steadily escalating share of our national output. Yet the health care industry is not one in which market forces can be expected to provide an adequate restraint on price increases. The Administration has taken measures to strengthen health planning and to encourage growth in Health Maintenance Organization programs, which embody incentives to promote cost consciousness. The Administration is also seeking a substantial deceleration in the growth of hospital charges,

which are the largest and fastest growing component of medical care costs, through voluntary standards for hospital cost increases. For 1979 the ceiling on such increases is 9.7 percent, which implies a deceleration of over 2 percentage points from current rates of hospital cost increases. The President will propose to the Congress a legislative initiative on hospital cost containment that would establish a hospital cost standard in law.

Professional workers in the health industry are also subject to the general standards for professional fees, which apply to companies providing professional services on a fee-for-service basis. A company will be in compliance with the standard if the average rate of change in its fees does not exceed 6.5 percent and if the increase in the fee for any single service does not exceed 9.5 percent.

Food price changes have accounted for a major part of the recent inflation and in general follow a more erratic year-to-year course than other prices. At the farm level, price changes are usually the result of weather conditions and other supply-side shocks beyond the control of individual farming units. The monitoring of these prices will therefore focus on overall market trends. Where price increases in particular commodity markets exceed the overall inflation rate and are not justified by changes in costs, administrative actions to expand supply will be considered.

At the retail level, individual firms in the food processing and distribution sectors will be expected to adhere to the price standards with respect to increases in margins. The Department of Agriculture and the Council on Wage and Price Stability will cooperate in a joint effort to monitor cost, price, and marketing margins. Efforts will be made to ensure that lower commodity prices at the farm level are quickly reflected in retail prices. Moreover, decisions on 1979 support and import levels have been made with careful attention to their impact on inflation.

## REGULATORY POLICY

Most of the regulatory activities of the Federal Government can be classified into two main groups. *Social regulation* seeks to control threats to the environment and to human health and safety that arise as an undesirable by-product in the production and use of goods and services. *Economic regulation* controls the prices, wages, conditions of entry, or other important economic characteristics of particular industries. While the Administration's efforts toward regulatory reform cover many areas, their essential aim is to minimize the costs and improve the effectiveness of social regulation and to reduce the scope and rigidity of economic regulation.

### *Economic Regulation*

The 1978 *Economic Report* discussed in some detail the current problems with economic regulatory programs, indicating that in many industries the regulatory structure established in the past is no longer suited to present economic conditions.

The President recognized this difficulty in the case of the airline industry, and the Congress agreed by initiating the first deregulation of a major industry by legislative action in recent history. Under the Airline Deregulation Act of 1978, entry and price regulation of domestic airlines will be phased out by 1982 and 1983 respectively. During the transition, the act provides much greater freedom and flexibility in entry and fares than was previously the regulatory norm. The new law strengthens the already substantial impetus to competitive forces that the industry was given last year by the Civil Aeronautics Board. The board's liberalizing actions on fares and entry produced markedly lower fares along with sharp increases in air travel, load factors, and airline earnings. The provisions of the new legislation should lower prices even more and broaden the variety of services to consumers.

In the coming year the Administration will support legislation that will extend the principles and benefits of airline deregulation to the surface transportation industry. The inefficiencies produced by price and entry regulation of the trucking industry are well known: empty return trips, restrictions on peak-offpeak pricing, anomalous commodity class rates, and lack of price competition. For example, in New Jersey and California, where such restrictions do not apply, trucking rates for unregulated intrastate traffic undercut comparable interstate rates by 10 to 15 percent.

The current problems with rail regulation are different. Rates of return for the rail industry fall below the all-industry average, and the number of bankruptcies in the industry has historically been above normal. At the same time, the principal rationale for government regulation—protection from monopoly—has been eroded by competition from trucks and shifts in population. The financial difficulties thus created have been compounded by Interstate Commerce Commission regulation that tends to slow or prevent rail abandonments and to inhibit railroads from reducing rates to meet competition from trucks and water carriers. The adverse effects of competition from other means of transportation and the Interstate Commerce Commission's regulation of railroad earnings have been offset up to now by substantial Federal subsidies. Unless regulation of the rail industry is relaxed, the inefficiencies and necessary subsidies are likely to continue to grow.

### *Social Regulation*

In recent years social regulation has greatly extended its scope and increased its complexity. Much of this heightened activity has been in response to growing public concern about an ever-widening range of environmental, health, and safety problems. It has also been spurred by our increasing ability to detect potentially harmful health effects from chemicals or chemical reactions. Controlling the harmful side effects of economic activity produces substantial benefits to society. But it also imposes costs, and these have mounted significantly as the scope and stringency of regulation have increased.

Our measurement of regulatory costs and benefits is highly imperfect. In addition, measures of the benefits from regulatory provisions—such as improvements in the environment and in health and safety—are generally excluded from the current national income and product accounts. The resources devoted to producing those benefits are not available for producing other outputs. As a society, we accept a tradeoff of lower *measured* output for increases in *unmeasured* output in the form of general environmental quality.

Once incurred, the costs of regulatory actions enter into the wage- and price-setting mechanisms of the economy. Most of the costs of regulatory action show up not as governmental budget expenditures, but as increased costs to industry. Acceptance of higher prices relative to wages and other money incomes is the way in which society pays for the benefits of social regulation. In fact, however, our economic institutions and measures of prices do not distinguish between these sources of price increases and others. Individuals and groups try to escape paying the costs of regulation by increasing wages and other forms of income to match the higher prices. The result is an additional round of price increases. But the costs of regulation cannot be avoided, and widespread attempts to do so simply add to inflation.

Both the large impact of government regulation, measured by its costs and benefits, and the way in which the costs add to inflation, highlight the responsibility of all branches of government to make sure that regulations are both necessary and efficiently designed. This Administration has undertaken a number of steps toward that goal.

### *Present Efforts*

Effectively managing the regulatory functions of government entails two tasks. The first is to improve the design of individual regulations. They should be confined to situations where they are necessary; they should set standards that will meet statutory objectives without being needlessly stringent; and they should minimize the costs of meeting those standards. The second task is to view the regulatory process comprehensively to judge how all the regulations being issued will affect costs and prices, the use of national resources, and the economic situation of particular industries and sectors.

The effort to improve the cost effectiveness of individual regulations began in 1974 with the requirement that regulatory agencies of the executive branch analyze the costs and benefits of major new regulatory proposals, as part of the process of preparing regulations. In 1978 the President broadened this requirement and also took steps to ensure that these analyses were reviewed not only by the regulatory agencies, but by the other economic agencies of the executive branch as well. The Regulatory Analysis Review Group was created, with representatives from both regulatory and economic agencies, to review several of the most important regulatory proposals each year.

During its first year, the review group submitted for the public record analyses of five major regulatory proposals having substantial economic effects: the acrylonitrile standard and generic carcinogen policy of the Occupational Safety and Health Administration, the ozone standard proposed by the Environmental Protection Agency, the Department of Transportation's regulation to provide equal access for the handicapped, and the Department of the Interior's surface mining regulations. Analyses of the Environmental Protection Agency's new source performance standards for steam electric plants and the Department of Energy's proposed coal conversion regulations for electric utilities and general industry were in progress at year-end.

The task of ensuring that regulations do not impose undue costs extends beyond the analysis of newly proposed regulations. On March 23, 1978, the President issued an executive order requiring agencies to establish a "sunset" procedure for regulations previously issued by the regulatory agencies of the executive branch. Under this executive order, each agency must periodically review its existing regulations with a view to eliminating those that are unnecessary and improving and simplifying others. Agencies must publish a semiannual agenda that sets forth the list of regulations to be reviewed, including at least one regulation whose economic impact is substantial.

Effective management of the regulatory process must go beyond measures dealing with individual regulations. Although the scope of social regulations has been expanding rapidly for over a decade, the Federal Government has had no process by which the combined social and economic effects of its regulatory actions could be assessed. Because of the complexity of the problems involved, development of analytical techniques and procedures to make such overall assessments and to utilize them constructively will have to occur gradually. But in 1978 the Administration took several steps in this direction.

In March 1978 the President ordered the executive branch agencies to publish semiannual agendas of forthcoming significant regulatory proposals and actions. In October he created a Regulatory Council charged with improving and using those agendas to create a government-wide calendar of scheduled regulations. The council is composed of all executive departments and agencies with regulatory responsibility as well as a large number of independent regulatory agencies. The calendar itself will present, for the first time, not only a timetable of new regulatory proposals and issuances, but preliminary data on their objectives and potential costs. As procedures, data bases, and analyses are improved, the calendar can provide both the regulatory agencies and the Executive Office of the President with a body of information for use in examining and assessing the effects of regulations and improving overall regulatory management. Using the information and analyses developed in producing the calendar, the Regulatory Council itself can address problems of coordination and thus eliminate conflicts and dupli-



cation. In addition, it will begin to examine the problems that have arisen in particular industries or sectors from the combined effects of regulations imposed by different agencies.

The measures to improve the regulatory process outlined above are already making major contributions, not only increasing the cost effectiveness of individual regulations but improving the overall coordination and integration of regulatory programs. Additional progress will depend, however, on developing satisfactory approaches to a number of other complex and difficult problems.

### *Balancing Costs Against Benefits*

The statutes authorizing the various social regulatory programs vary widely in the degree that they allow the regulatory agencies to balance benefits against costs in setting regulatory standards. Some statutes dealing with the control of damaging health effects from chemicals or other substances appear to be based on the proposition that effects are harmful above some threshold of concentration but not below it. These statutes, in effect, require the regulatory agency to set standards at or just below the presumed threshold without regard to costs. In fact, scientists are increasingly questioning the existence of the presumed thresholds; many believe that health hazards diminish continuously down to zero concentration. Since in many cases flatly prohibiting the substance is far too costly or disruptive, any standards that set the level of concentration above zero must implicitly take into account a balancing of economic and social costs against the prevention of health risks.

Some regulations are issued under statutes which do not mention balancing economic costs against benefits, but do require that the regulatory standard be "feasible." Still other statutes not only permit but require economic costs to be taken into account. And finally there are cases where regulatory costs are ignored. For example, the "Delaney Amendment" to the Food, Drug, and Cosmetic Act, flatly bans substances used as food additives if they have been found carcinogenic in animal tests, regardless of their potency as carcinogens or the economic costs that such a ban would impose.

There is obviously no all-purpose formula for reaching sound decisions about the stringency of environmental health and safety standards, given the need to take into account both the prevention of health risks and the costs of such prevention. Uncertainty is always present in determining the specific nature and degree of the health risks from exposure to various substances, though the uncertainties in some cases are substantially greater than in others. The same is true of costs. In each regulation, a decision must be made about how to deal with these uncertainties. Regulators sometimes encounter situations where exposure to health risks is very high but occurs among a small number of people; at other times one finds very low exposure among a large number of people. Although circumstances thus vary considerably from case to case, a generally consistent approach to these and similar problems by the different regulatory agencies would do much to make the needed

regulations better and more cost effective. Developing such an approach will require coordination among regulatory agencies as well as a careful analysis and review of the statutory background behind the different regulatory programs.

### *Overall Management of the Regulatory Process*

Despite many differences, social regulation shares some of the characteristics of the budgetary programs of the Federal Government. Both are designed to provide economic and social benefits: such things as educational services, highways and dams in the case of the budget; and environmental improvements and health protection in the case of social regulation. Both use national resources that could be diverted to other uses. For the budget the resource costs show up as Federal expenditures, which are paid for by taxes. The costs of regulations are less visible, since they are imposed on industry and paid for by consumers in the form of higher prices.

The Nation has long had a set of procedures to consider the Federal budget as a whole: Costs of particular programs and of the total budget are estimated in order to make the best possible qualitative judgments about benefits, and priorities among programs are established. Regulatory programs have no such established procedures, and as a consequence there is no good estimate of the overall cost of regulation. The difficulties of developing such a process are formidable. Since program costs in the budget represent money actually spent by the government, there is a firm basis for finding out how much programs have actually cost, however difficult it is to estimate future costs.

Most regulatory costs, however, are not directly borne by the Federal Government but by private parties. Moreover, some of these costs, while very real, can only be roughly estimated even after they have actually occurred. What, for example, are the costs of requiring a firm to locate at point M instead of point N, or of requiring that chemical Z no longer be used as a pesticide? Such estimates are necessarily subject to dispute. And, not unnaturally, people who place a high value on the benefits of the particular regulation tend to arrive at low estimates, while those who must pay the costs tend to make high estimates.

In addition, social regulation is carried out under a large number of statutes, many of which state quite specifically the objectives to be reached, the deadlines for reaching them, and the factors that must be considered in setting regulatory standards. The executive branch has much less flexibility in asserting priorities and deferring or speeding up the issuance of regulations on the basis of economic conditions and social needs than in managing many budgetary programs.

More generally, the relationship between the Congress and the executive branch in the case of budget programs is quite different from that in the regulatory process. Although the President has flexibility in determining the priorities among budget programs and the size of the recommended expendi-

tures each year, the Congress must pass on the appropriations to carry out those programs. Once a regulatory statute is passed, the executive branch agencies do not have to come back to the Congress each year, and they may issue regulations that confer important benefits and impose large costs without congressional approval. On the other hand, the statutes under which most regulation occurs tend to be extremely specific, often limiting the ability of the President and the heads of executive agencies to determine priorities and otherwise balance costs against benefits among and within the various regulatory agencies.

For all of these reasons the development of procedures and techniques to improve the overall management of the Federal regulatory process, to achieve social gains at minimum cost, and to reduce the inflationary consequences of regulatory activities will have to be a long and carefully executed process. It should proceed step by step and involve both the Congress and the executive branch. Several important gains have already been made. According to polls, the public continues to believe that improvements in the environment, in health, and in safety are an important national goal. But recently this sentiment has been accompanied by a growing recognition of the very large costs and the inflationary effects of regulation. The effort to improve both the cost effectiveness of individual regulations and the overall management of the regulatory process will continue to be a top priority of this Administration.

## CHAPTER 3

# The Economic Outlook

**I**N 1979 THE ECONOMY will enter its fifth consecutive year of economic growth, making this the second longest recovery in postwar history. As a recovery matures, sustaining a satisfactory pace of expansion becomes more difficult. Housing, in which starts have more than doubled since early 1975, is only one example. Given current demographic trends, a high level of starts is sustainable, but housing could not be expected to add much to growth even under the most favorable circumstances in financial markets. The saving rate has fallen to very low levels by historical standards, and the rise of consumption may consequently drop behind the growth of disposable income. In addition, business fixed investment in real terms has already regained its prerecession ratio to gross national product (GNP), and hence a slower growth of business capital expenditures is likely. All these factors will combine to check the pace of economic expansion next year.

As Chapter 2 makes clear, a reduction in economic growth from the rate of the last 2 years is needed both because idle labor and capital resources have been cut considerably and because inflation has accelerated. The task for aggregate demand policies will be to provide a climate in which inflationary pressures can begin moderating, but to avoid restraint so severe as to generate a recession.

### THE ECONOMY IN 1979 AND 1980

Real growth is projected to average about  $2\frac{1}{4}$  percent for the 4 quarters of 1979, a lower growth rate than in 1978 but positive throughout the year. If the anti-inflation program succeeds, as is anticipated, the rate of growth of consumer prices should slow to less than  $7\frac{1}{2}$  percent over the 4 quarters of 1979, and to an annual rate of slightly under 7 percent by the end of the year. According to initial indications, business and labor groups are taking the President's voluntary standards seriously, but success cannot yet be assured. Widespread compliance with the anti-inflation program is essential to maintenance of a strong and healthy economy.

In 1980, real growth is expected to rise to a rate of  $3\frac{1}{4}$  percent over the 4 quarters, largely as a result of an upturn in housing, while inflation will continue to slow, dropping below  $6\frac{1}{2}$  percent. Here also success in the fight against inflation will contribute materially to sustaining economic growth by reducing the pressures on credit markets and strengthening confidence among consumers and businesses.

Employment is expected to rise by about 2 million a year in both 1979 and 1980. Productivity is expected to grow at about the same rate in 1979 as in 1978, with some improvement in 1980. It is likely to remain well below its trend rate of increase of about  $1\frac{1}{2}$  percent. With the labor force expected to continue growing at a rate above the long-term trend and real growth slowing, the unemployment rate is likely to increase to  $6\frac{1}{4}$  percent by the end of 1979 and remain near that level in 1980.

#### FISCAL POLICY FOR 1979 AND 1980

The course of fiscal policy that is appropriate for 1979 and 1980 was described generally in Chapter 2. In specific terms, Federal outlays are projected to be \$493 billion in fiscal 1979, an increase of over 9 percent from the previous year. In fiscal 1980 the President's budget calls for outlays of \$532 billion, an increase of less than 8 percent. This 1980 figure includes a small real increase in defense spending, a constant level of real spending for domestic programs, and restraint in or deferrals of new spending initiatives. Because existing legislation mandates continued real growth in some programs, such as health care and social security, zero real growth in domestic spending can be achieved only through reductions in real outlays for a number of other programs. Holding outlays to \$532 billion will require strenuous efforts by government agencies as well as cooperation from the Congress.

Over a year ago forecasts of economic activity suggested that the current economic expansion would slow too much unless the burden of rising taxes was eased. Inflation and economic growth were pushing people into higher tax brackets, and substantial increases in social security taxes had been legislated for 1979 and later years. To prevent too great a check on the expansion, these tax increases would have to be offset by a tax cut. A tax cut was also needed to encourage the investment that would provide the productive capacity for future economic growth and improve the prospects for greater growth in productivity.

Last January, the President therefore proposed a tax cut of \$25 billion to take effect October 1, 1978. Since inflation was higher than expected, this was scaled back in May to a cut of \$20 billion to take effect January 1, 1979. The size of the tax bill passed by the Congress is close to this request with a stimulus of \$18.9 billion in 1979. The bill contains a \$14.1-billion cut in personal taxes, a \$6.5-billion cut in business taxes, and a \$0.7-billion increase in outlays for the earned income tax credit, but allows \$2.5 billion in jobs credits to expire.

The Revenue Act of 1978 achieves cuts in individual income taxes largely by lowering the schedule of tax rates. It replaces the general tax credit, which was due to expire at the end of 1978, with an increase in the personal exemption from \$750 to \$1,000. The legislation also expands the earned income tax credit for the working poor and lowers the tax rates on capital gains. Its provisions include some of the tax reform proposals made by the President in his tax package.

In general the Revenue Act of 1978 will have relatively little effect on the after-tax distribution of income. Most households will receive a cut in tax liability of about 7 percent. Households with incomes above \$200,000 and those with incomes below \$10,000 will receive larger cuts. These distributional effects contrast sharply with those of the President's tax proposal, which called for larger tax cuts for those with incomes below \$30,000 and smaller reductions for those with incomes above \$30,000. In its effects the 1978 legislation will also differ markedly from income tax legislation enacted between 1964 and 1978, which increased the progressivity of the tax system.

The business tax cuts in the 1978 Revenue Act are attained primarily by lowering corporate income tax rates. The maximum rate is dropped from 48 to 46 percent, and a new tax schedule, with more income brackets and lower tax rates, is introduced. The tax rate on corporate income between \$50,000 and \$75,000 is cut the most, from 48 percent to 30 percent. The legislation also extends and expands the investment tax credit, providing a \$500-million tax cut for business in 1979. Both of these cuts were in the package proposed by the President. Capital gains tax rates were also lowered in the 1978 legislation, reducing revenues by nearly \$2 billion in 1979.

#### MONETARY POLICY

The combined effects of rising inflation and efforts by the Federal Reserve to hold down the growth of the monetary aggregates carried interest rates last year to near record levels. More restrained growth of the monetary and credit aggregates is an appropriate complement to the other parts of the anti-inflation program. It will help to moderate the rate of economic expansion. Additionally, higher U.S. interest rates make dollar-denominated assets more attractive than those denominated in foreign currencies and thus contribute to sustaining the value of the dollar in exchange markets.

Many private forecasters anticipate a recession in 1979, partly because they expect that current high interest rates will substantially depress housing and business investment. High interest rates are likely to dampen aggregate demand in 1979, but to a lesser degree than one would expect from past experience because of institutional changes in financial markets. Our judgment that economic growth in 1979 will be sustained reasonably well and that a recession will be avoided depends in part on our analysis of why the effect of monetary restraint is different from what it used to be.

During most of the postwar period, intervals of substantial monetary restraint were followed by recessions. Curbing aggregate demand through the use of monetary restraint disrupted financial markets because the depository institutions experienced a large outflow of deposits when interest rates on market instruments rose above the rates these institutions were permitted to pay to attract consumer savings. This disintermediation sharply reduced the availability of credit for those borrowers most dependent on commercial banks and thrift institutions for credit. These included small businesses and some units of State and local government, but the sector most severely hit was the mortgage market. As mortgage credit became not merely more expensive but unavailable, residential construction dropped precipitously, and this sharp drop was often important in tipping the entire economy into recession.

Table 19 shows periods of such cyclical declines in acquisitions of mortgages by financial institutions and the associated declines in single-family and multifamily housing starts. In the 1965-66 period the sharp decline in residential construction contributed to a slowing of overall economic growth, but the expansion of Federal outlays was sufficiently strong to maintain economic expansion. The 1959-60, 1969-70, and 1972-74 episodes were all followed by recessions. Of course, factors other than the decline in housing were also involved in each of these recessions, but the speed with which the decline in housing occurred had a destabilizing effect for which it was difficult to compensate elsewhere in the economy.

TABLE 19.—*Cyclical contractions in mortgage credit and housing starts, 1959-74*

[Percent change at seasonally adjusted annual rate, except as noted]

Period	Interest rate <sup>1</sup>	Mortgage acquisitions <sup>2</sup>	Housing starts	
			Single-family	Multifamily
1959 II to 1960 II	1.27	-12.7	-17.3	-16.4
1965 III to 1966 IV	1.41	-28.9	-28.5	-36.1
1969 I to 1970 I	1.35	-28.2	-23.1	-30.1
1972 IV to 1974 IV	3.36	-24.8	-22.9	-53.2

<sup>1</sup> Percentage point change in the quarterly average market yield on 6-month Treasury bills from the beginning of the period to the peak reached during the period.

<sup>2</sup> Acquisitions by financial institutions.

Sources: Department of Commerce (Bureau of the Census), Board of Governors of the Federal Reserve System, and Federal Home Loan Bank Board.

The first half of last year was somewhat like earlier periods of credit restraint. Short-term market interest rates rose well above rates payable on deposits. As shown in Table 20, deposit inflows at thrift institutions slowed, and so did their mortgage lending. In the second half of the year, however, deposits again began to grow rapidly.

TABLE 20.—*Growth in deposits, 1977-78*[Percent change, seasonally adjusted annual rate <sup>1</sup>]

Type of deposit	1977				1978			
	I	II	III	IV	I	II	III	IV <sup>2</sup>
Commercial banks, total.....	9.5	8.7	9.8	12.1	10.0	10.4	10.5	7.7
Demand.....	7.6	7.5	8.9	5.5	3.9	12.6	9.2	-3.1
Passbook.....	17.3	5.6	11.3	1.5	2.6	1.3	4.6	-6.9
Other time.....	8.4	13.1	11.3	14.2	12.0	11.9	18.1	20.4
Large certificates of deposit (CDs).....	-3.2	7.3	3.2	81.0	50.8	25.0	6.6	47.0
Nonbank thrift institutions, total.....	14.0	12.5	17.7	12.8	8.1	8.2	14.6	11.6
Savings and loan associations.....	20.9	14.8	15.4	10.7	13.3	10.0	12.0	-----
Passbook.....	13.8	8.4	8.5	3.6	7.3	-4.3	-6.9	-----
Other.....	25.8	19.3	20.0	15.4	17.1	19.3	24.0	-----

<sup>1</sup> Changes are measured from end of quarter to end of quarter.<sup>2</sup> Preliminary.

Sources: Board of Governors of the Federal Reserve System and Federal Savings and Loan Insurance Corporation.

As discussed in Chapter 1, the principal reason for this higher growth was the new regulation that permitted the issuance of money market certificates beginning last June. This change followed upon similar, but much smaller, steps taken in 1970 and 1973. In those instances interest ceilings were raised on longer-term certificates of deposit, thus reducing somewhat the vulnerability of thrift institutions to deposit outflows. (Passbook and shorter-term certificate ceilings were also raised slightly in 1970 and 1973.)

Other less obvious institutional changes have also modified the response of the economy to credit restraint. One of these is the expansion of secondary mortgage market activity. The Federal Home Loan Mortgage Corporation, established in 1970, issues its own mortgage-backed securities and purchases mortgages from the thrift institutions. The Government National Mortgage Association has developed a procedure whereby it guarantees securities that are issued by private institutions and backed by pools of mortgages insured by the Federal Housing Administration or guaranteed by the Veterans Administration. These securities have been purchased by a broad range of investors, many of whom were not previously in the mortgage market. Some thrift institutions have also begun issuing their own bonds, for which mortgages serve as collateral.

Institutional changes have also occurred in other financial markets. Commercial banks no longer depend primarily on liquidating U.S. Government securities to obtain funds for business lending, as they had done through the early part of the postwar period. The advent of liability management (exemplified by the issuance of negotiable certificates of deposit and the use of nondeposit sources of funds) has enabled most banks to obtain the funds they want for lending, provided they are willing to pay going rates of interest. Moreover, large firms can increasingly shift their borrowing between commercial banks and open market commercial paper, and between foreign and domestic sources, in response to differences in the cost and availability of funds. Their direct access to credit markets makes them less dependent on intermediation by institutional lenders. The expan-



sion of trade credit provides a mechanism through which large firms extend this benefit to smaller customers and suppliers.

The result of these institutional changes has been to smooth the response of the economy to increased restraint in financial markets. In place of sharp changes in availability of credit, there is now a more gradual response of credit users to changes in the cost of credit. Measured application of monetary restraint has become more feasible. The degree of restraint required to achieve the desired growth in private demand is difficult to judge, however, because the response of the private sector is likely to occur more slowly and to be diffused more widely than in the past. Moreover, the indicators showing the degree of restraint have changed, and experience in implementing monetary policy under present circumstances will come only gradually.

Over the near future, nominal interest rates are likely to remain relatively high by historical standards. It will take time to reduce the rate of inflation and the inflation premiums contained in interest rates. As inflation recedes, the maintenance of a restrained monetary policy will be consistent with a decline in nominal interest rates.

### THE ECONOMIC FORECAST

The economy is entering 1979 with substantial momentum, and economic expansion will be bolstered by the recently enacted tax bill, which will help to sustain consumer expenditures during the first half of the year. Later in the year, as the effect of the tax cut wears off, a slower expansion of consumer purchases is foreseen. Partly as a response to current high interest rates, housing starts are expected to decline and the growth of business fixed investment to diminish during the year (Table 21).

TABLE 21.—*Economic outlook for 1979*

Item	1978 <sup>1</sup>	Forecast range 1979
<b>Growth rates, fourth quarter to fourth quarter (percent):</b>		
Real gross national product.....	4.3	2 to 2½
Personal consumption expenditures.....	3.8	1¾ to 2¼
Nonresidential fixed investment.....	8.3	4 to 4½
Residential investment.....	-.8	-8½ to -9½
Federal purchases.....	-.3	¾ to 1¼
State and local purchases.....	3.5	1¾ to 2¼
GNP implicit price deflator.....	8.3	7¼ to 7½
Compensation per hour <sup>2</sup> .....	9.8	8¼ to 8¾
Output per hour <sup>2</sup> .....	.5	¼ to ¾
<b>Level, fourth quarter: <sup>3</sup></b>		
Unemployment rate (percent).....	5.8	6 to 6½
Housing starts (millions of units) <sup>4</sup> .....	2.1	1½ to 1¾

<sup>1</sup> Preliminary.

<sup>2</sup> Private business sector; all persons.

<sup>3</sup> Seasonally adjusted.

<sup>4</sup> Annual rate.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

Growth is likely to be stronger in the first half of the year than in the second half. Housing starts are expected to bottom out during the fourth quarter of 1979 and begin to move up in 1980 as pressures in money and credit markets ease with the decline in the rate of inflation. The upturn in housing is a principal reason for the anticipated increase in the rate of economic growth in 1980.

The rate of increase of the GNP deflator is expected to decline from 8.3 percent in 1978 to slightly under 7½ percent during the 4 quarters of 1979; a further drop to just under 6½ percent is probable during 1980, partly as a result of a tightening of the pay and price standards. Inflation is likely to remain high during the first half of 1979, however, because of the minimum wage increase in January, the delayed effects on import prices of the decline in the value of the dollar, the oil price increases by the Organization of Petroleum Exporting Countries (OPEC), and the continued rise in food prices. As the year proceeds, these factors will put less upward pressure on prices, and the effects of the President's anti-inflation program should be increasingly felt. Consequently the increase in consumer prices is expected to fall to an annual rate of below 7 percent by late in the year.

### *Consumption*

Consumption has been a major source of strength in the current expansion. Consumers have increased their spending by more than the rise in their after-tax incomes, reducing the saving rate from almost 8 percent in 1975 to under 5 percent in the last quarter of 1978. Some of the possible reasons for this low saving rate were discussed in more detail in Chapter 1.

In 1979 the saving rate is expected to rise moderately but remain well below its 6 percent average of the 1950s and 1960s. Much of this increase will reflect less intensive use of consumer credit, which expanded sharply during 1978. Automobile sales in particular are not likely to rise further in 1979 and may fall slightly from the high level of the 1978 model year. Purchases of furniture and household equipment may also decline as a result of the expected reduction in residential construction.

Continued growth in purchases of nondurables and services should allow personal consumption expenditures to rise in real terms at a rate of about 2 percent, close to the projected rate of growth of real GNP but below the rate of increase in real disposable income.

As inflation abates during 1979, consumer confidence in the economy should improve and thus strengthen consumer markets in 1980. The saving rate is consequently expected to decline in 1980. During that year, however, rising effective tax rates will tend to slow the growth of disposable income; the increase in consumer spending is thus likely to be somewhat less than the rise in real GNP.

## *Business Fixed Investment*

Business fixed investment in 1972 dollars should grow at a rate of about 4 percent during 1979, measured from fourth quarter to fourth quarter. This estimate represents a slowdown from the 8.3 percent increase for 1978, but the increase is still above the expected growth in real GNP. Investment is foreseen to remain relatively strong in the first half of 1979 but to slow later in the year with the rest of the economy. Moderate improvement from the less rapid rate of the second half of 1979 is expected during the course of 1980.

Indicators of the probable pace of investment next year are mixed. Higher rates of capacity utilization are encouraging new and replacement investment, and contracts and orders for plant and equipment are rising rapidly. Orders for nondefense capital goods in October and November were 12½ percent above their third quarter level. Unfilled orders for nondefense capital goods at the end of November stood 6 percent above their September level.

Moreover the Revenue Act of 1978 should provide some encouragement for business fixed investment. Profits seem likely to remain relatively high throughout the next year, falling only marginally from their current share of GNP. The confidence of investors with regard to future inflation should improve as the Administration's anti-inflation initiatives take hold.

Not all the forces influencing business investment decisions are positive. Expectations of a slowdown in economic activity next year are widespread and may already be holding back investment plans. Nominal interest rates have risen to very high levels, and their effects will be felt increasingly as 1979 progresses. Some reduction in investment in motor vehicles may also follow the recent large purchases of cars and trucks by businesses. This drop in sales may restrain discretionary capital spending by the auto industry, although the industry will still have to maintain a high level of capital outlays to meet the requirements of government regulations.

The latest Commerce Department survey of business investment intentions found that businesses are planning to increase their outlays for new plant and equipment in 1979 by 11.2 percent in current dollars. This compares with an actual rise of 12.7 percent in 1978. If capital goods prices rise in 1979 by the 8 percent figure expected by survey respondents, the real increase in outlays for plant and equipment in 1979, measured on a year-over-year basis, would be about 3 percent. Measured from fourth quarter to fourth quarter, the increase would be less.

In the past 3 years total outlays for business fixed investment in the national income and product accounts have exceeded the amount included in the plant and equipment survey by a large and widening margin, even after allowance has been made for conceptual differences in coverage of the two series. This margin may well persist in 1979. The results of the Department of Commerce survey thus seem consistent with our forecast, which calls for a moderate slowdown this year in this key element of aggregate demand.

The number of housing starts and the real volume of residential construction are likely to decline in 1979 from the high levels of last year, in large part because prospective home buyers will be deterred by the high level of mortgage interest rates. In areas where mortgage rates are limited by usury ceilings, some constraints have developed on the availability of credit. This should not greatly affect the national total of housing starts, but it may restrain housing sales and residential construction in some parts of the country. By the fourth quarter of 1979 housing starts are expected to fall to an annual rate of around  $1\frac{3}{4}$  million or somewhat less, a decline that is significant but less steep than in most postwar periods of tight money.

The prospects for housing this year will depend importantly on whether thrift institutions continue to attract funds through money market certificates and to make the proceeds available to potential home buyers. Margins between mortgage yields and the cost of issuing the certificates have narrowed. Some thrift institutions may therefore pay less than the maximum permissible yield on money market certificates and in other ways market them less aggressively. Moreover, there may be some diversion of funds from mortgages to higher-yielding short-term liquid assets. The potential for strengthening longer-term earnings by issuing money market certificates and acquiring long-term, high-yield mortgages in such a period is nonetheless attractive.

The effect of these new money market certificates in reducing current earnings of thrift institutions is a matter of concern. However, the certificates still represent a small proportion of total deposits (less than 10 percent at year-end). Moreover, at least half of the money going into the money market certificates appears to be coming from outside the thrift institutions, and some of the remainder is being converted from high-yielding certificates rather than from low-yielding passbook accounts. In view of the high level of earnings on the mortgage portfolio—about  $8\frac{1}{2}$  percent in the second half of last year—thrift institutions in general are in a favorable position to cope with higher deposit costs for a limited time, although the earnings and cost positions of individual institutions undoubtedly vary considerably.

Given reasonable prospects for the availability of mortgage credit, the primary determinant of the volume of housing starts will be the response of home buyers and builders to the higher level of mortgage interest rates. The rate on new mortgage commitments had risen sharply to nearly 11 percent by the end of last year.

Virtually all of the projected decline in housing starts is likely to be in single-family units. Following last year's upturn, construction of multifamily units will probably level out in 1979 in response to the high costs for building loans, which often have to be carried a long time. But the decline in the rental vacancy rate from a peak of 6.2 percent in 1974 to a historically

low level of 5.0 percent late last year implies a strong demand that should sustain multifamily construction.

The demand for single-family homes will also be supported by demographic factors. Between 1973 and 1978 the number of people in the 25-29 age group grew by 16 percent, and the 30-34 group grew 22 percent. By 1983, population in these two age groups is expected to rise nearly 14 percent, somewhat below the rate of the last 5 years but far above the rates prevailing before 1970. In fact the population in this age group will grow more in the next 5 years than it did in the 15 years up to 1970. The largest number of first-time home buyers is in the 25-34 age bracket. More than half of the married couples aged 25 to 29 and nearly three-fourths of those between 30 and 34 own their own homes. Although the proportion of married couples in the total number of U.S. households has been declining, this change has been offset by the rise in homeownership among single persons.

Given the favorable demographic trends and low vacancy rates, it is quite likely that housing starts will begin to rise as inflation and nominal interest rates ease late next year. The forecast anticipates a rise in housing starts to about 1.9 million units by the fourth quarter of 1980. Residential construction is expected to add nearly as much to real GNP growth in 1980 as it subtracted in 1979. This projected turnaround in housing activity is the principal reason for expecting somewhat stronger economic growth in 1980.

### *Inventories*

Businesses throughout this recovery have pursued a cautious policy on inventory accumulation, as noted in Chapter 1. Ratios of inventories to sales have been kept relatively low for this stage of the recovery, and there are no major inventory imbalances that would depress economic activity this year. Since growth in final sales is expected to moderate in 1979, however, the rate of inventory investment may decline slightly if businesses continue to pursue their conservative inventory policies, as seems likely. Heightened inventory accumulation may occur in 1980 as final sales again become stronger.

### *Net Exports*

During 1978, for the first time in this recovery, the foreign sector provided some support to the expansion of GNP. The volume of exports rose, and the growth of import volumes slowed from its rapid pace at the beginning of the year. The foreign sector should continue to contribute to growth in 1979.

In many foreign countries, growth of domestic demand began to pick up during the course of 1978, and this movement should increase somewhat more this year, chiefly because of a shift toward more expansionary fiscal policies in Germany and Japan in late 1978. More rapid growth of foreign demand will help to raise demands for U.S. exports. At the same time, the

deceleration of growth in the United States is acting to reduce the growth of import volumes. In 1979, for the first time since 1975, growth rates in the major foreign countries are likely, on average, to exceed growth in the United States.

The marked depreciation of the dollar from September 1977 through October 1978, which has been only partially reversed since then, will also help to improve our net exports in 1979. Since trade volumes adjust only slowly to changes in relative prices, the principal effects of the dollar depreciation on imports and exports are not yet evident.

U.S. exports tend to respond more strongly to relative price shifts than imports do, but with longer lags. Exports of nonagricultural merchandise in 1972 dollars are expected to grow by 7 to 10 percent in 1979; agricultural exports, on the other hand, are not likely to increase from current high levels. Slower economic growth in 1979 and last year's depreciation of the dollar should limit the rise in the volume of non-oil imports this year. Despite an expected rise in the volume of oil imports, the merchandise trade balance should improve in 1979.

An important development in the structure of our foreign balance over recent years has been a marked surplus in net exports of services, especially fees, royalties, and earnings of American enterprises abroad. In the early years of this decade the United States was near balance on services, but in 1977 the service component of the current account showed a surplus of \$16 billion, and the surplus rose to an annual rate of \$18 billion in the first 3 quarters of 1978. In the near future this trend should continue, since the comparative advantage of a mature industrial country like the United States will increasingly lie in exporting capital and technology.

### *Government Demand*

Purchases of goods and services by both the Federal and the State and local sector will rise in 1979 and 1980, but the amount of growth will be relatively small in real terms.

The President's budget calls for Federal outlays of \$493 billion in fiscal 1979 and \$532 billion in the next fiscal year. Purchases of goods and services, comprising roughly one-third of these expenditures, are concentrated in defense outlays, where Federal expenditures are projected to rise in real terms. Total real Federal purchases are expected to increase 1 percent during 1979 and to fall slightly during 1980. The 1979 increase follows a small decline in real Federal purchases during 1978.

Although State and local purchases will continue to grow in real terms during 1979 and 1980, two recent developments indicate a slowing in the rate of increase from the 3½ percent rate of 1978. First, as Chapter 1 noted, sentiment among voters appears to favor limiting the growth of State and local taxes and expenditures, as evidenced by the passage of Proposition 13

in California and successful budget-cutting referenda in eight other States in 1978. Second, Federal aid to State and local governments, which had been growing rapidly, will level off over the next 2 years.

These developments suggest that the rate of growth in real State and local purchases may moderate to about a 1½ to 2 percent annual rate over the next 2 years. The operating balance of the State and local sector, which was in surplus by about \$6.6 billion in 1978, is expected to shift to a small deficit in 1979 and 1980.

### *Labor Force and Employment*

Growth in the labor force and in employment cannot be expected to continue at the exceptionally rapid rates of the past 3 years. The slower rate of real economic growth foreseen for 1979 and 1980 and trends in the age structure of the population make it reasonable to expect growth rates for both labor force and employment to decline toward their long-term trend.

The civilian labor force has grown at an annual rate of about 2¾ percent over the past 3 years, up from an average around 2¼ percent in the first 5 years of the decade. This recent pace is much more rapid than the average annual growth of 1.7 percent during the past 30 years. There have been two principal reasons for the relatively high growth of the labor force lately. The number of persons between the ages of 16 and 24, the normal age for entering the labor force, is large because of the peak birth rates in the late 1950s; and a higher proportion of women and teenagers have joined the labor force. Reductions in the size of the Armed Forces were also a factor in the earlier part of the decade. In the past 3 years the labor force participation rate has gone up a full 2 percentage points. The rapid expansion of employment opportunities during this period has undoubtedly had an important bearing on this striking increase.

In 1979 and 1980 the factors outlined above are expected to have less effect on labor force expansion. The rate of growth in the noninstitutional population at ages 16 and older will decline from the 1.7 percent per year average of the early and middle 1970s to 1.5 percent in 1979 and 1.4 percent in 1980. Slower growth of real output will cause the participation rate to rise less rapidly, but it may remain above its long-term average annual growth of 0.2 percentage point. The growth rate for the civilian labor force is expected to average about 2¼ percent per year in 1979 and 1980.

The rate of increase in employment will be limited by slower growth in real aggregate demand. Average employment in the fourth quarter of 1979 should be about 2 percent above that in the fourth quarter of 1978. Employment growth during 1980 is expected to be about 2¼ percent, compared to an average annual employment growth in the preceding 3 years of over 3½ percent.

These projections concerning employment and the labor force imply a small rise in the unemployment rate. Unemployment is expected to increase to about 6¼ percent of the labor force by late 1979 and to remain near that level in 1980. Forecasts of unemployment rates must be regarded as highly uncertain, however, because of the difficulties inherent in predicting growth in the labor force, in productivity, and in output.

#### PRICE AND WAGE DEVELOPMENTS

The outlook for prices and wages in 1979 is affected in important ways by the Administration's anti-inflation program. A significant reduction of inflation will require widespread cooperation and compliance with the wage and price standards.

The wage standard limits increases in compensation generally to 7 percent, but even with full compliance by groups not exempt the rise in private compensation is likely to exceed 7 percent. Equity and flexibility require some groups to be exempt from the pay standard, including workers who are covered by collective bargaining agreements negotiated before the announcement of the anti-inflation program on October 24, 1978, and those who were earning less than \$4.00 per hour on October 1, 1978. Many workers qualifying for the low-wage exemption received substantial increases on January 1, when the minimum hourly wage was raised from \$2.65 to \$2.90 as a result of the 1977 amendments to the Fair Labor Standards Act. Others in this group may be indirectly affected if wages slightly above \$2.90 are raised to maintain normal wage differentials. On average, wages and private fringe benefits of those qualifying for the low-wage exemption are expected to increase between 8½ and 8¾ percent.

Deferred increases in compensation due in 1979 under existing collective bargaining agreements are also exempt. These increases vary considerably, but the average, including allowance for cost-of-living provisions, is likely to be in the 8¼ to 8½ percent range.

New labor contracts will play an important role in wage changes in 1979 when a new round in the 3-year collective bargaining cycle begins. For these contracts, an employee group is in compliance if the agreement provides for pay increases that do not exceed 7 percent per year over the life of the contract. But increases in any one year may be as large as 8 percent. Industries where major multiyear agreements will be negotiated in 1979 include petroleum, trucking, rubber, electrical equipment, meatpacking, and automobiles. In all, the wages of almost 4 million workers in bargaining units with 1,000 or more workers, and of a similar number in smaller units, will be determined for the next 2 to 3 years. In the previous 1976-77 round of negotiations many of these agreements provided for double-digit annual rates of pay increase. A repetition of such large increases would have serious inflationary consequences not only in 1979 but in subsequent years.

Despite the large number of exempt workers, a high rate of compliance by those not exempt—who account for about two-thirds of the entire wage



and salary bill—will still produce significant deceleration. Substantial compliance would limit the rate of increase of total private wages and fringe benefits to about 8 percent. Total employee compensation per hour, including employer payroll taxes, would then increase by about 8½ percent in 1979, a significant deceleration from the 9¾ percent increase in 1978.

Because of the continued rapid escalation of food prices, increases in the minimum wage and social security taxes, the rise in OPEC oil prices, and the continued pass-through of higher prices for other imports, inflation is likely to remain relatively high in the first part of 1979. As the year progresses, the rise in consumer prices should fall somewhat below a 7 percent annual rate, a rate consistent with the underlying rise in labor costs.

A deceleration of wage and price increases during 1979 will be an important first step in braking the momentum of inflation. Expectations of continuing inflation would then begin to give way to the prospect of smaller increases in wages and prices. Further progress could be made more certain in 1980 by adjusting the pay and price standards. The special factors boosting inflation in 1978 and 1979—food price increases, payroll taxes, medical costs, depreciation, and energy prices—may also have less effect in 1980. We can reasonably expect further gains in reducing inflation. The rate of increase of consumer prices is projected to fall to just under 6½ percent during 1980.

*Food prices* over the 4 quarters of 1979 are expected to rise between 7 and 8 percent, significantly below last year's 11 percent. During the first half of the year, however, food price increases may be larger than during the second half, as the food processing and marketing system reacts to increased costs for labor, energy, packaging, and transportation, as well as to higher prices for wheat, cocoa, and sugar. Prices of dairy products and the cost of food consumed away from home are projected to rise considerably in the first half of the year.

An important reason for higher food prices in 1979 is likely to be a continued reduction in supplies of beef. Because of a decline in the number of cattle, total beef production in 1979 is likely to be lower than in 1978. Production of pork and poultry is expected to rise significantly, however, especially in the second half of the year, and per capita consumption of all meats is therefore likely to decline by less than 1 percent.

Some encouraging signs for food prices can be discerned. After increasing very sharply in the first half of 1978, the index of prices that farmers receive for crops remained quite stable during the second half of the year. This suggests that, with normal winter and spring weather, no immediate inflationary pressure should appear at the retail level because of abnormal increases in farm crop prices. The favorable prospects for the grain and soybean crops that will be harvested in the Southern Hemisphere this spring and the higher level of world stocks of these commodities are also reassuring. Hog and poultry producers are geared to expand production significantly, helping to offset lower beef supplies. As the Administration's

anti-inflation program begins to show tangible results, pressure on processing and marketing margins is also expected to moderate.

*Energy prices* will rise substantially in 1979, in large part as a result of the 14½ percent increase in oil prices announced by OPEC. This OPEC increase will add almost 0.4 percent to the consumer price index by the end of 1979 (compared to what would have happened if OPEC oil prices had remained stable), and some further effect will be felt in 1980. Domestic energy prices will also increase. The deregulation of natural gas will add to the price of energy, and further rises in coal prices can also be expected.

*Mortgage interest costs* are likely to rise less rapidly in 1979 than in 1978 as nominal mortgage interest rates level off and as the housing market weakens. In 1978 mortgage interest costs, which include the effects of rising prices for homes and higher mortgage interest rates, rose about 20 percent.

*Import prices* have already risen significantly in conjunction with the decline in the dollar on foreign exchange markets during 1978. To the extent that foreign exporters do not absorb the effects of this depreciation, some further price rises are likely in 1979.

*Hospital costs*, which for several years have increased at nearly twice the rate of overall consumer prices, moderated somewhat in 1978. Further moderation is expected in 1979 and 1980 in response to official action at two levels: hospital cost containment legislation to be proposed by the Administration, and State cost containment programs.

## ECONOMIC OBJECTIVES AND POLICY FOR THE LONGER RUN

During the past 2 years this Administration has developed its economic policies within the context of longer-term objectives for the economy. That approach was embedded in law during 1978 by the planning procedures incorporated in the newly enacted Humphrey-Hawkins Full Employment and Balanced Growth Act. This act establishes procedures for developing and reviewing economic policies within the government, requires the government to set 5-year goals for the American economy, and challenges it to formulate policies to achieve them.

For the past three decades the Employment Act of 1946 has been the basic guide for the President and the Congress in the development of economic policies. The Employment Act charged the government with responsibility to promote maximum employment, production, and purchasing power through the use of the policy tools at its disposal. Since 1946 the instruments of fiscal and monetary policies have been used in ways that contributed to economic prosperity. In recent years, however, the view has become widespread that amendments to the Employment Act would be an appropriate response to the changed economic circumstances and the serious new difficulties that we face in today's economy. The Full Employment and Balanced Growth Act of 1978 was designed to address these difficulties.

## THE HUMPHREY-HAWKINS ACT

The new law strengthens the Employment Act in three essential respects. It explicitly identifies national economic priorities and objectives; it directs the President to establish, and the Congress to consider, goals based on those priorities and objectives; and it creates new procedures and requirements for the President, the Congress, and the Federal Reserve to improve the coordination and development of economic policies.

The priorities and objectives set forth in the new act are varied, reflecting the nature of today's economy. The act establishes as a national goal "the fulfillment of the right to full opportunities for useful paid employment at fair rates of compensation of all individuals able, willing, and seeking to work." The new act also specifies "reasonable price stability" as a national objective and recognizes the need to improve government policies for dealing with inflation. Emphasis is placed on encouraging private and public capital formation to promote full employment, growth in productivity, and price stability. The act responds to the widespread desire for reduced governmental intervention by calling for steady reductions in the share of the Nation's output accounted for by governmental spending and by relying primarily on the private sector to meet the act's objectives. It also specifies that a balanced Federal budget, consistent with the achievement of other goals, is to be an objective of national policy. Finally, the act stresses the position of our economy in international markets. Those who make public policy are called on to work to improve the trade balance of the United States as well as its competitive position in world trade, while promoting fair and free international trade and a sound and stable international monetary system.

To provide a better focus for the government in its effort to achieve these general objectives, the Full Employment and Balanced Growth Act requires that the Administration set annual numerical goals for key indicators in the economy over a 5-year period, including employment and unemployment, production, real income, productivity, and prices. Goals for the first 2 years of the 5-year period are considered short-term objectives, and the President is required in his budget to recommend levels of outlays and receipts consistent with them. Goals for the final 3 years are known as medium-term goals, and projections of outlays and receipts consistent with them are to be included in the President's budget.

The act establishes new procedures for developing economic policies within the Federal Government. Each year the President is to present a program for achieving the economic goals he has set. As a matter of general guidance, the act provides that the government should rely as far as possible on growth in the private sector to meet goals for employment and output. At the same time, it calls the President's attention to a variety of governmental measures for dealing with unemployment, inflation, inadequate capital formation, and other problems. No new programs are specifically required or author-

ized in the act, however, and the President would need additional legislation to put new programs into effect.

To improve the coordination of fiscal and monetary policies, the act requires the Federal Reserve Board to report to the Congress twice each year on its objectives and plans with respect to monetary policies. The Board, in its reports, is required to comment on the relation between its plans for monetary policy and the short-term economic goals established by the President.

The policies of the President and the Federal Reserve Board will be considered jointly by the Congress. The act directs the Joint Economic Committee of the Congress to review reports from the President and the Federal Reserve Board, together with submissions from the committees of the Congress, and to offer its findings regarding the economic situation to the Budget Committee in each House prior to development of the First Concurrent Resolution on the Budget. Four hours during the debate on that resolution in each House will be reserved for debate on economic policies and goals and specific budgetary plans for achieving economic objectives. Through this process of reports and debate, the new act aims to improve economic decisions by providing better ways of arriving at them and better information on which to base them.

The Full Employment and Balanced Growth Act stipulates that in the first *Economic Report* published under the act the goal for unemployment in 1983 should be 4 percent for workers aged 16 and over and 3 percent for workers aged 20 and over. The act also requires that the goal for the rate of increase in the consumer price index in 1983 should be 3 percent.

Beginning with the 1980 *Economic Report of the President*, the President is authorized under the new act to change the timetable for achieving the goals if he determines that such a change is necessary. If the President changes the 4 percent and 3 percent unemployment goals, however, his *Economic Report* must state the year that he expects the unemployment goals to be reached.

#### GOALS FOR THE ECONOMY TO 1983

Lower unemployment and inflation rates are basic objectives, but they are not, of course, the only economic aims of the Administration or the new act. As noted earlier, the Humphrey-Hawkins Act places a high priority on improving the competitive position of the U.S. economy in the world, encouraging the growth of investment and capital formation, reducing the share of Federal spending in the Nation's output, and balancing the budget. In formulating economic policies for the next 5 years, these additional concerns have been taken into consideration.

Economic goals consistent with those specified in the act are shown in Table 22. The short-term goals for 1970 and 1980 represent a forecast of how the economy will respond over the next 2 years not only to the budgetary policies proposed by the President for fiscal 1979 and 1980 but to the anti-inflation program announced on October 24. The medium-term goals for

1981 to 1983 are not forecasts. They are projections of the economic performance that would be required to reach the 1983 unemployment and inflation goals specified in the act.

TABLE 22.—*Economic goals, 1979–83*

Item	1979	1980	1981	1982	1983
	Level, fourth quarter <sup>2</sup>				
Employment (millions).....	97.5	99.5	102.6	105.5	108.3
Unemployment (percent).....	6.2	6.2	5.4	4.6	4.0
	Percent change, fourth quarter to fourth quarter				
Consumer prices.....	7.5	6.4	5.2	4.1	3.0
Real GNP.....	2.2	3.2	4.6	4.6	4.2
Real disposable income.....	2.8	2.3	4.4	4.4	4.0
Productivity <sup>1</sup> .....	4	1.1	1.8	2.0	2.0

<sup>1</sup> Based on total real GNP per hour worked.

<sup>2</sup> Seasonally adjusted.

Source: Council of Economic Advisers.

The rate of GNP growth for the 1981–83 period that will be needed if unemployment is to be reduced to 4 percent by 1983 will depend on the growth rates of the labor force and productivity. Trends in these variables are hard to predict, as experience in the past 2 years indicates.

Over the next 5 years, growth in the population aged 16 and over will decline significantly, from about 1.6 percent in 1978 to about 1.0 percent in 1983. The rate of increase in the labor force participation rate (the ratio of persons in the civilian labor force to the total number within the working-age range) also seems likely to slow. During recent years the participation rate has increased by at least 0.8 percentage point annually, well above the long-term trend. With slowing growth both in the working-age population and in the participation rate, increases in the labor force will taper off from current rates of 2 to 3 percent a year to perhaps 1¾ to 2 percent 5 years from now.

This slowing of labor force expansion will reduce the GNP increase that will be needed to achieve any given reduction in the unemployment rate. At the same time, however, it is reasonable to expect productivity growth to improve somewhat over that of 1978. The slowing of labor force expansion will be accompanied by a shift in the age distribution of the labor force toward more mature workers, and the average experience of the labor force will also be lengthened by a reduction in the number of new entrants. These developments will help to stimulate greater productivity growth. Strong growth of investment could also improve the outlook for productivity.

These considerations suggest that potential GNP over the next 5 years might continue to increase at about the 3 percent rate of the past 5-year

period. There may be some slowdown in the growth of potential output during the next 5-year period as increases in the working-age population taper off, but information on labor force and productivity trends is not sufficient to permit a forecast of when it will happen.

In developing the projections in Table 22 for 1981 to 1983, a potential GNP growth of 3 percent was therefore assumed. The trend rate of increase in productivity underlying this estimate is 1½ percent, while the trend rate of increase in the labor force is 2 percent; these two numbers add to more than the 3 percent increase in potential GNP since average hours worked are expected to keep declining, as they have done through most of the postwar period. The yearly increases in the labor force and productivity shown in the table vary from the long-term trend because they will be influenced by the actual growth rate of real GNP in that year.

Jobs and training programs to reduce structural unemployment might make it possible to achieve the goal of a 4 percent overall unemployment rate, and 3 percent for adults, with a somewhat lower rate of growth of real output. Although such programs are primarily aimed at reducing the unemployment rate that is consistent with stable prices, they may, at least in the short run, tend to increase the level of employment and reduce the unemployment rate that is consistent with any given level of real output.

The increase in real disposable income from 1981 to 1983 is derived from historical relationships between that variable and real GNP, assuming no major changes in income shares between personal income and corporate profits.

#### REQUIREMENTS TO ACHIEVE THE ECONOMIC GOALS

By any criterion these are very ambitious goals. Achieving all of them simultaneously would demand not only a performance by the American economy that is unprecedented in peacetime history, but also government programs that can deal effectively with some of our most intransigent problems, particularly inflation and structural unemployment. The fact that the aims are ambitious makes it all the more important to consider carefully and realistically the obstacles to achieving them.

The difficulties likely to be encountered in moving the economy along the path set out in Table 22 follow two broad lines. First, will aggregate demand for goods and services be great enough to propel the economy along a relatively fast growth track from 1981 to 1983? What kind of budgetary policies would be required over the next several years to achieve this kind of economic growth? Second, if real economic growth did proceed at the pace needed to reduce the unemployment rate to 4 percent by 1983, what are the prospects that the inflation rate would decline to 3 percent by that year, and what are the principal obstacles to such a decline?

Answers to these two groups of questions are related. The likelihood of achieving rapid and sustained economic growth while inflation remains high is very small. Inflation gives rise to forces that raise interest rates and

discourage investment. It also increases the uncertainties facing businesses and consumers, and at times in the past it has severely weakened their propensity to spend. Because inflation reduces confidence abroad as well as at home, it can undermine the value of the dollar, giving rise to further inflationary pressures. The new act recognizes that inflation and growth are not separable concerns, and that public policy must seek ways both to achieve low unemployment and to control inflation.

### *Adequacy of Aggregate Demand*

The growth rates of real GNP that will be needed in 1981–83 to reach the goal of a 4 percent unemployment rate by the end of that period are quite high by past standards, but they are not unprecedented. The average rate of growth for those 3 years,  $4\frac{1}{2}$  percent, is actually somewhat lower than the average rate of economic expansion from the last quarter of 1975 to the last quarter of 1978, which was 4.8 percent. In evaluating the difficulties in maintaining a  $4\frac{1}{2}$  percent average yearly growth rate of real GNP, however, one should recall that the current expansion will soon be entering its fifth year.

The course of economic policies that would ensure sufficient aggregate demand growth to permit the economy to grow at a  $4\frac{1}{2}$  percent rate from 1981 through 1983—and still avoid excess demand that would interfere with the unwinding of inflation—can only be described in very general terms. Our ability to foresee economic developments and to design appropriate policies to deal with emerging problems over a 5-year period is extremely limited. The outlook for 1979 is uncertain, the prospects for 1980 are much more so, and the probable course of later developments can be foreseen only dimly. The best we can do is to rely on past experience to indicate possible future patterns of economic activity and tell us the kinds of economic policies most likely to contribute to a strong economy over the next 5 years.

One way to evaluate the prospects for maintaining strong economic growth is to consider the distribution of saving and investment by sector. Defined in terms of the national income and product accounts, a sector is a net saver if its income receipts exceed its expenditures. If expenditures exceed receipts, the sector has engaged in dissaving, that is, in net investment. For the economy as a whole, expenditures and receipts are two sides of the same coin, and hence measured saving and investment must always be equal. What one sector saves, another must invest.

This equality of saving and investment in the aggregate is, of course, an accounting identity. There is no reason why decisions to save and invest should lead to a balance in each of the various sectors of the economy, and generally they will not. But when desired amounts of saving and investment do not match, adjustments occur in the economic system—such as changes in interest rates, levels of economic activity, or prices—that force saving and investment into balance.

The relation between saving and investment and the level of economic activity can be seen by comparing the distribution of net saving by sector in 2 recent years, 1973 and 1975 (Table 23). In 1973, a year of relatively full employment, investment incentives in the private sector were strong. Gross private investment—including residential construction and business outlays for plant, equipment, and additions to inventories—was large enough that it more than offset gross private saving. The governmental sector was close to balance: a small deficit in the Federal sector (as measured in the national income and product accounts) was offset by a surplus in State and local governmental budgets. In 1975, a year of recession, investment propensities were comparatively weak. Gross private investment was far below the volume of private saving, even though the latter was not much larger in relation to GNP than it had been in 1973. The counterbalancing item was a deep governmental deficit mainly due to the fact that Federal receipts were depressed below the levels that would have occurred in a more fully employed economy.

TABLE 23.—*Net saving by sector, 1973 and 1975*

[Net saving, or investment (—)]

Sector	1973		1975	
	Billions of dollars	Percent of GNP	Billions of dollars	Percent of GNP
Private sector:				
Personal .....	70.3	5.4	83.6	5.5
Business <sup>1</sup> .....	-77.2	-5.9	-7.4	-1.5
Government sector:				
Federal .....	-6.7	-.5	-70.6	-4.6
State and local .....	13.0	1.0	6.2	.4
Foreign sector <sup>2</sup> .....	.6	(*)	-11.9	-1.8

<sup>1</sup> Gross business saving plus the statistical discrepancy minus gross private domestic investment.

<sup>2</sup> Net capital grants received by the United States less net foreign investment.

\* Less than 0.05 percent.

Source: Department of Commerce, Bureau of Economic Analysis.

Maintaining relatively strong growth from 1981 through 1983 will require that the excess of private investment over private saving be large enough to offset the net saving by both the governmental sector and the foreign sector in a high-employment economy. Large governmental surpluses would tend to make that task more difficult, as would large net saving by the foreign sector.

### *Prospects for State and Local Budgets*

During recent years the aggregate surplus in the State and local sector, as measured in the national income and product accounts, has been fairly large, as much as 1.6 percent of GNP in 1977. The magnitude of this surplus is mainly the result of net payments into social insurance funds for



State and local employees. But in 1976 and 1977 the aggregate operating and capital budget of State and local governments was also in surplus because of slow growth of capital expenditures and substantial increases in Federal grant programs. During 1978 the operating and capital accounts have returned to approximate balance; given the strong demands by citizens to reduce State and local taxes, a return to surpluses seems unlikely over the next 5 years. The amount of net saving in the State and local sector between now and 1983 is therefore likely to depend mainly on the accumulation rate of the social insurance funds.

That accumulation rate has been moving up rapidly in the past decade, from about one-half of 1 percent of GNP in the middle 1960s to about 1 percent at present. This buildup derived from the relatively rapid increase of State and local employment during the period and the effort by State and local governments to fund their pension liabilities. The upward trend in the ratio to GNP is not likely to continue. Growth of employment in State and local governments no longer exceeds the national average, and a good deal of funding of existing pension liabilities has already been accomplished. Projections by several prominent private forecasting services put the accumulation rate of State and local social insurance funds in 1982 and 1983 at around three-fourths of 1 percent of GNP.

### *Net Foreign Saving*

The measure of net saving by the foreign sector in the national income and product accounts is conceptually similar to the current account deficit in the balance of payments. (The principal difference between them is that the unrepatriated earnings of U.S. firms abroad are counted as an export of services in the current account balance, but not included as part of net saving by the foreign sector.) A projection of net foreign saving or of the current account balance in 1983 or any single year would be extremely hazardous. In the past 2 years, net foreign saving has been about 1 percent of GNP; in 1975, on the other hand, the foreign sector showed net dissaving—that is, net investment—by an amount equal to 0.8 percent of GNP. Relative growth rates in economic activity here and abroad, differences in the rate of wage and price increases, changes in exchange rates, and other factors can cause large movements from one year to the next in our current account balance and hence in net foreign saving.

Looking at trends over a 5-year period, it would be reasonable to expect market forces to bring receipts and payments on current account close to balance, and the net amount of foreign saving close to zero. A tendency in that direction is already under way. This year the current account deficit is forecast to decline significantly, and a further reduction in 1980 is expected. By 1982 and 1983, therefore, a reasonable forecast of net saving by the foreign sector would be zero.

Prospects for the Federal budget, of course, depend importantly on the fiscal policies pursued in the years from 1981 to 1983. If there were no further changes in tax laws or Federal expenditure programs other than those recommended in the fiscal 1980 budget, and if the economy grew as described in Table 22, Federal receipts would rise much faster than outlays. With such a "current policy" budget (Table 24), Federal outlays would decline as a share of GNP to under 20 percent by 1983; but Federal receipts would rise as a proportion of GNP, reaching nearly 22 percent by 1983. This rise in receipts results from inflation and real growth, which push individuals into higher tax brackets, and from the impact of large increases in social security taxes scheduled under current law, particularly in calendar years 1981 and 1983. The unified budget would therefore move from a deficit of \$29 billion in fiscal 1980 to a surplus of \$73 billion by fiscal 1983.

TABLE 24.—Federal unified budget receipts and outlays under current policy budget, fiscal years 1979–83

[Fiscal years]

Item	1979	1980	1981	1982	1983
Billions of dollars:					
Receipts .....	456.0	502.6	576.8	652.6	718.3
Outlays .....	493.4	531.6	578.0	614.9	645.6
Surplus or deficit (—) .....	–37.4	–29.0	–1.2	37.8	72.7
Percent of GNP:					
Receipts .....	19.9	20.1	20.9	21.6	21.9
Outlays .....	21.6	21.2	21.0	20.3	19.7
Surplus or deficit (—) .....	–1.6	–1.2	( <sup>1</sup> )	1.2	2.2

<sup>1</sup> Less than 0.05 percent.

Sources: Department of the Treasury and Office of Management and Budget.

A 1983 Federal surplus of that size, combined with a State and local surplus of three-fourths of 1 percent of GNP, would imply an overall government surplus equal to 3 percent of GNP, which is much larger than we have usually seen during periods of high employment. Maintaining a strong growth of economic activity under such circumstances would require a substantially larger excess of private investment over private saving than has been typical of past periods of high employment.

Table 25 shows the balance between investment and saving in the private sector for selected periods of relatively high employment: 1952–53, 1955–56, 1965–66, 1972–73, and the past 2 years. The forecast for 1979–80 is also presented. The difference between private saving and investment in periods of high employment has varied considerably, but the excess of private saving over investment has not been more than 1¼ percent of GNP. A large surplus in the governmental sector would of course provide ample funds for financing investment outlays, and thus tend to encourage a high rate of private invest-

ment. But past experience suggests that an excess of private investment over private saving equal to 3 percent of GNP would not be realized even under the best circumstances.

TABLE 25.—*Private net saving and investment and the unemployment rate, 1952–80*

Period	Personal saving		Business net investment		Excess of business investment over personal saving		Unemployment rate (percent)
	Billions of dollars	Percent of GNP	Billions of dollars	Percent of GNP	Billions of dollars	Percent of GNP	
1952–53 average.....	16.5	4.6	12.2	3.4	-4.3	-1.2	3.0
1955–56 average.....	17.3	4.2	20.7	5.1	3.5	.8	4.2
1965–66 average.....	31.6	4.4	28.3	3.9	-3.3	-.5	4.2
1972–73 average.....	59.8	4.8	66.4	5.4	6.6	.5	5.2
1977.....	66.9	3.5	69.2	3.7	2.3	.1	7.0
1978 <sup>1</sup> .....	76.7	3.6	99.9	4.7	23.2	1.1	6.0
1979–80 average <sup>2</sup> .....	87	3.6	109	4.4	22	.9	6.1

<sup>1</sup> Preliminary.

<sup>2</sup> Forecast.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

Viewing the issue from a somewhat different vantage point, the rise in Federal tax receipts from 20 percent of GNP in fiscal 1980 to nearly 22 percent 3 years later would represent a record peacetime increase in the burden of taxation on the private economy. Maintaining strong growth in private consumption and investment in the face of such an increased fiscal drag would be virtually impossible. Adjustments of fiscal policy from the current Administration policy budget would be needed to keep the economy moving forward steadily and strongly.

In principle, a lessening of restraint through fiscal policy adjustments could be accomplished either by increasing Federal outlays above the current policy base or by cutting tax rates. Relying mainly on reductions in taxes to promote growth in the private sector would be consistent with the objectives of the Humphrey-Hawkins Act and with the goals of this Administration. It would also prevent tax burdens from reaching an unprecedented level.

The appropriate magnitude and timing of such adjustments cannot, however, be determined now. The fiscal policy needed to maintain a smoothly functioning economy from 1981 through 1983 will depend on spending propensities of consumers and businesses, the amount of stimulus or drag on the economy from the foreign sector as well as from State and local government budgets in those years, developments affecting wages and prices, the course of monetary policy, and so on. The stronger the autonomous growth in the non-Federal sectors of the economy, the smaller the fiscal policy adjustments needed to keep the economy growing along the path

described in Table 22, and the more rapid the progress toward a balanced budget. Achieving a balanced budget is consistent with the principles of the new legislation. But the speed with which that objective can be realized will depend on developments that cannot now be foreseen.

Achieving a balanced Federal budget and at the same time maintaining a high growth rate of real GNP do not appear to be inherently conflicting aims. If the Federal budget were in balance in 1983, the excess of private investment over saving in 1983 would have to be roughly 1 percent of GNP, about equal to the probable magnitude of the State and local surplus. Such a relationship is within the boundaries of historical precedent. It occurred in 1955-56 and again last year. And the forecast for 1979 and 1980 implies a continuation of private investment at a rate that would exceed private saving by only a little less than 1 percent.

### *Factors Affecting Investment and Saving*

Demographic factors are likely to favor relatively strong investment growth over the next 5 years. As noted earlier in this chapter, the postwar baby boom will give rise to very large increases during the next 5 years in the prime home-buying age group (25-34 years). The demand for housing is therefore likely to be robust in the years immediately ahead.

Demographic factors will also work somewhat to keep the personal saving rate low compared to the early 1970s. The 1972-73 Consumer Expenditure Survey data (Table 26) indicate that personal saving rates are about the same between the ages of 25 and 54, but persons in the 55-64 age group save a considerably higher proportion of their income than others. The number of people in this age group will be rising at a much slower rate than the 1.5 percent average increase for the group aged 20 and over. Moreover, the group aged 65 and over will be growing somewhat more rapidly than the average, and the typical saving rate for this group is comparatively low. It is true that the population under 25 will be declining during the next 5 years, and households with heads under 25 tend to be dis-savers. But the proportion of total income and saving accounted for by this group is not large.

TABLE 26.—*Saving rate and population growth, by age of household head*

[Percent]			
Age of household head (years)	Saving rate, <sup>1</sup> 1972-73	Distribution of disposable personal income, 1972-73	Projected annual population growth rate, 1980 to 1985
Under 25.....	-6.9	5.3	-0.3
25-34.....	9.4	20.4	1.8
35-44.....	9.7	21.0	4.1
45-54.....	9.2	24.5	-.2
55-64.....	11.2	17.0	.5
65 and over.....	6.1	11.8	1.8

<sup>1</sup> Saving as percent of disposable personal income.

Sources: Department of Commerce (Bureau of the Census) and Department of Labor (Bureau of Labor Statistics).

A substantial increase in business investment in the period ahead would be required to improve productivity. Growth in the ratio of capital to labor inputs has been declining since the late 1960s; in recent years, in fact, the ratio of capital to labor inputs has not increased at all: the labor force has expanded rapidly while growth in the capital stock has slowed. This decline in capital intensity has been one cause of the lower rate of productivity growth typical of this period. Over the next 5 years, business fixed investment will have to increase rapidly if the aggregate capital-to-labor ratio is not to fall even further.

High investment requirements do not, of course, translate directly into incentives for businesses to press forward with investment programs to ensure satisfactory growth in the stock of capital. Making certain that the incentives to invest in plant and equipment will encourage the needed rate of capital expansion must be a fundamental aim of economic policy. Policies toward this end are discussed more fully later in this chapter.

Perhaps the most important single contribution to this objective would be lower inflation. Expectations that the inflation rate will decline steadily over the next 5 years would directly attack one of the obstacles to the recovery in business investment, since the uncertainty faced by business has been an important deterrent to investment planning. Indirectly, reduced inflation would have even larger effects on financial markets. With declining inflation, we could look forward confidently to a marked fall in short- and long-term interest rates, to strongly rising stock prices, and hence to a reduction in the cost of both debt and equity capital. Thus, if inflation can be steadily reduced over the next 5 years, prospects would be much improved for achieving a healthy growth in business investment.

#### ATTAINING THE GOALS FOR UNEMPLOYMENT AND INFLATION

The most difficult problem we as a Nation will face in reaching the goals of the Humphrey-Hawkins legislation is to reduce unemployment to 4 percent and simultaneously lower the rate of inflation to 3 percent. Although our economy was operating at a level somewhat below potential in 1978, intensified pressures on wage rates and prices have already appeared.

The Humphrey-Hawkins Act recognizes that we cannot reach the goals for unemployment and inflation simultaneously by relying solely on monetary and fiscal policies. The Administration shares this view. As Chapter 2 indicated, the anti-inflation program announced by the President on October 24 is based on the premise that braking the momentum of inflation will require widespread compliance by business and labor in reducing the rate of private price and wage increases. Success in that endeavor is critical to our ability to attain the unemployment goals of the Humphrey-Hawkins Act as well as the inflation goal. As noted earlier, continuation of inflation at a high rate could seriously jeopardize the prospects for maintaining a strong economy.

Unwinding the inflation inherited from the past will not remove the risk that new inflationary forces might develop in the future. Prudent fiscal and monetary policies will be needed to avoid an emergence of excess demand. Improved structural policies will also be required. It will be particularly important to find ways to curb the inflationary effects of substantial future reductions in unemployment from present levels.

The current structure of labor markets in our economy makes it especially hard to reach 4 percent unemployment and reduce inflation substantially at the same time. Unemployment varies widely across demographic groups. Measures to address the structural sources of unemployment have been an ingredient of government economic policies for more than a decade, but differential unemployment ratios among groups in the labor force are greater today than they were 10 years ago. Unless these differentials can be reduced, the prospects are dim for making substantial further reductions in the unemployment rate without creating additional inflationary pressures.

The uneven incidence of unemployment among groups in the labor force is shown in Table 27 for the fourth quarter of 1978 and the fourth quarter of 1972. In the earlier period the unemployment rate for adult white males (aged 20 and over), the most experienced group of workers in the labor force, was about the same as it was in late 1978. Over the past 6 years the unemployment rate for almost every other group has risen relative to the rate for adult white males. This widening of unemployment rate differentials has been caused in part by the fact that other groups, which have relatively high unemployment rates, are growing faster as a share of the labor force than adult white males.

TABLE 27.—Selected unemployment rates, fourth quarter 1972 and fourth quarter 1978

[Percent; seasonally adjusted]

Group	1972 IV	1978 IV
All civilian workers.....	5.3	5.8
White 20 years and over.....	3.9	4.1
Males.....	3.4	3.5
Females.....	4.7	5.0
Black and other 20 years and over.....	7.3	9.2
Males.....	6.0	8.3
Females.....	8.9	10.2
Teenagers (16-19 years).....	15.7	16.3
White.....	13.3	14.0
Black and other.....	35.4	35.3
Males 20 years and over.....	3.7	4.0
Females 20 years and over.....	5.2	5.8
Veterans 20-34 years.....	6.1	5.0
Both sexes 55 years and over.....	3.1	2.9

Source: Department of Labor, Bureau of Labor Statistics.

In well-functioning labor markets some differences among the unemployment rates of various demographic groups can always be expected.

Teenagers and young adults tend to change jobs more frequently than older workers as they try new occupations and search for long-term careers. Short spells of unemployment when they first enter the labor market or while they look for better jobs keep their overall unemployment rate above the average for older workers. Women, particularly during child-bearing years, tend to move into and out of the labor market more frequently than men.

The proportion of women and teenagers in the labor force has grown substantially since the earlier postwar years, and both of these groups have higher unemployment rates than average. In 1956 the overall unemployment rate was 4.1 percent. If the unemployment rates of each of the various age and sex groups in the labor force today were the same as in 1956, the overall rate would be 4.6 percent. Changes in the demographic composition of the labor force since 1956 have thus added about one-half of 1 percentage point to the unemployment rate. Between now and 1983 the structure of the labor force is likely to change somewhat, bringing a lower proportion of teenagers and a higher proportion of women. However, the effect of this change on the overall unemployment rate will not be large. If unemployment rates of each major demographic group in 1983 were the same as in 1956, the overall rate in 1983 would still be 4.6 percent. Achieving an overall unemployment rate of 4 percent at any time within the next 5 years would therefore require that the jobless rates of many groups within the labor force be brought well below the levels associated with full employment in earlier years.

Although part of the difference in unemployment rates can be explained by differences in voluntary job turnover and entry and reentry into the labor market, major structural obstacles also confront many groups of workers—especially, but not exclusively, minorities. Many potential imbalances in labor markets disappear as workers move from sectors offering relatively poor prospects for employment and earnings to sectors offering better opportunities. But in many instances this process may be blocked by the difficulty of acquiring skills, wage rigidities that discourage employers from hiring less productive workers, and various sorts of discrimination. As pointed out in Chapter 2, the structural rigidities and uneven incidence of unemployment make it very hard under current circumstances to reduce the overall rate of unemployment substantially below the present level without encountering labor shortages in some markets. As the overall unemployment rate declines, demand for skilled, prime-age workers exceeds supply of those workers and puts upward pressure on their wages, even though unemployment among minorities, teenagers, and women may remain unacceptably high. The inflationary pressures in the tight labor markets carry over into the rest of the economy, contributing to general inflation.

Chapter 2 also noted that improvements in various income maintenance programs may have increased the time during which individuals search for

better jobs, thus raising the unemployment rate associated with excess demand in labor markets. The primary focus of labor market policies in the United States has been on manpower training programs, public service employment, and the provision of labor market information. This Administration has maintained a strong emphasis on these traditional programs, but it has also provided resources for new programs aimed specifically at creating work and training opportunities for youths and the poor.

Achievement of substantially lower rates of overall unemployment in a noninflationary environment will hinge on whether governmental policies can effectively reduce the structural sources of unemployment. Toward that end the Administration is pursuing several strategies.

First, strong efforts are being made to target public service employment programs and to reduce the degree of substitution. In the past, the net employment gains attributable to public service employment programs have been considerably smaller than the number of available jobs because some government units used funds from that source to pay for work that would have been done in any case. Amendments to the Comprehensive Employment and Training Act (CETA) in late 1976 were designed to direct public service jobs more effectively toward the unemployed. As the number of these jobs was expanded in 1977 and early 1978, the Department of Labor took steps to create as many net new jobs as possible with available funds, and to eliminate fraud in the program. In 1978 a new structural employment component was added under Title II of the act, establishing a category of public service jobs specially targeted for the disadvantaged and the long-term unemployed. Under the new Title II program, State and local governments are prohibited from supplementing the wages of public service employees.

During 1977 and 1978 the Administration emphasized the use of public service jobs to promote recovery. With the economy now closer to high employment, the Federal budget for 1980 provides funds to support 467,000 public service jobs under CETA at the end of fiscal 1980. An increased share of the jobs, however, are being designated for the structurally unemployed under Title II. The more specific targeting and the prohibition of supplementation should improve the net job-creating impact of the program.

Second, in 1979 the Administration will propose a major incremental welfare reform plan. If enacted promptly, this plan will be fully effective in fiscal 1982. The Administration's plan will reform cash assistance programs and further develop the use of CETA to combat structural unemployment. The plan will expand Title II of CETA and direct more of the jobs to principal earners in families eligible for cash assistance. The exact number of new Title II jobs in 1982 will depend in part on what we learn about CETA in the next 2 years and in part on the budgetary and economic situation in 1982.

Third, special employment programs that are established for youths under the Youth Employment and Demonstration Projects Act and other legisla-



tion will continue to pay particular attention to the needs of the disadvantaged. Total funding for these programs in fiscal 1980 will be held constant at the fiscal 1979 level.

Fourth, the Administration has devoted substantial new resources in 1979 and 1980 to promoting employment opportunities for the disadvantaged in the private sector. As requested by the President, the 1978 CETA legislation provides authority for a special private sector employment and training initiative that will finance 10,000 new job training slots in private business. Under this program, private business will join with the Federal Government, State and local CETA programs, and the U.S. Employment Service to increase permanent private sector jobs for the disadvantaged. In addition, funding is being sought to create about 500,000 opportunities for training and work experience that will be available to the disadvantaged under other parts of CETA. The targeted employment tax credit, which was enacted in the Revenue Act of 1978, provides an income tax credit of 50 percent of the first \$6,000 of wages in the first year of employment and 25 percent in the second to encourage the employment of disadvantaged persons, particularly youths between the ages of 18 and 24. Although this approach to structural unemployment is new to the United States, selective employment subsidies have been tried in a number of European countries, including France, West Germany, Sweden, and the United Kingdom.

In various ways these programs directed toward the problem of structural unemployment can reduce the labor market shortages and inflationary pressures that would otherwise be associated with achieving a low overall rate of unemployment. To the extent that training programs provide skills for disadvantaged groups, they increase the supply of workers available to fill some of the skilled and semiskilled jobs that are created in a rapidly growing economy. Evaluations of the success of Federal training programs for the disadvantaged provide mixed results. But there is some evidence that training programs increase the employability and earning power of trainees by an amount that exceeds the cost of the programs. The extent to which these programs could be expanded significantly and still retain their effectiveness is uncertain.

Public service employment programs can in principle help the unemployment-inflation tradeoff. If carefully concentrated on the structurally unemployed, they can add to total employment without substantially increasing upward wage pressures in the labor market. And to the extent that they inculcate better working habits and skills among those who would otherwise be chronically unemployed, they act as a training program with the advantages described above. But several limitations restrict the usefulness of public service employment in dealing with the unemployment-inflation tradeoff. In periods of tight labor markets—when the tradeoff problem is most serious—a public service jobs program that pays relatively attractive wages may encourage workers who would otherwise be available for private

employment to take public service jobs, thereby adding to upward wage pressures. On the other hand, if public service jobs paid relatively low wages they might attract very few workers during periods of tight labor markets. While carefully designed public service employment programs can help provide jobs to the disadvantaged, reduction of structural unemployment by enough to achieve the Humphrey-Hawkins unemployment and inflation goals will require the use of other programs as well.

The more recent additions to our armory of weapons against structural unemployment are the special private sector employment initiative and the targeted tax credit. These have the advantage of directing the structurally unemployed to the private sector where the bulk of new jobs will be forthcoming. They may make an important contribution to improving the trade-off between unemployment and inflation, but they are too new to have been fully evaluated.

### *Industrial Capacity and Sectoral Problems*

At the present time the utilization of industrial capacity is below, but not far below, the peak levels reached in 1973. At that time pressure on capacity, especially in raw materials industries, began to develop, adding to inflationary pressures. To avoid similar problems in the future, industrial capacity over the next 5 years would have to expand about as fast as output.

Last year the Council of Economic Advisers investigated the relation between output, investment, and capacity expansion. The conclusion was that a fairly rapid expansion of output—4.8 percent a year between 1977 and 1981—would raise the capacity utilization rate. The rate would remain, however, below inflationary levels if there were a substantial expansion of investment similar to that in 1962–66, when both capacity and output grew rapidly. In 1979 and 1980, the growth of output is forecast to be slower than in 1978. Capacity utilization over the next 2 years is therefore unlikely to rise, and it might fall somewhat. As a consequence, there appears to be little risk of widespread major capacity shortages in this period. But in the subsequent 3 years, achievement of the Humphrey-Hawkins goals for unemployment would require growth in output averaging about 4½ percent a year, or only slightly below the 4.8 percent growth rate analyzed in last year's capacity utilization study.

In general, therefore, the conclusions reached in last year's study are applicable to the 1981–83 period. If real GNP grew at a 4½ percent average rate, a rapid growth in investment would be necessary to hold the capacity utilization ratio to levels that did not threaten inflation.

An earlier section of this chapter discussed the relationships between saving, investment, and the government budget that would be needed to achieve the Humphrey-Hawkins goals for output and employment and still move toward a balanced Federal budget. The analysis showed that a substantial expansion in private investment relative to private saving would be needed. Investment would have to grow at rates approximating those of

the 1962-66 period—a difficult but not unattainable goal. If that occurs, the requisite capacity expansion would be forthcoming.

There are other ways in which aggregate demand could expand rapidly in the 1981-83 period. Large consumption-oriented tax cuts, for example, would result in a faster expansion of consumer outlays but a slower growth in private investment than if tax cuts were oriented more toward stimulating capital formation. Consumption-led growth would create a danger that capacity would not expand fast enough to avoid inflationary pressures. Such an outcome would not only defeat the Humphrey-Hawkins goal of reducing inflation, but also threaten the possibility of maintaining satisfactory economic growth and achieving a substantial reduction in the rate of unemployment.

## SUMMARY

The aspects of economic performance that are critical for the achievement of our longer-run economic objectives were discussed above. Growth in aggregate demand sufficient to reduce unemployment to the levels set forth in the act would require fiscal policy adjustments after 1980, which could be accomplished within the framework of balancing the budget and reducing Federal outlays as a share of GNP by reducing taxes. A strong growth in private investment would be needed. Business investment would have to be particularly strong, but not out of line with performance during other times in the postwar period. Without progress in reducing inflation, however, this outcome is unlikely to be realized.

The most difficult obstacle to achieving the 1983 goals arises from the potential inconsistency between the objectives for growth and unemployment and the need to reduce inflation. Aggregate demand policies must be framed to take this problem into account. Economic policies for the next 2 years are designed to avoid any acceleration of inflation from the demand side, and to use macroeconomic instruments together with the pay and price standards to unwind the inflation inherited from the past. It is clear, however, that the task of reducing inflation to an acceptable pace will not be completed by 1980. We should not commit ourselves now to highly stimulative macroeconomic policies in the years after 1980; to do so might result in an acceleration of inflation, thereby threatening the maintenance of stable economic growth.

Our prospects for achieving the 1983 goals depend upon finding ways to reduce the divergence of unemployment rates among various demographic groups. With the current structure of labor markets, reducing the overall unemployment rate to 4 percent, and the unemployment rate for adults to 3 percent, would require that unemployment rates for experienced adult workers be brought down to extremely low levels. There would be a very substantial excess demand for those workers, giving rise to inflationary wage and price increases. The Federal Government has a number of programs in place,

and is inaugurating several new ones, aimed at reducing structural unemployment. At the present time, however, we cannot be sure that continuing or even rapidly expanding these programs would make possible an overall 4 percent unemployment rate without accelerating inflation. Much work needs to be done to improve existing employment programs and discover new approaches to structural problems if the goals of the act are to be realized.

## INVESTMENT POLICY REPORT

The Humphrey-Hawkins Act puts considerable emphasis on the importance of capital formation in achieving our national economic goals. One of its requirements is the inclusion of an Investment Policy Report in this *Economic Report*.

Private investment during the coming years will play two important roles in shaping economic developments. A strong rise in business fixed investment will be required to achieve sustained economic growth and declining unemployment. Substantial growth in the capital stock will also be needed to expand our capacity to produce. Only by devoting a significant share of current production to replace, modernize, and expand the capital stock can we hope to maintain adequate growth in productivity.

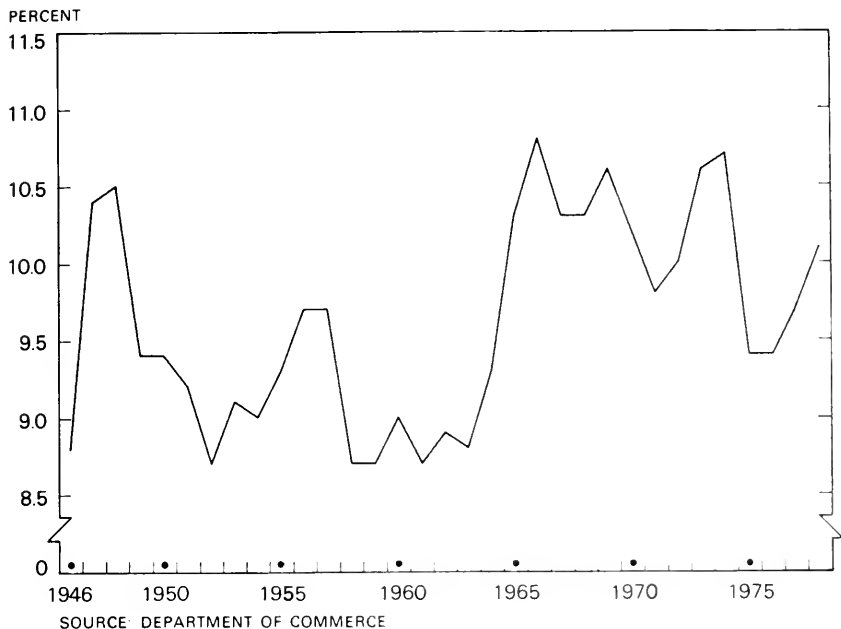
Growth in the capital stock will be of strategic importance in particular sectors of the economy. If growth of productive capacity were to lag in sectors producing supplies that were of critical importance in other industries, bottlenecks would develop, restricting overall growth and adding significantly to inflationary pressures in periods of high demand. This is particularly true of the basic materials and energy-producing industries where substitutes, exclusive of imports, may be difficult to find.

Our competitive position in world markets will also depend heavily on whether or not business fixed investment grows at an adequate pace. Most other industrial countries devote a larger share of output to investment than the United States does, and their growth rates of productivity have also been higher than ours. Increasing the growth of productivity in the United States would help significantly to improve the outlook for our foreign trade balance and to strengthen the dollar in foreign exchange markets.

## POSTWAR TRENDS IN INVESTMENT AND CAPITAL FORMATION

Business fixed investment has been quite volatile historically—fluctuating in absolute level and as a percentage of GNP in response to a number of factors: prospects for future output growth and profits, the degree of uncertainty about the future, growth rates of population and the labor force, relative costs of capital and labor, and the speed of innovation. As shown in Chart 8, business fixed investment since 1946 has ranged between 8½ and 11 percent of real GNP. Although there is no obvious sustained trend in this ratio, it tended to hover close to 9 percent in the 1950s and early 1960s, and then moved somewhat above 10 percent from 1965 to 1974.

## Real Nonresidential Fixed Investment as Percent of Real GNP



The recovery of investment from the 1974-75 recession was slow. The 9.7 percent investment share for 1977, the third year of recovery, was only midway between the low of 8.7 percent registered in 1952, 1958, 1959, and 1961 (all but 1952 being recession years), and the high of 10.8 percent scored in 1966. Last year investment regained a 10 percent share of GNP.

If a rough estimate of the investment contributed by the public sector is added to private investment, the investment share of GNP is increased. Although differences in statistical measurement and in industry structure make international comparisons imprecise, the evidence (Table 28) suggests that the share of investment in gross domestic product is lower in the United States than in other industrial countries. In the years following World War II such differences were explainable by the need in Japan and in European countries to replace productive capital destroyed in the war. More than 30 years after the war, this explanation can no longer be valid.

International comparisons are not the only, or even the most important, indicator of the adequacy of investment. Achieving the objectives of the Humphrey-Hawkins Act over the next 5 years would require strong investment to support the expansion of private demand, to equip an increasing number of workers, to improve productivity growth, and to meet environmental and social goals. The precise amount of capital required to equip a

TABLE 28.—*Real nonresidential fixed investment as percent of real gross domestic product, 1966-76*

Country	Percent of GDP
United States	13.5
Canada	17.2
France <sup>1</sup>	16.7
West Germany	17.4
Japan	26.4
United Kingdom	14.9

<sup>1</sup> 1970-75.

Note.—Data are on an OECD basis.

Source: Organization for Economic Cooperation and Development.

worker is, of course, variable. Alternative technologies exist or can be devised to produce the same output with differing ratios of capital to labor, and shifts between industries can also change the overall ratio, since capital-labor ratios differ across industries. Because growth in the civilian labor force over the past decade has been more rapid than in the preceding 10 years (28 percent compared to 16 percent), an acceleration in investment would have been needed to maintain the rise in the capital-labor ratio achieved earlier. More rapid growth of employment in less capital-intensive sectors (government, trade, finance, insurance and real estate, and some services) than in manufacturing, utilities, communication, and transportation, however, has perhaps reduced the need for this acceleration.

The capital-labor ratio has typically shown a long secular upward trend in all the major industrial countries. This has coincided with improvements in the health and education of the work force and substantial technological change. The precise roles and interactions between these forces in contributing to the secular growth in productivity remain subject to considerable debate and are difficult to verify quantitatively. It is worth noting, however, that the U.S. capital-labor ratio grew at an average annual rate of nearly 3 percent between 1948 and 1973. Since then the growth of this ratio has declined more than 1 percentage point. These developments coincided with a decline in the trend rate of growth of productivity in the private nonfarm economy from 3 percent between 1948 and 1973 to under 1½ percent over the past 5 years. Restoring the earlier trend in the ratio of capital to labor input would make an important contribution to greater productivity growth, but such an increase will require devoting a larger share of our national output to business investment than has been characteristic of recent years.

A number of other considerations suggest that society would benefit from stronger investment than has occurred in much of the recent past. To expand our production of domestic energy, at least in part from new sources, will require large outlays at some future time. In addition, society is demanding protection from environmental pollution, occupational hazards, and product

deficiencies. Achieving these social goals, which are not part of output as conventionally measured, entails additional investment. Business expenditures for pollution abatement have risen to a significant fraction of total business fixed investment in recent years, an estimated 5 percent in 1977 and 4.7 percent of total planned investment in 1978. Table 29 illustrates the substantial variation among industries in these outlays. For some, the percentage of total investment is more than twice the national average. Investments for pollution abatement and other social objectives may, to some degree, displace investment that would expand capacity. Consequently higher total investment will be needed if we are to meet both output goals and social objectives.

TABLE 29.—*Capital expenditures by business for pollution abatement, by industry, 1976-78*

[Percent of total capital outlays by business]

Industry	1976	1977	1978 planned			
			Total	Air	Water	Solid waste
All industries.....	5.6	5.1	4.7	2.4	1.9	0.4
Manufacturing.....	8.3	7.0	6.2	2.9	2.8	.5
Durable goods.....	6.6	5.9	5.5	3.0	2.1	.3
Primary metals.....	15.7	15.7	14.4	9.4	4.6	.5
Electrical machinery.....	5.6	3.4	3.4	1.1	1.9	.4
Machinery, except electrical.....	1.6	1.8	1.8	.7	1.0	.1
Transportation equipment.....	3.4	3.1	4.0	1.5	1.9	.6
Stone, clay, and glass.....	6.1	7.3	7.3	4.9	2.1	.3
Other durables.....	3.9	3.6	2.9	1.3	1.4	.1
Nondurable goods.....	9.6	8.0	6.8	2.7	3.4	.6
Food, including beverage.....	4.5	4.2	4.7	1.7	2.5	.5
Textiles.....	4.4	3.8	3.5	1.0	1.9	.7
Paper.....	14.7	13.8	9.6	3.6	5.3	.7
Chemicals.....	11.4	10.2	9.2	3.5	5.1	.7
Petroleum.....	10.9	8.2	7.0	3.0	3.3	.8
Rubber.....	3.4	3.3	3.0	1.9	1.0	.1
Other nondurables.....	1.4	1.2	1.0	.6	.3	.1
Nonmanufacturing.....	3.5	3.5	3.6	2.1	1.2	.3
Mining.....	2.2	2.2	3.1	1.1	1.0	.9
Railroad.....	1.1	1.0	1.4	.0	1.3	.0
Air transportation.....	1.2	.8	.9	.6	.2	.0
Other transportation.....	1.1	1.0	.9	.2	.6	.1
Public utilities.....	9.1	8.8	8.7	5.4	2.8	.5
Communication, commercial, and other <sup>1</sup> .....	.5	.5	.5	.2	.2	.1

<sup>1</sup> Consists of communication, trade, service, construction, finance, and insurance.

Note.—Excludes agricultural business; real estate; medical, legal, educational and cultural services; and nonprofit organizations. Pollution abatement operating costs are also excluded.

Data for 1976 are based on the survey conducted in November and December 1976. Data for 1977 and 1978 are based on the survey conducted in November and December 1977.

Source: Department of Commerce, Bureau of Economic Analysis.

## INVESTMENT INCENTIVES

The most important inducement for investors is the prospect of future profits from future sales. These profits may come from increased sales activity, reductions in production costs, or improvements that allow a higher price for the product or attract more buyers of the product. The principal

indicators of the profitability of investment are the rate of growth of output, the percentage of current capacity that is utilized, and the rate of return on the existing capital stock. Costs of investment are also important, of course. These include the price of physical units of capital and the costs of financing investments. Financing costs depend on the after-tax real rate of return required in capital markets by those who provide funds for investment. Various measures are used for this required rate of return. One is the long-term corporate bond rate, adjusted for inflation. The required rate of return could, alternatively, be captured by the earnings-price ratio in the stock market. The price of physical capital and the effective rate of return required by investors can be combined into a single measure, the ratio of the stock market value to the replacement cost of corporate net assets. When investors' required rate of return rises relative to firms' current earnings, the market value of corporate stock declines relative to its replacement cost. Some of the major measures of the profitability and cost of investment are summarized in Table 30.

TABLE 30.—*Determinants of business fixed investment, 1955–78*

[Percent]

Year	Ratio of real investment to real GNP	Capacity utilization rate in manufacturing <sup>1</sup>	Nonfinancial corporations			
			Cash flow as percent of GNP <sup>2</sup>	Rate of return on depreciable assets <sup>3</sup>	Rate of return on stockholders' equity <sup>4</sup>	Ratio of market value to replacement cost of net assets <sup>5</sup>
1955	9.3	87.0	9.3	15.0	6.0	0.932
1956	9.7	86.1	8.9	13.2	5.2	.921
1957	9.7	83.6	8.9	11.6	4.9	.853
1958	8.7	75.0	8.6	9.5	3.8	.874
1959	8.7	81.6	9.2	12.2	4.8	1.044
1960	9.0	80.1	8.9	11.1	5.0	1.019
1961	8.7	77.3	8.8	11.0	4.4	1.147
1962	8.9	81.4	9.4	12.7	5.8	1.092
1963	8.8	83.5	9.6	13.6	6.3	1.204
1964	9.3	85.7	10.0	14.8	7.5	1.295
1965	10.3	89.5	10.4	16.3	9.0	1.360
1966	10.8	91.1	10.3	16.2	8.8	1.205
1967	10.3	86.9	9.9	14.2	7.7	1.217
1968	10.3	87.0	9.4	14.2	7.6	1.257
1969	10.6	86.2	8.6	12.8	6.9	1.124
1970	10.2	79.2	7.9	10.1	4.4	.911
1971	9.8	78.0	8.2	10.3	5.2	1.000
1972	10.0	83.1	8.6	11.5	6.4	1.076
1973	10.6	87.5	8.0	12.3	8.7	1.016
1974	10.7	84.2	6.9	11.4	8.4	.756
1975	9.4	73.6	8.7	9.3	5.2	.725
1976	9.4	80.2	9.1	10.4	4.8	.825
1977	9.7	82.4	9.0	10.6	6.2	.768
1978 <sup>6</sup>	10.1	84.2	9.9	10.6	8.9	.703
1962–66 average	9.6	86.2	9.9	14.7	7.5	1.231
1955–70 average	9.6	83.8	9.3	13.0	6.1	1.091

<sup>1</sup> Federal Reserve Board index.

<sup>2</sup> Cash flow calculated as after-tax profits plus capital consumption allowance plus inventory valuation adjustment.

<sup>3</sup> Profits before taxes plus capital consumption adjustment plus net interest paid divided by the stock of depreciable assets valued at current replacement cost.

<sup>4</sup> After-tax profits corrected for inflation effects divided by net worth (physical capital component valued at current replacement cost).

<sup>5</sup> Equity plus interest-bearing debt divided by current replacement cost of net assets.

<sup>6</sup> Preliminary.

Sources: Department of Commerce (Bureau of Economic Analysis), Board of Governors of the Federal Reserve System, and Council of Economic Advisers.



A year ago the *Economic Report* noted that the 1974-75 recession and the period of price controls in 1971-73 had severely depressed investment incentives. As was also noted, measures of investment incentives were recovering, and continued expansion and rising utilization rates held the promise of further improvement.

Table 30 presents preliminary data for 1978 indicating substantial further gains in capacity utilization and in the rate of return on stockholders' equity. The latter measure, the ratio of after-tax economic profits to net worth, was boosted by the effect of inflation in reducing the real burden of corporate debt. Furthermore, the improvement in the rate of return on stockholders' equity relative to earlier periods partly reflects a shift in the structure of corporate financing of investment from equity to debt issues.

The rate of return on all depreciable assets (profits before tax plus capital consumption adjustments and interest paid) maintained the level it had achieved in 1977 but did not increase further. The rate of corporate cash flow was slightly depressed because profit growth slowed somewhat; although profits measured in book value terms were strong, a significant part of this strength was attributable to capital gains on inventories and to underestimation of depreciation, both resulting from the increase in inflation.

The weakest of the determinants of investment in 1978 was the ratio of market value to replacement cost of capital, which fell in response to the weakness in stock prices. Equity values have risen relatively little during this cyclical recovery for many reasons: uncertainties engendered by the depth of the 1974-75 recession, the sharp disruption caused by higher energy costs, fluctuations in the exchange value of the dollar, and a volatile inflation rate.

Of the four measures of profitability shown in Table 30, only one, the rate of return on stockholders' equity, has regained the 1955-70 average. The other three are well below the 1955-70 average and still further below the average for 1962-66, when investment outlays rose very strongly.

In view of the possible increase in the perceived risks of investment since the early 1970s, one might surmise that businesses have begun to respond differently to the usual measures of investment incentives. During the past year the Council of Economic Advisers extended its earlier analysis of this subject. Economists have suggested several alternative formulations, or models, of the determination of investment, which emphasize to various degrees the influence on investment of growth of output, variations in capacity utilization, changes in cash flow and in the rental price of capital, and the ratio between the market value of capital and its replacement cost. All involve substantial margins of error.

The Council has not attempted to choose between these different formulations. It has tested, for each model, whether the statistical relation between investment and those factors that determine investment in the model differ significantly in the various periods covered by the examination.

This analysis suggests that the behavior of investment in equipment has not changed significantly during the years since 1973 in comparison with

earlier years. Variations from year to year in the strength of investment in equipment, relative to the forces expected to determine it, have remained within the normal margin of error. Indeed, if there has been any point in recent years at which the pattern of investment in equipment seems to have changed, the most likely time would have been in 1968-69. This period also marked the beginning of a slowdown in the growth of the capital-labor ratio.

Most formulations indicate that investment in structures was unusually slow following the 1974-75 recession and that the substantial recovery last year was not explained by reference to previous relationships. Quite possibly, special factors affecting particular industries may underlie this structural change. For example, early in the recovery the impact of environmental regulations on the steel industry was very heavy at a time when capacity utilization and profits were exceptionally low both here and abroad, and foreign competition was particularly severe. Similarly, uncertainties about energy prices may have had a perverse effect on investment by utilities before the enactment of the energy bill.

This analysis suggests tentatively that some weakening of the demand for equipment may have occurred at the end of the 1960s or early in the 1970s in response to greater perceived risks, and that a variety of special factors may have disrupted the normal pattern of investment in structures. Moreover, as noted above, the profitability of investment has not yet regained the high level prevailing in the early 1960s. If the investment needed to reach our economic goals in 1983 is to be realized, policy actions are required that will strengthen investment incentives and reduce investment costs and risks.

Tax policy is one instrument that can encourage investment by lowering the rental cost of capital, or raising its after-tax rate of return. The Revenue Act of 1978 contained important measures toward achieving this end. The corporate tax rate was reduced by lowering the top rate from 48 percent to 46 percent and by scaling the rate up more gradually, across four brackets instead of two, so that the top rate is paid on earnings over \$100,000 rather than \$50,000. The act also made the investment tax credit permanent. The limitation on the amount of tax liability that could be offset by the credit is to be raised from 50 to 90 percent by 10 percentage point increments from 1980 to 1982; the credit is extended to cover rehabilitation of nonresidential structures and single-purpose agricultural and horticultural structures; and it is liberalized for certain pollution control facilities. Selected tax treatment of small businesses was also liberalized. Finally, taxes on capital gains were reduced. The proportion of net long-term capital gains that can be excluded from an individual's taxable income was raised from 50 percent to 60 percent. The alternative tax of 25 percent was dropped, and the excluded portion of capital gains will no longer be counted as a preference item subject to the minimum tax. A new alternative minimum tax was introduced, however, with a maximum rate of 25 percent. These changes reduce the effective tax rate on capital gains by about one-third.

All of these tax changes result in a lower rate of taxation on returns to corporate capital—the key sector for productivity-raising investment, since it produces 75 percent of total private output. The corporate rate reduction and the investment tax credit will have the greatest effect because they are concentrated directly on the corporate sector and on the relatively heavily taxed, capital-intensive industries in that sector. The reduction in the capital gains tax may also be helpful in encouraging the supply of risk capital, but lowering capital gains taxes is not an efficient means of promoting investment. Only one-third of taxable capital gains accrue on corporate stock or on assets owned by corporations. Only two-thirds of capital gains accrue on reproducible long-lived assets used in production. The part of the tax advantage that accrues to other sectors (for example, capital gains on land) may have no investment effect. Furthermore, a significant fraction of gains accrue in already lightly taxed industries. As a result, this tax change conflicts with the objective of equalizing taxation across industries and thus distorts the efficiency with which markets allocate resources.

Further tax reductions designed to strengthen investment incentives may well be needed in the years ahead to encourage a high rate of investment in new plant and equipment. Given the budgetary constraints required in the near future to reduce inflation, there is no room for additional tax cuts now. Over the longer term, however, opportunities for further general tax reduction will emerge. As they do, reductions carefully designed to strengthen incentives for business investment should be given high priority.

Other public policies have a substantial influence on investment incentives. Pollution abatement requirements and other forms of social regulation pertaining to health and safety impose costs on private industry—both current operating costs (for example, by requiring extra workers for waste treatment processes) and capital costs (covering such items as extra equipment for safety and pollution control). Industries like steel, coal, chemicals, and electric utilities have been especially affected.

As discussed in Chapter 2, the Administration is working to make the regulatory process more rational. A strong and successful effort in this direction offers promise of reducing significantly the costs of regulation relative to its social benefits. In turn, this should reduce the effective capital costs of investment projects and thereby strengthen investment incentives. Furthermore, removing some of the uncertainty regarding future regulations will facilitate business investment decisions.

Other policy measures should also help to reduce the risks faced by those responsible for making investments. The energy legislation enacted last year will make the relative prices of various types of fuels more predictable. Coordination of Federal efforts to improve productivity is being undertaken by the National Productivity Council, a cabinet-level group. A major effort is also under way to promote more rapid innovation through increased emphasis on research and development.

## RESEARCH AND DEVELOPMENT

Research and development expenditures are a form of investment on which the returns are very uncertain, especially in the case of basic research. In some instances society as a whole may benefit from research that adds nothing to an individual investor's profits: for example, when it is discovered that a theory does not work. Moreover the investor is usually unable to capture all of the returns from research even when the results are directly useful. The limited life of a patent and uncertainties about patent rights and the enforcement of patents have deterred investment in research and innovation.

The slow growth of research and development expenditures in this country in recent years may account for a part of the low productivity growth of the 1970s. After correction for inflation, expenditures for research and development in 1975 were only 2.6 percent above their level in 1965. This slow growth was largely due to the decline in space-related research; private expenditures for research and development grew at roughly the same pace as the economy. In contrast to the trend over the past decade, real Federal support for research and development rose by 4.2 percent in 1977 and by 2.6 percent in 1978, while total spending for this purpose increased to 4.4 and 2.8 percent respectively in these 2 years. This amounts to a 2-year gain almost three times as great as the rise in the previous 10 years.

Recognizing the importance of basic research to innovation and the high risks of conducting such research in the private sector, the Administration initiated a significant expansion of obligating authority and outlays for basic research and development in the fiscal 1979 budget. Outlays this year in current dollar terms will rise by almost 18 percent from fiscal 1978 levels, and they are scheduled to increase by an additional 10 percent in fiscal 1980.

The President has also begun a comprehensive interagency review, under the leadership of the Secretary of Commerce, of all Federal policies bearing on the process of industrial innovation. This review will rely on assistance from relevant Federal agencies, representatives from business and labor, and other interested parties. Its scope is not limited to the influence the Federal Government exerts through direct expenditures and grants for research; it will also consider the effect of patent, antitrust, procurement, and other governmental policies that bear indirectly on research and innovation.

## THE SUPPLY OF INVESTMENT CAPITAL

The supply of resources available for business fixed investment is limited by the capacity of the economy to produce goods and by the amounts of those goods that are preempted for other public and private uses. When substantial slack remains in the economy, expansion of public spending or private consumption has little or no adverse impact on the supply of investment goods. In fact, an expansion of public spending or consumer demand

is likely under those circumstances to increase investment by improving the perceived profitability of investment.

When the economy is operating close to capacity, however, increases in public demand or private consumption will adversely affect business fixed investment, because prices of capital goods are bid up and the cost of borrowing rises. One aim of Federal policy must be to avoid excess aggregate demand and the inflation and credit market tightness that it generates. A second aim must be to analyze carefully the social costs and benefits of Federal programs, in order to control the share of the Nation's output absorbed by the government. Achieving this goal in the context of favorable tax and monetary policies will help provide the real resources, credit market conditions, and incentives needed for rapid growth of the capital stock.

As the Federal budget is moved toward balance in the context of continued economic expansion, and as growth in the government share of total output is curbed in the years ahead, more resources will be available for business fixed investment. The combination of this fiscal policy with successful steps to reduce inflation will create the environment in which monetary policy can offer more encouragement to investment.

Financial capital in recent years has been available at attractive real interest rates, although nominal rates have remained high. Nonfinancial corporations have raised substantial amounts of funds in credit markets. The ratio of funds raised in credit markets to total capital expenditures began to rise rapidly in late 1976 and reached a peak in the first quarter of last year, after which it tapered off. The 1978 first quarter peak was surpassed historically only in 2 isolated quarters during the 1972-73 investment boom.

A similar pattern appears in the nonfarm, noncorporate sector. For farm business, on the other hand, growth of credit use was more modest than in other sectors during 1977, but it accelerated sharply in the second and third quarters of last year to a pace more than 25 percent above the 1977 average.

These relatively high rates of business credit expansion were facilitated by the steady flows of funds to those financial intermediaries that are important for business lending, particularly life insurance companies and pension funds. Growth in pension fund reserves—a means by which households indirectly provide loans to businesses and governments—rose by a dramatic 46 percent between 1975 and 1977. In the second and third quarters of last year the average growth in these reserves was 8.6 percent above the 1977 pace.

The cost and availability of equity capital are more volatile than is true of debt capital, since they depend on the expectations of the public as reflected in stock prices and on the willingness of private and institutional investors to accept equity market risks. In periods when credit markets are weak, firms may thus be forced to accept a higher debt-equity ratio than they would prefer. This is particularly likely in periods when the flow of internal funds is small relative to desired investment. It probably happens also to firms in cyclically sensitive industries that do not have exceptionally strong growth trends, and to newer businesses that have not yet established strong earnings

records. In 1977 and the first half of 1978, new issues of common and preferred stock accounted for only 23 percent of the gross proceeds of stock and bond issues. The lagging recovery of the stock market during the current expansion is undoubtedly a major reason why this ratio is lower than in the mid-1960s, when stock prices were high.

#### SMALL BUSINESSES

The availability of capital, and particularly equity capital, to small businesses is a fundamental concern. The data at hand suggest persistently higher debt-equity ratios for small corporations (those with assets under \$5 million) manufacturing nondurable goods than for larger ones. For small manufacturers of durable goods the ratio of debt to equity has been higher than for large corporations in all years since 1959, except in the period from 1967 to 1971, when borrowing by large corporations rose sharply.

These higher debt-equity ratios and a corresponding heavier reliance on bank credit are partly due to the fact that small businesses tend to have a higher proportion of assets invested in inventories and a lower proportion in plant and equipment. This, in turn, may be caused by a differing distribution of large and small firms within various industries. It may also, however, be a symptom of imperfections in capital markets that limit the availability of equity capital.

Programs of the Small Business Administration (SBA) are designed to increase the financial capital available to small firms. In 1977 the number of direct loans approved by the SBA rose 25 percent, and the dollar value of new loans rose 70 percent. In addition to the direct loan program, the SBA also licenses, regulates, and provides financial assistance to small business investment companies (SBICs). The privately owned SBICs pool public and private funds in order to provide equity and long-term debt capital to newer small businesses. These latter firms, in contrast to those financed by other SBA programs, tend to operate in new markets or with new technology. At the end of 1977 there were 273 SBICs, making use of \$428 million of private capital and \$537 million of funds from the SBA. The volume of new financing arranged during fiscal 1977 was \$197 million, a 68 percent increase from the preceding year. In order to provide special attention to the needs of businesses owned by socially or economically disadvantaged persons, the SBA administers a parallel program of SBICs for minority enterprises. The volume of loans under this program grew 72 percent in fiscal 1977.

## CHAPTER 4

# The World Economy—Managing Interdependence

**F**ROM THE EARLY 1950s THROUGH THE LATE 1960s, growing economic interdependence provided the major impetus toward sustained, rapid growth in the world economy. Just 10 years ago, in his last *Economic Report*, President Johnson wrote:

In the past two decades, enormous progress has been made in building a closely knit international economy. Remarkable growth in the volume of international commerce has gone hand in hand with sustained world prosperity; each has contributed to the other. At times, deep and obvious strains in the international monetary system have imperiled this progress, but these financial difficulties have been weathered without a serious setback in economic growth or world trade.

Much has changed throughout the last decade. In some areas the momentum of the 1960s has continued: an ever-growing share of world production is devoted to international trade. Financial markets have become more integrated internationally and have adapted to the task of recycling unprecedented flows of funds from surplus to deficit countries. For a few countries of the Third World and the southern tier of Europe, rapid export growth—and particularly the shift in the composition of exports toward manufactured goods—have occasioned rapid rises in income growth and production.

There have also been fundamental changes in the international economic system. The most dramatic change, of course, was the breakdown of the Bretton Woods system of pegged exchange rates, and its replacement by a system of market-determined flexible exchange rates. This change has, by and large, helped the world economy to adjust to the severe problems confronting it in the past 5 years—the rise in oil prices and the poor harvests of 1973–74, the subsequent serious recession, persistently high and divergent rates of inflation in most industrial countries, and the hesitant economic recovery outside the United States.

The evolution of the floating rate regime has given individual countries more elbow room for steering their economies in different directions. The extent of independence, however, is limited and the need for some coordina-

tion of economic policies remains. Indeed, to some extent the major lesson of 1977 and 1978 is that policy divergences produce severe strains: the rapid expansion in the United States relative to other major industrial countries triggered a large and potentially destabilizing depreciation of the dollar during 1978. The rise in U.S. inflation and the depreciation of the dollar led the United States to implement a policy of monetary and fiscal restraint, in coordination with a cooperative action to deal with exchange-market disturbances.

A second major change from the picture 10 years ago—and one which has been appreciated only slowly—is the pronounced decline in growth dynamism of the industrial world. Growth of potential output has been retarded, but growth of actual output has fallen even further. Aggregate demand has been sluggish throughout the industrial world outside of the United States since 1973. Weak investment and cautious consumers generally slowed private demand. Yet the need to reduce inflation and the large external and public deficits made policy makers cautious. As a result, the overall growth in the countries making up the Organization for Economic Cooperation and Development (OECD) slowed to an average of 3.0 percent over the 1973–78 period, compared to 4.9 percent in the preceding decade.

The reasons for the slowdown of potential output are not fully evident. The slowing of investment virtually everywhere has resulted in an aging capital stock. The growth of trade has slowed, and the earlier economic gains from economic integration have not been repeated. In many countries the hidden unemployment in agriculture has largely disappeared, leaving little of the productivity bonus that accompanies a declining primary sector. Clearly the sharp rise in the cost of energy has led to some costly substitution. To a lesser extent, generally higher and more volatile commodity prices may have retarded some productive sectors.

Finally, both actual and potential output growth has probably been restrained because of new views concerning the value of change and economic growth. Occasionally, a new spirit of “preservationism” has created pressures to protect the existing structure of jobs and wages and bolster weak sectors. In part, this spirit is a reaction to acute problems in key industries: excess capacity in steel, shipbuilding, and textiles, for example, burdens many economies. But a more cautious attitude has also increased the difficulties of shifting resources from declining to expanding sectors. Preservationist pressures encourage protectionist trade measures or internal subsidies that could make the world economy even less dynamic and more prone to inflation. The adventurous spirit that once characterized much industrial activity and is vital to rapid structural and economic change may have been suppressed at least temporarily by the uncertainties of the recent past.

Managing interdependence today is a major challenge. We have been through a period in which—in contrast to the robust postwar expansion—growth potential has declined and inflationary pressures have increased. To



some extent these conditions may prevail for a number of years. In the past, numerous structural factors favored rapid expansion and rising productivity: relative commodity and energy prices fell, trade barriers were lowered, new technologies came in quickly, and economies of scale were realized. These favorable factors have been weakened or reversed. The challenge to policy—at home and abroad—is twofold: to steer our economies safely through these more hazardous waters and to create conditions that favor sustained economic growth. Improved international coordination of domestic policies will be essential to accomplish both of these tasks.

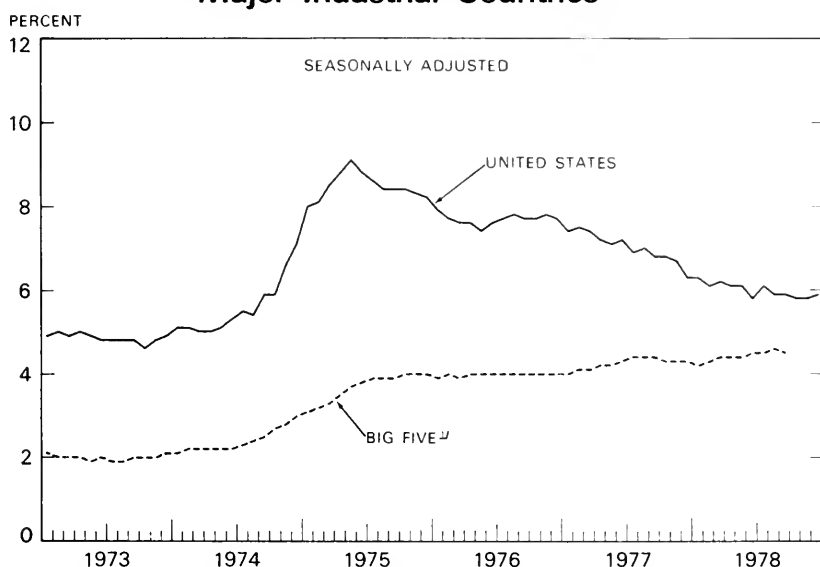
## THE GLOBAL ECONOMY: DEVELOPMENTS AND PROSPECTS

In many ways 1978 can be seen as a year of transition for industrial countries. Here in the United States economic growth began to slow after a strong recovery earlier. In the other major industrial countries, where recovery had been hesitant, growth accelerated somewhat, though not enough to reduce excess capacity substantially or to prevent a continued upward drift in unemployment (Chart 9).

The inflation rate accelerated in the United States. In most other industrial countries, inflation rates, which on average exceeded those in the United States during 1974-77, continued to decline. As a result, the rate

Chart 9

### Unemployment in the U.S. and Five Major Industrial Countries



∩ JAPAN, GERMANY, FRANCE, UNITED KINGDOM, AND CANADA DATA ARE GNP-WEIGHTED AVERAGE SOURCES DEPARTMENT OF LABOR AND COUNCIL OF ECONOMIC ADVISERS

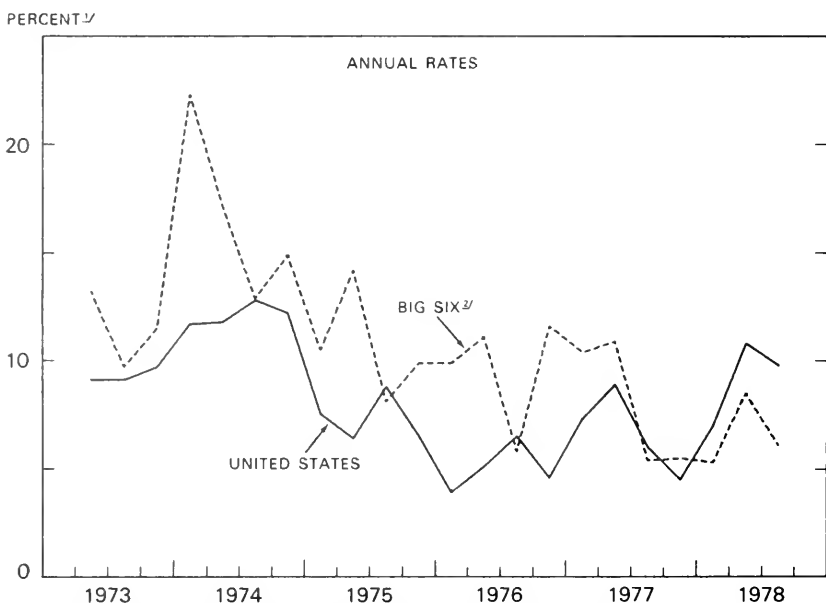
of inflation in the United States in 1978 was higher than the average level for the major foreign countries (Chart 10).

External positions also changed markedly during 1978. For the OECD countries as a group the combined current account deficit declined sharply. The deficit of the United States widened somewhat, but this was more than offset by the large rise in the combined surplus of the other major countries, especially Japan, and a marked decline in the combined deficit of the smaller OECD members. Nevertheless as the year progressed there were increasing indications that the major imbalance between the positions of the United States and Japan was beginning to be reversed. Both the Japanese surplus and the U.S. deficit were smaller in the second half of 1978 than in the first half.

The year 1979 should see some correction in the cyclical divergence that has arisen since the oil crisis. As shown in Table 31, the anticipated slowing of growth in the United States is matched by an expected slight rise of growth abroad. For the first time since 1975, growth abroad is likely to exceed growth in the United States. (It should be noted that the growth rates presented here are year over year, rather than fourth quarter over fourth quarter as generally presented elsewhere in this *Report*.)

Chart 10

## Consumer Price Inflation Rate in the U.S. and Six Major Industrial Countries



✓ PERCENT CHANGE FROM PRECEDING QUARTER AT ANNUAL RATE.

⌘ JAPAN, GERMANY, FRANCE, UNITED KINGDOM, CANADA, AND ITALY DATA BASED ON 1977 GNP/GDP WEIGHTS AND EXCHANGE RATES

SOURCES DEPARTMENT OF LABOR AND NATIONAL SOURCES

**TABLE 31.—Annual growth in real GNP in the United States and other major industrial countries, 1960–79**

[Percent change]

Country	1960–74 average	1975	1976	1977	1978 <sup>1</sup>	1979 <sup>2</sup>
United States.....	3.6	-1.3	5.7	4.9	3.9	3.3
Big Six <sup>3</sup> .....	5.8	-.3	5.4	3.3	3.8	3.9

<sup>1</sup> Preliminary.

<sup>2</sup> Forecast.

<sup>3</sup> Japan, Germany, France, United Kingdom, Canada, and Italy; OECD estimates. For 1960–74 average, based on 1970 GNP/GDP weights and exchange rates; for 1975–79 based on 1977 GNP/GDP weights and exchange rates.

Sources: Organization for Economic Cooperation and Development and Council of Economic Advisers.

Inflation rate differentials are also expected to narrow somewhat during 1979, in line with the anticipated slowing of inflation in the United States and a possible increase in inflation in some foreign countries. Trade and current account imbalances are expected to diminish further as a result of the shift in relative growth and of the large exchange rate movements during 1978.

## GROWTH AND INFLATION

In the major foreign countries there was a modest rise in the growth of gross national product (GNP) in 1978. Table 32 records the growth rates of GNP during 1977 and 1978 for each of the major foreign countries and the United States. Also included are two columns showing the average annual growth of GNP prior to 1974 as well as the average rate of growth since then.

**TABLE 32.—Annual growth in real GNP in major industrial countries, 1960–78**

[Percent change, except as noted]

Country	1977	1978 <sup>1</sup>	1960–73 average	1974–78 average <sup>1</sup>	GNP shortfall in 1978 (percent) <sup>2</sup>
United States.....	4.9	3.9	3.9	2.3	8.1
Japan.....	5.2	5.8	10.5	3.7	37.3
Germany.....	2.6	3.0	4.8	1.7	16.0
France.....	3.0	3.0	5.7	2.8	14.7
United Kingdom.....	1.6	3.0	3.2	1.0	11.5
Canada.....	2.7	3.5	5.4	3.4	10.2
Italy.....	1.7	2.0	5.2	1.9	17.1

<sup>1</sup> Preliminary.

<sup>2</sup> Difference between actual GNP and the level that would have been reached if growth since 1973 had equaled its 1960–73 trend rate, expressed as a percent of actual GNP.

Sources: Organization for Economic Cooperation and Development and Council of Economic Advisers.

The final column shows the percentage difference between the actual GNP in 1978 and the level of GNP that would have existed in 1978 if growth had proceeded after 1973 at its 1960–73 trend rate. The gap recorded in the last column is not meant to indicate the precise difference between actual and potential output. Few deny that potential output growth has slowed everywhere in recent years, and in some cases sharply, although considerable uncertainty remains about the current underlying trend for potential output. What the gap does indicate is that, for whatever reasons, the major indus-

trial countries outside the United States have witnessed a dramatic reduction in growth since the oil crisis.

Evidence that at least part of the slower growth is due to a slowdown in potential growth is shown in Table 33. Each of the large industrial countries has shown significantly lower productivity growth in the last 5 years compared to the earlier period. Clearly, part of the poor productivity performance is due to low utilization rates. Even after correcting for utilization

TABLE 33.—*Annual growth in GNP per employed worker in major industrial countries, 1964–78*

[Percent change]

Country	Average	
	1964–73	1974–78 <sup>1</sup>
United States.....	1.8	0.1
Japan.....	8.9	3.2
Germany.....	4.7	3.0
France.....	4.5	3.0
United Kingdom.....	3.2	.8
Canada.....	2.4	.6
Italy.....	5.4	1.1

<sup>1</sup> Estimate.

Source: Organization for Economic Cooperation and Development.

and recognizing analytical shortcomings in the productivity measure, however, some slowdown is evident. The largest absolute decrease occurred in Japan, where growth in GNP per worker slowed from 8.9 to 3.4 percent annually.

Whatever the new rates of potential growth may be, the actual GNP growth outside the United States was apparently not above the underlying potential growth in 1977 and 1978. In the fifth year after the onset of recession, recovery toward a fuller utilization of potential among countries outside the United States continues to be extremely hesitant and incomplete.

To some extent the slowing of potential growth and the weakness of actual growth relative to potential since 1975 are tied together. In Japan, for instance, the sharp fall in potential growth reduced capital requirements and hence reduced required investment as a share of output. Because this fall was not matched by a decline in the personal saving rate, a problem of excess saving emerged. This imbalance was absorbed partly by the rise in the external surpluses and government budget deficits and partly by the decline in income and production relative to potential output. In Japan, as in other countries, low rates of actual investment constitute a major reason for the hesitant recovery of demand. At the same time, as mentioned earlier, sluggish investment has led to a marked aging in the capital stock and has further checked the growth of potential output by limiting productivity increases.

The principal factors constraining more expansionary policies during the current recovery have been persistently high rates of inflation in most countries and the resulting judgment that relatively cautious fiscal and monetary

policies were needed. Even in those countries making notable progress in reducing inflation by 1977—particularly Germany and Japan—fear of renewing inflation continued to dampen enthusiasm for more expansionary fiscal and monetary policies.

In 1978 constraints on policies eased somewhat outside the United States as rates of inflation declined almost everywhere (Table 34). For the United Kingdom and Italy, where the rates had been highest, the decline was impressive. As a result of relaxed constraint, fiscal policies also tended to

TABLE 34.—*Changes in consumer prices in major industrial countries, 1976–78*

[Percent <sup>1</sup> ]			
Country	1976	1977	1978 <sup>2</sup>
United States.....	5.8	6.5	7.6
Japan.....	9.3	8.0	3.9
Germany.....	4.6	3.9	2.7
France.....	9.6	9.5	9.2
United Kingdom.....	16.6	15.8	8.3
Canada.....	7.5	8.0	9.0
Italy.....	16.8	17.0	12.2

<sup>1</sup> Changes measured from year average to year average.

<sup>2</sup> Estimate.

Sources: Department of Labor, Board of Governors of the Federal Reserve System, and Council of Economic Advisers.

become significantly more expansionary in the major foreign countries: according to OECD estimates, the direct impact of fiscal policy shifts in 1978 amounted to over one-half of 1 percent of GNP for the major foreign countries, excluding Japan, and to over 2 percent for Japan.

The 1978 pattern of changes in growth and inflation rates was heavily influenced by the marked decline of the dollar and the consequent appreciation of most other major currencies. In countries where exchange rates appreciated, it is broadly true that GNP growth lagged behind the growth of domestic demand and that inflation rates declined. In this environment fiscal policy became more expansionary during the course of the year. These shifts in fiscal policy were both necessary and appropriate. They were necessary because extra stimulus was required to offset the negative effect on GNP of the adverse shift in real net exports. And they were appropriate because the reduction in inflation due to currency appreciation gave policy makers breathing room to shift toward more expansionary policies. Moreover in Germany, and even more in Japan, a reduction in the current account surplus required a shift in policy to make sure that shifts in export and import volume would eventually become large enough to offset the effects of the currency appreciation on terms of trade.

For the United States the opposite set of circumstances prevailed. A weak external sector, accelerating inflation, rapidly declining unemployment, and a depreciating currency made it necessary to shift toward a more restrictive fiscal and monetary policy. Indeed, this shift occurred during the year.

The need to realign and coordinate economic policies, both in the United States and abroad, so as to promote external adjustment and reduce diver-

gences in economic performance across countries was increasingly recognized during 1978. In the course of meetings that culminated in the Economic Summit at Bonn in July 1978, a significant degree of coordination was realized. At the Bonn meeting the leaders of the seven largest industrial countries discussed the major goals and problems in the world economy, and a Concerted Action Program was devised in which each country made appropriate specific commitments.

The Bonn Summit marked a turning point, particularly for the United States. The United States noted that curbing inflation has become the top priority of economic policy. The President therefore pledged to take specified actions to reduce the U.S. inflation rate, obtain a more rapid reduction in our current account deficit, and adopt an energy policy which would, by 1985, cut our imports of petroleum by 2.5 million barrels per day.

In addition, Germany and Japan proposed steps to increase growth and thus reduce external surpluses: Germany to provide additional fiscal stimulus totaling 1 percent of GNP; Japan to achieve a 7 percent growth in real GNP between March 1978 and March 1979. The other participating countries (France, Italy, the United Kingdom, and Canada), whose high rates of inflation provided less scope for specific action, made broadly complementary commitments. At the same time, each country recognized the overriding importance of not allowing sluggish growth, sectoral difficulties, or trade imbalances to serve as pretexts for actions that would undermine the framework of free trade among nations. A joint commitment, covered more fully later in this chapter, was adopted to secure a rapid and successful outcome for the Multilateral Trade Negotiations.

Considerable progress has been made in meeting these commitments. As discussed earlier in this *Report*, the United States has in place a major anti-inflation program and has shifted both fiscal and monetary policies toward restraint. The 1978 National Energy Act, signed at year's end, establishes a comprehensive framework for rationalizing energy policy and reducing oil imports along the lines discussed at Bonn. Germany completed legislation in December 1978 that fully implements its own commitment. Although Japan began in September to carry out a supplementary fiscal program to stimulate growth, it now seems likely to fall well below the 7 percent growth target.

The Concerted Action Program adopted at Bonn marks an important step in international economic cooperation. On a substantive plane, the measures taken helped put the major economies onto more balanced and sustainable paths. More important is the symbolic significance: it is now clearly recognized at home and abroad that, in a world where countries are interdependent, policy choices by one nation directly affect economic performance in others. If some countries grow very slowly, their trading partners will be forced to abandon dynamic export industries; if one country attempts to protect its industries, at the border or by domestic

subsidies, others will have to retrench; if one nation pursues extremely rapid growth or inflationary policies, the resulting exchange rate depreciation may lead to uncertainties and market disorders. Increasing awareness of these linkages and acceptance of the responsibilities they imply represent the goal of policy coordination exemplified by the Summit.

## PROSPECTS

Although the shift toward more rapid growth abroad is a welcome development, the world economy continues to face difficult challenges. GNP growth, while expected to maintain the 1978 rates, will remain low by the standards of the 1960s, and it will be hard to generate enough jobs to reduce unemployment. In some countries more extensive use of specific job programs and special incentives to reduce structural unemployment of young workers must effectively supplement demand management policies if further increases in unemployment are to be avoided.

Most economies also face excess capacity in basic industries such as steel, textiles, and shipbuilding. The consolidation of these sectors by reducing capacity, and the resulting loss of jobs, aggravate labor market problems. Ways must therefore be found to smooth the transfer of workers from declining to expanding sectors. Securing a more rapid rate of job creation is made harder by continued low rates of investment in plant and equipment. While some growth in investment occurred in 1978, the basic circumstances have not changed substantially. Excess capacity remains large and prospects indicate only a moderate growth in demand. In this environment a sharp acceleration of investment during 1979 is not foreseen.

While faster growth would greatly benefit most foreign economies, inflation rates in all but a few OECD countries remain too high for governments to pursue policies that are significantly more expansionary. Even relatively restrictive macroeconomic policies will bring only a gradual decline in inflation. In some countries inflation may accelerate again as the favorable effects of exchange rate appreciation and commodity price declines wear off.

Thus, despite some easing of constraints on policy in countries outside the United States, the economic environment presents difficulties. Few easy solutions are available; and according to an increasing number of observers, it will take a continued effort to bring about conditions more favorable to sustained economic growth.

## CURRENT ACCOUNT DEVELOPMENTS AND PROSPECTS

In 1978 there were marked changes in global payments positions (Table 35). First, the large current account surplus of the countries making up the Organization of Petroleum Exporting Countries (OPEC) diminished sharply and unexpectedly from about \$32 billion in 1977 to an estimated \$11 billion in 1978.

TABLE 35.—*World current account balance,<sup>1</sup> 1975–78*  
 [Billions of dollars]

Country	1975	1976	1977	1978 <sup>2</sup>
OECD countries.....	0.3	-19.0	-27.5	0.5
United States.....	18.4	4.3	-15.3	-17.0
Big Six <sup>3</sup> and Switzerland.....	-3.8	-3.7	13.5	33.5
Other OECD.....	-14.3	-19.4	-25.7	-16.0
OPEC countries.....	27.3	37.0	31.5	11.0
Non-oil developing countries.....	-38.5	-26.0	-24.0	-34.0
Other <sup>4</sup> .....	10.9	8.0	20.0	22.5

<sup>1</sup> OECD basis.

<sup>2</sup> Estimate.

<sup>3</sup> Japan, Germany, France, United Kingdom, Canada, and Italy.

<sup>4</sup> Reflects errors and asymmetries, as well as balances with omitted country groups.

Sources: Organization for Economic Cooperation and Development and Council of Economic Advisers.

This remarkable decline resulted from volume and price effects in about equal measure. The volume of OPEC oil exports actually fell somewhat in 1978, a consequence of the slackened pace of growth in energy demand in the industrial countries and the rapid 1978 expansion of other sources of oil. North Sea, Alaskan, and increased Mexican production, accounted together for a rise in production of 1.2 million barrels per day, or roughly 4 percent of total OPEC production.

At the same time, the volume of imports into OPEC countries continued to grow at a significant though slowing rate, a result of the momentum of on-going development plans in a number of OPEC countries. Price movements have also been important in reducing the OPEC surplus. The dollar price of oil remained roughly constant, while import prices rose.

Second, in the so-called non-oil developing countries (that is, the poorer countries outside of OPEC and the OECD) the combined deficit expanded considerably last year. The terms of trade, which had been generally favorable in 1977, turned against such countries in late 1977 and early 1978. Late last year, however, the terms of trade again strengthened appreciably. Borrowing conditions for most of these developing countries remained favorable, and many of them borrowed substantial amounts to service outstanding debt, maintain the growth of their imports, and increase their gross reserves for the third consecutive year.

The most striking change in 1978, however, was the disappearance of the OECD deficit. The aggregate deficit of the OECD countries, \$28 billion in 1977, gave way to a small surplus in 1978. This turnaround was the second largest recorded year-to-year change in the OECD external position; it was exceeded only by the large shift from surplus to deficit which followed the OPEC price rise. It was surprising that the decline passed virtually unnoticed and had little effect on developments during the year compared to those occurring in the 1974–75 period.

The OECD can be usefully divided into three groups. The first comprises countries in surplus; the second contains small countries, chiefly in deficit;



and the United States is the third. Starting with the surplus countries, one should note that the largest part of the decline in the OECD deficit is accounted for by the rise in the combined surpluses of Japan, Germany, France, Italy, and Switzerland. These countries, along with the United Kingdom, experienced strong gains in their terms of trade—that is, the prices received for exports rose more rapidly than prices paid for imports, principally because of appreciation in their exchange rates.

A gain in the terms of trade affects the favored country in two ways. First, it increases income and thus tends to have a stimulating effect on aggregate demand similar to that of a tax cut. Second, after some time, however, the higher export prices tend to depress the volume of exports, while the lower import prices tend to raise the volume of imports, thereby reducing aggregate demand. Table 36 records the movement in current account balances for each of the countries named above, except Switzerland, and shows the relative size of the two different effects in 1978: the ratio between the gain in terms of trade and domestic demand, and the ratio between the change in the volume of net exports and GNP.

TABLE 36.—*Current account balances for selected major industrial countries, 1976–78*

Country	Current account balance <sup>1</sup>			Gain in terms of trade as percent of domestic demand, 1978 <sup>2,3</sup>	Change in volume of net exports as percent of real GNP, 1978 <sup>2</sup>
	1976	1977	1978 <sup>2</sup>		
	Billions of dollars			Percent	
Japan.....	3.7	10.9	20.0	1.9	-0.3
Germany.....	3.8	3.7	6.0	.6	-.3
France.....	-6.1	-3.3	2.0	.8	.3
United Kingdom.....	-2.0	.5	-5	1.2	-1.0
Italy.....	-2.8	2.3	5.5	.4	.8

<sup>1</sup> OECD basis.

<sup>2</sup> Estimate.

<sup>3</sup> The gain in terms of trade is the percent change in export prices times 1977 export value minus the percent change in import prices times 1977 import value.

Sources: Organization for Economic Cooperation and Development and Council of Economic Advisers.

Even though estimation of gains in terms of trade is subject to a considerable margin of error because of serious measurement difficulties, the results are striking. These five countries experienced very large gains in income from the terms of trade in 1978 and, excepting the United Kingdom, had little or no offset from the declining volume of net exports. The income gains, however, do not appear to have been matched by a corresponding rise in the growth of real output, especially when allowance is also made for the expansionary shifts in fiscal policy. A possible explanation for this relatively weak multiplier effect is that, because these income gains were perceived to be transitory, they were largely absorbed in increased household and corporate saving, rather than in increased expenditures.

The second group of OECD countries, comprising the smaller nations, in the aggregate reduced their deficits in 1978 by about \$10 billion. This

reduction was especially welcome in view of the very large deficits these countries had run from 1974 to 1978, when their net indebtedness grew by close to \$80 billion. Indeed, external positions had become unsustainable for a number of countries in this group and severe retrenchment was necessary. Stabilization programs were developed in connection with upper credit-tranche drawings from the International Monetary Fund for Portugal and Turkey. Governments in the Scandinavian countries acted to forestall further accumulation of debt that might well have become a source of difficulty in a few years. For still others, the extent of improvement in their current account was limited by adverse shifts in the terms of trade stemming from the fall in a number of raw materials prices. For the group as a whole, the decline in current account deficits can be explained almost entirely by the reduction in import volumes relative to export volumes.

The United States stands alone in the third category. Throughout the postwar period the growth of U.S. imports tended to be greater in relation to domestic growth than the growth of exports in relation to growth abroad. Until 1975 a rough balance between import and export growth was maintained by the fact that growth abroad tended to exceed U.S. growth. From 1975 through 1978, however, growth in the United States surpassed the average growth abroad. As a result, the current account of the United States shifted sharply. In 1977, a year in which U.S. economic growth exceeded that of its trading partners by about 1½ percentage points, the U.S. current account shifted by almost \$20 billion, from a surplus of \$4.3 billion to a deficit of \$15.3 billion. Roughly three-fourths of this shift is accounted for by the more rapid growth of merchandise import volumes compared to export volumes. The remainder of this shift reflected changes in the terms of trade and in the composition of trade, only partly offset by gains in service transactions.

On the basis of preliminary estimates the current account shifted toward deficit in 1978 by a further \$1.7 billion. There was, however, substantial improvement from the first half of the year to the second, when growth in export volume picked up and import growth began to moderate. Despite the depreciation of the dollar during this period, the expected adverse shift in the terms of trade was restrained to a significant degree by the constancy of the price of oil imports and by the general increase in the prices of manufactured goods relative to the prices of primary commodities.

The shifts that occurred in 1978 in current account positions among the countries of OPEC, the non-oil developing countries, and the OECD countries are not likely to be reversed in 1979. The large oil price increase announced by OPEC last December will seriously complicate the task of economic management in the industrial and non-oil developing countries. This price increase is not expected to result in a substantial widening of the OPEC surplus from 1978 levels, however, since imports by OPEC will also continue to rise. It can be said that the industrial countries are now paying the "OPEC oil tax" largely in current goods and services rather than

I O Us. As a result, the so-called recycling problem has become much less troublesome—though the surpluses of a few individual OPEC countries will continue for years to come. More generally, the traditional pattern of resource flows between countries, in which the major industrial countries are net capital exporters to the developing countries and to other poorer countries within the OECD, appears to have been firmly reestablished.

Barring a substantial run-up in commodity prices, the deficits of the non-oil developing countries are likely to rise somewhat in 1979. Such a rise in deficits would appear to be consistent with the strong liquidity positions of many countries in this group, the ability of a growing number of countries to borrow successfully on international financial markets at lower interest spreads and longer maturities, and the apparent willingness of banks to increase their lending to developing countries despite a few isolated debt rescheduling problems during 1978.

Among industrial countries of the OECD, a more balanced distribution of surpluses and deficits is likely to emerge in 1979. The U.S. current account deficit is expected to decline considerably from the levels at the end of 1978, dropping to about an annual rate of \$2–\$8 billion by the end of 1979. This reduction will result from two conditions: first, the effects of slower U.S. economic growth on imports; and second, a steady and vigorous growth in exports as markets continue to adjust to the improved price competitiveness of American goods and services that resulted from last year's depreciation of the dollar.

Some decline, too, is anticipated in the surpluses of Japan and Germany. Expectations for the decline of the Japanese surplus are grounded primarily in the anticipation of a further fall in the volume of Japanese exports. Import volumes rose only moderately in 1978 after allowance for large accounting transactions made under the emergency import program. They are unlikely to accelerate strongly this year, despite the appreciation of the yen, because of the relatively closed structure of many Japanese import markets. This one-sidedness in adjustment by Japan is likely to intensify the difficulty of reducing the Japanese surplus to a sustainable level over a longer period. The need for a sustained reduction of barriers in Japanese import markets is well recognized by Japanese officials, and extensive discussion between Japan and the United States during 1978 has laid the groundwork for progress toward this end.

## INTERNATIONAL FINANCIAL DEVELOPMENTS

For the international financial markets 1978 was a year of unusual instability. Serious questions were raised at home and abroad about the functioning of foreign exchange markets, culminating at year-end with the charter of the new European Monetary System and with the dollar support measures of the United States. These developments were responses to increased volatility and to disorderly conditions in the foreign exchange mar-

kets. In the case of the European Monetary System they arose also from concern about the undesirable side effects of a system of floating exchange rates for closely integrated economies and from the need to foster closer economic integration in Europe.

## THE OPERATION OF FLEXIBLE EXCHANGE RATES

The developments of 1978 must be seen as a part of the continued evolution of international financial arrangements. It is therefore appropriate to begin this discussion by reviewing the role of floating exchange rates in macroeconomic adjustment over the 1973-78 period.

### *Floating Rates in Principle*

The role of floating exchange rates can best be seen in the need for adjustment among national economies. All countries are continually subjected to shocks that lead both to internal imbalances (excessive or deficient utilization of domestic resources) and to external imbalances (foreign trade or capital flows at unsustainable levels). A system of flexible, market-determined exchange rates (or, in short, "floating" rates) allows more automatic external adjustment than a system of fixed parities, and thus leaves more scope for domestic macroeconomic policies to adapt to the changing requirements for internal balance.

External adjustment occurs as exchange rates move to equilibrate trade and net capital flows. More precisely, for a given change in official holdings, the rate will move to a level that either brings the value of goods and services exported and imported into balance or induces changes in private asset holdings to finance the discrepancy.

The equilibrating mechanism works on both the capital and current accounts. For a country incurring a large current account deficit, the currency depreciates to reduce the current account deficit by increasing the country's price competitiveness. That process, however, takes time. In the interim, currency movements will induce private holders of wealth to accumulate the country's assets to the extent necessary to finance the deficit.

The second feature of an idealized system of floating exchange rates can be seen as a consequence of the first. Because floating rates tend to assure external equilibrium, countries can enjoy greater independence of macroeconomic policies and performance. Under a regime of fixed exchange rates, the extent to which a country's macroeconomic policies could diverge from those of its trading partners was limited in important ways. Divergent policies would lead to trade imbalances, with expansionary countries moving toward deficit and restrictive countries toward surplus. There was no automatic mechanism to generate the needed capital movements to support the imbalances. Indeed, outflows of capital from countries pursuing relatively expansionary policies to countries pursuing restrictive policies sometimes exacerbated disequilibria in overall balance of payments positions. A coun-

try's freedom to engage in independent macroeconomic policies was thus constrained by its capacity to absorb or lose reserves.

Under a floating rate regime, however, wide divergences of macroeconomic policies would, in principle, be possible. For those countries pursuing rapid growth through expansionary macroeconomic policies or those accepting high inflation, the presence of a depreciating currency would allow the balance of payments to remain close to equilibrium.

### *Critiques of Floating Rates*

For more than 5 years the major economies have functioned under a floating rate regime. The new regime has been successful in permitting the industrial economies to absorb shocks that were unprecedented in the post-war period. At the same time, overall economic performance and exchange market behavior have been much less satisfactory than was expected, leading many to wonder whether the exchange rate regime was at least partly responsible for the poor performance.

Critics have argued that floating rates have had four failings: they have not eliminated balance of payments disequilibria; they have not allowed the degree of policy independence that had been anticipated; they have proved inflationary; and they have introduced major new elements of instability and uncertainty to financial markets.

First, floating rates clearly have not eliminated current account surpluses and deficits. These deficits and surpluses have not, in general, fallen from the levels of the late 1960s and early 1970s and, on many occasions, some have been even higher.

Such an observation, however, does not imply a failure of floating rates to perform their adjustment function. The imbalances that have occurred have not usually resulted from floating per se, but from the greater divergence of macroeconomic performances and from the exceptionally large shocks to the international system, such as OPEC price rises and large increases in agricultural and commodity prices. Exchange rate changes have generally responded well to these deficits and surpluses and have helped to move economies back toward external equilibrium, even if not as quickly or as smoothly as originally hoped. A balance of payments equilibrium, moreover, does not necessarily require that the current (or trade) account should be balanced, only that the current or trade account deficit or surplus be willingly financed. In fact, deficits or surpluses on current account may well represent the equilibrating counterpart to structural or "autonomous" capital inflows or outflows.

In contrast, during the final years of the Bretton Woods system, balance of payments disequilibria that resulted at least partly from divergent macroeconomic performances led to several serious and protracted balance of payments crises. Normal trade and investment patterns were disrupted as governments responded to these disequilibrium situations by imposing trade

and capital controls and other emergency measures before they were finally forced to change their exchange rate parities.

A second cause of concern exists because floating has led to less policy independence than had been anticipated. To be sure, countries have been significantly more independent than in prior years, especially in the realm of monetary policies. A good example lies in the ability of Germany, during the early phase of the current expansion, to pursue a relatively restrictive monetary policy, while that of the United States was relatively expansionary.

Although independence has been greater than with fixed rates, it has by no means been complete under floating. There have been obvious limitations to policy flexibility, partly because exchange rate changes cannot insulate national economies from their partners' performance or from international economic shocks. We have learned that in an increasingly interdependent international economic system floating exchange rates do not free countries from the effects of their neighbors' economic policies and performances. Similarly, countries must recognize their responsibility to act in ways that do not inflict excessive adjustment costs on others.

The third major criticism of the floating rate system has been that it contains an inflationary bias. Two lines of argument have been presented to support this view: first, that floating generates inflation because it fails to impose needed discipline on the conduct of fiscal and monetary policies; second, that because of asymmetries and ratchets the increased inflationary pressures associated with depreciation are not matched by commensurate downward price pressures in countries whose exchange rates are appreciating. Thus, it is argued, the net effect of exchange rate changes is inflationary for the world as a whole.

Neither of these arguments is entirely convincing. Regarding the first argument—presumed lack of discipline—it is important to note that even without external pressures there are clearly powerful internal forces which oppose inflation. Recent experience in the United States and some countries of Europe, where large current account deficits and currency depreciations have led to quite restrictive economic policies, indicates the extent to which difficult stabilization policies will be undertaken even in a flexible exchange rate system.

Moreover, a regime of fixed rates allows inflation to spill over the borders. Price rises originating in one country spill over into other countries directly if exchange rates cannot shift. Indeed, to the extent that inflation originating in one country is shared by others when exchange rates are fixed, discipline in the conduct of fiscal and monetary policies may be weaker than under floating rates, where the full inflationary impact of inappropriate policies is felt domestically.

The evidence to support the second argument—that there are asymmetries in the effects of exchange rate changes on inflation—is mixed. While it is true that there exists considerable evidence of increasing downward rigidity in the levels of prices and wages in a number of countries, there is

no comparable evidence that rates of inflation are less responsive to currency appreciation than to depreciation.

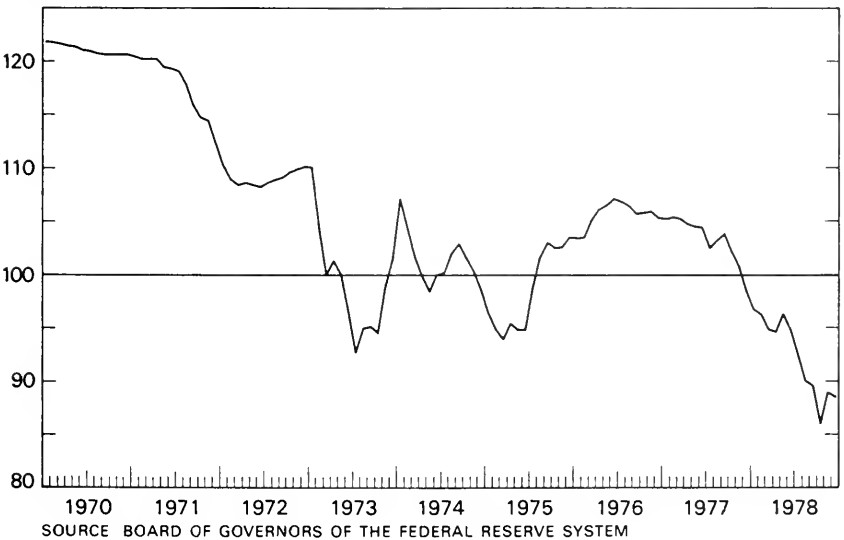
Finally, factors other than floating exchange rates provide a more compelling explanation for the high and persistent inflation in the industrial countries: slower productivity growth, excessive demand pressures, external shocks such as those created by OPEC, and structural changes and rigidities in domestic labor and product markets.

A final criticism of floating has been that it induces excessive volatility in exchange rate movements. Chart 11 presents the path of the trade-weighted dollar since 1970, using an index of dollar movements against the 10 major currencies, and 1972-76 total multilateral trade shares as weights. In addition to these longer-run swings in rates, it is certainly true that day-to-day movements in exchange rates have been larger in the float than in the preceding Bretton Woods era. It is difficult to determine whether these movements have been excessive. In a fixed rate system such as Bretton Woods, day-to-day variability is sharply reduced by the active intervention of central banks to keep the rate within a narrow range. Furthermore, for as long as the range remains credible, private actions tend to keep the rate within the range whenever transient factors lead to a rate movement to the upper or lower limit. Day-to-day variability is thus largely eliminated. On the other hand, the fixing of exchange rates while economic conditions are changing makes it likely that exchange rates will increasingly

Chart 11

### Weighted-Average Exchange Value of the U.S. Dollar

INDEX, MARCH 1973=100



diverge from levels that would be consistent with underlying economic factors. Eventually the credibility of the range is challenged by market participants, and potentially disruptive speculative attacks can then occur until rates are forced to new, more appropriate levels.

In a floating rate system, day-to-day variability of exchange rates is inevitable as market participants respond to new information about economic developments that alters their perceptions about appropriate exchange rate patterns. Indeed, these day-to-day movements in principle constitute the means of accomplishing longer-run adjustment of exchange rates to changing economic circumstances. This fundamental role of exchange rate movements raises the question whether the observed short-run variability of exchange rates has been larger than was required to allow the necessary medium-term flexibility. This question is complex and has not been thoroughly addressed. A preliminary examination of recent experience and related studies by the Council of Economic Advisers has uncovered mixed evidence. In some cases, short-run variability over the last 5 years has been broadly commensurate with longer-run changes, while in other cases short-run changes have been less than might be consistent with the longer run. No cases of persistent, excessive volatility were found.

There is a sense in which the floating rate system itself may have led to excessive volatility—through the relaxed constraints on macroeconomic behavior. As noted above, a floating rate system allows greater divergence in macroeconomic experience. Unfortunately, when greater scope for divergent policies and performance is allowed, market uncertainty about appropriate exchange rates is also increased. The uncertainty, in turn, can cause market exchange rates to move in an erratic and disorderly fashion as market participants react, and overreact, to transitory bits of information and rumors.

Greater exchange rate noise and uncertainty are among the costs of a floating rate system. Achievement of greater stability in exchange rate markets is dependent on the closer and more effective coordination of macroeconomic policies among countries and on the continuing efforts of each country to sustain macroeconomic policies that are consistent with internal and external adjustment.

In general, however, the evidence, although not conclusive, does indicate that floating has worked well over the long run, especially considering the magnitude of the shocks to the international financial system. In fact, given these shocks, it is not clear that any system other than generalized floating would have been viable during the period. Exchange rate movements, while large, have broadly responded to economic fundamentals, have facilitated adjustment, and have tended to move the system toward rather than away from greater stability. If exchange rates are at present too volatile for some countries, steps to increase the coordination of macro-



economic policies could be helpful. Recognition of the current level of interdependence through improved coordination across countries may help to bring greater stability to the foreign exchange markets as well as to provide an international environment that is favorable to domestic policy goals.

#### IMPORTANT 1978 DEVELOPMENTS

The summer and fall of 1977 marked the beginning of a protracted fall in the value of the dollar and an increase in the day-to-day volatility of exchange rates in general. Both of these trends continued through the first 3 quarters of 1978.

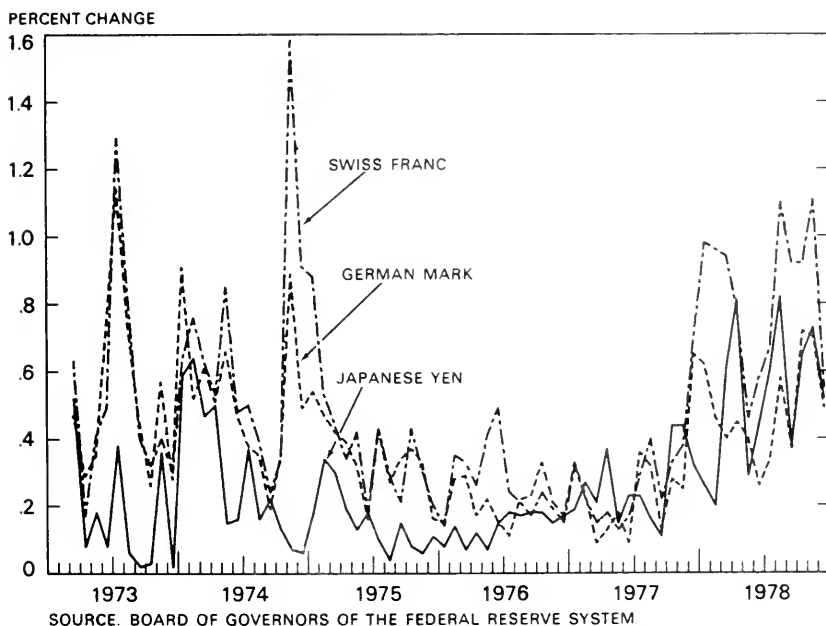
#### *The Variability of Exchange Rates and Depreciation of the Dollar*

The extent of exchange rate variability can be seen in the average day-to-day change of major currencies. In general the daily variation in exchange rates decreased between 1973 and 1975, remained comparatively small from 1975 to about the middle of 1977, and then increased markedly in the second half of 1977 and in 1978 (Chart 12).

The decline in variability from 1974 to the 1975-77 period is probably due to a lessening of shocks to the world economy and the gradually growing ability of market participants to work with a regime of floating rates. The

Chart 12

### Monthly Average of Daily Exchange Rate Changes



source of the sudden increase since late 1977 is less clear. Only to a small extent can it be explained by the fact that the computed variability is somewhat amplified when the level of the exchange rate is moving sharply in one direction rather than fluctuating around a steady trend. A more plausible explanation was the heightened uncertainty about the dollar's future equilibrium level in view of the growing current account deficit, a subsequent acceleration in inflation in the United States, and, for a time, uncertainty about the response of U.S. economic policies to these developments.

The value of the dollar also began to change dramatically in late 1977. Chart 11 shows the trade-weighted value of the dollar against the major currencies for 1970-78. Two distinct periods can be identified during the recent experience. From September 1977 through March 1978 the dollar fell by 8.7 percent on a weighted average basis against other currencies. During this period the markets tended to focus on the rapid widening of the U.S. trade and current account deficits and their expected persistence. Even though a substantial portion of the deficits could be accounted for by the cyclical position of the United States relative to its major trading partners, growth forecasts suggested that this cyclical divergence would not soon be eliminated.

After a brief period of leveling off in April and May 1978, a second dollar decline began in early June and carried through until the end of October. Some part of this renewed decline can be accounted for by the acceleration and persistence of inflation in the United States, which aroused much concern in international financial circles. From a purely technical point of view, this is not a sufficient explanation, however, since the inflation rate in the United States, while substantially higher than that in Germany, Switzerland, and Japan, was not much higher than the average level among all our major trading partners. And the parallel shift in interest rate differentials in favor of the dollar was more than sufficient to offset the change in underlying inflation in the United States. Finally, the dollar's fall came in the face of increasing evidence that the U.S. current account position was improving markedly.

By the end of October, then, there was considerable evidence that the primary reason for the dollar's fall was the uncertainty in foreign exchange markets. Little attention was paid to the anti-inflation message on October 24. Market participants continued to shift out of dollars despite an apparent consensus of market expectations that the dollar was undervalued from a long-run point of view. Almost all market participants commenting in the press or in discussions during the fall of 1978 expected an eventual turnaround of the dollar. Only the timing and the duration of the expected recovery were uncertain. Market participants, however, were highly uncertain about the future course of U.S. macroeconomic policy, and this uncertainty encouraged shifts out of dollars because it made the dollar a riskier, and hence less attractive, asset.

## THE NOVEMBER 1 INITIATIVE

On November 1 the Administration and the Federal Reserve implemented a strong dollar support program. Its basis was the judgment that, whereas some of the earlier 1977-78 dollar decline had been necessary to correct the external disequilibrium, the continued decline of the dollar had become disorderly and was not justified by fundamental economic conditions. On the contrary, all the econometric evidence, the government forecasts, and the private forecasts indicated that the U.S. current account deficit was likely to narrow sharply in 1979. Indeed, it had already fallen from the levels reached in the first half of 1978.

The dollar depreciation from September 1977 through the summer of 1978, combined with U.S. economic policies recently put in place—the National Energy Act, a new national export policy, the shift toward more restrictive monetary and fiscal policies, and the other elements of the anti-inflation program—was thought likely to be effective in slowing inflation at home and bringing about a more appropriate external balance. Further dollar depreciation, especially that induced not by fundamental economic factors but by uncertainty about future exchange rates or policies, was therefore unnecessary for adjustment and would have led to a misallocation of resources at home and abroad, possibly even to serious instability in the financial system. Such movements would have added further to U.S. inflationary pressures and thus harmed the prospects for the anti-inflation program. They could also create the kind of instabilities in exchange markets that could threaten economic prospects in other countries.

In the light of these considerations, the United States announced a dollar support package that contained two parts. First, the United States mobilized \$30 billion in resources as its share of a joint intervention program with Germany, Japan, and Switzerland. Second, the Federal Reserve tightened domestic monetary policy by raising the discount rate from  $8\frac{1}{2}$  to  $9\frac{1}{2}$  percent and by imposing a 2 percent supplementary reserve requirement on large time deposits. The Federal funds rate also rose from  $9\frac{3}{8}$  to  $9\frac{7}{8}$  percent on November 1.

The \$30-billion intervention package comprised several different items: (1) the Treasury's drawings on our International Monetary Fund reserve position of \$2 billion and \$1 billion in Deutschmarks and yen respectively; (2) the Treasury's sales of a total of \$2 billion of special drawing rights to Germany, Japan, and Switzerland; (3) a doubling of the Federal Reserve swap lines with Germany, Japan, and Switzerland—to \$6 billion, \$5 billion, and \$4 billion respectively; and (4) the Treasury's commitment to issue up to \$10 billion in foreign currency denominated securities in foreign private markets.

The markets responded favorably to the dollar support policy. By the end of the first week of the program, the trade-weighted dollar was 7.7 percent higher than it had been at its low point at the close of business on October 30. By November 30 it had risen an additional 2.4 percent; and, while some

declines occurred in December and early January—principally with the news of the OPEC price increases and the instabilities in Iran—by the middle of January it was again roughly 7.7 percent above its October low. Thus the foreign exchange markets at the beginning of 1979 were clearly in a different condition from what they were in the summer and fall of 1978. The one-way speculation had largely ended, and economic fundamentals appeared to be much more important market factors than they had been 2 or 3 months before. Market participants, who had been primarily concerned about preventing further foreign exchange losses and uncertain about the specific timing of an expected dollar upturn, were now taking a more healthy wait-and-see attitude about the future course of market fundamentals. The November 1 action, bolstered by the greater certainty that it generated, appears to have achieved its basic purpose. In the period ahead the value of the dollar should depend on sustained progress in the U.S. trade and current accounts and on the success of the new anti-inflation program, rather than on the level of market uncertainty.

While the dollar's decline in the fall of 1978 was an instance of a malfunctioning of exchange markets, the overall history of exchange rates in recent years does not suggest that such malfunctions are chronic. Rather, they are temporary but acute symptoms that are most likely to develop when general macroeconomic conditions are diverging, or in transition, thereby generating greater uncertainty about future economic conditions and policies and an increased dispersion in expectations about future exchange rates. Conversely, as general macroeconomic conditions and policy directions become better established, exchange markets can be expected to perform more smoothly their function of adjusting rate levels to such economic divergences as remain between countries. Such a calming of exchange markets may take time and may require considerable further efforts toward coordinating macroeconomic policies across countries. Excessive market sensitivity, built up during periods of disorderly movement, is likely to induce continued higher than normal variability in rate movements until accumulated evidence of greater underlying stability becomes firmly established.

#### THE EUROPEAN MONETARY SYSTEM

The members of the European Economic Community reached agreement on a new European Monetary System expected to be implemented in 1979. The development of this system is consistent with the Community's continued efforts to work toward economic and political unification and with its members' concern about the negative effects on economic activity and investment of what they consider increasingly excessive and unnecessary volatility in exchange rates.

In the short run this new agreement amounts to adding France, Ireland, and Italy to the Snake arrangement of the Benelux nations, Denmark, and West Germany, with Norway dropping out. There will be expanded credit arrangements and increased margins around parity changes (up to 6 percent

for new members) as well as greater flexibility for parity changes. The United Kingdom, which initially will participate in only part of the system, may become a full member later in 1979. The European Monetary System is considered by many participants to be an important step toward a full-fledged monetary union of the European Community countries, with fixed exchange rates, a European Currency Unit for use as a numeraire as well as for intra-Community central bank settlements, and a European Monetary Fund with comprehensive credit facilities.

In the early part of its existence, any system of fixed exchange rates must concern itself with the establishment of consistent rate patterns and adjustment mechanisms. Otherwise, whenever rate patterns or fundamental economic conditions appear unsustainable, market participants are likely to test the weakest and strongest currencies. Judging from past efforts, governments can sometimes forestall such attacks by judiciously adjusting central rates when economic conditions warrant such action. The adjustment of central rates, however, cannot be too frequent, for then future changes would tend to become anticipated by the market, and the self-stabilizing property of the system—which is its major benefit—would be dissipated. On the other hand, if rate adjustments become too infrequent, fundamental disequilibria will become so large as to attract massive, and successful, speculative attacks.

To maintain a fixed-margin arrangement, therefore, it is necessary to forestall situations in which central rates cease to be credible and to do this by working actively toward convergence of macroeconomic conditions and policies. For the countries of the European Monetary System, this necessity is clearly recognized. Indeed, to some extent the European Monetary System was regarded as an instrument for achieving precisely this sort of convergence. Its success will depend in the shorter run on its flexibility, the viability of its credit arrangements, and the eventual full-time membership of all Community members, and in the longer run on the convergence of member countries' macroeconomic policies and economic conditions.

## THE CHANGING ENVIRONMENT OF WORLD TRADE

Until recently, the postwar period has been one of very high growth of national economies and improved living standards. One of the major sources of this vitality has been the progressive dismantling of trade barriers. Each of the three major industrial regions (North America, Europe, and Japan) has experienced increased trade flows. This increase is due in large part to the vision of those who built the Common Market, progressively opened up the Japanese economy, and sustained the Kennedy Round of multilateral tariff reductions.

During the last decade, however, movement toward increased competition in international markets has flagged. Indeed since 1974 there has been some regression in trade policies. In response, the United States, along with governments of other major industrial countries, has committed itself to pro-

moting free trade and reducing protectionist pressures around the world. The aims of U.S. trade policy are to enable the United States and other economies to benefit from the most efficient allocation of worldwide resources and to channel U.S. resources into sectors of comparative advantage. In 1978 the major activities of U.S. policy makers in this area involved the Multilateral Trade Negotiations in Geneva, the determination of domestic trade policy, and the development of the President's National Export Policy.

In recent years the growing economic interdependence in the international community, along with an increasing incidence of shocks and resulting adjustment policies, has led to an increasing number of trade problems around the world and consequently to more cases of overt or indirect protection and reaction. These trade problems and increasing protectionist pressures have several causes: the emergence of newly industrialized nations who are competing to gain an increasing proportion of the export market for industrial goods; the development of long-term structural problems in several sectors, resulting from shifts in the pattern of world consumption and production; the appearance of significant current account deficits after the oil price increase in 1973; greater skepticism about the functioning of the international trading system; and, above all, the recession, stagnant domestic markets, and associated high levels of unemployment since 1974. Accordingly, individual nations have taken several measures—including safeguard actions (protecting domestic industry against injury from imports), antidumping proceedings, and actions to offset export subsidies. These policies have been concentrated in certain industrial sectors, particularly textiles, automobiles, steel, and shipbuilding.

#### THE MULTILATERAL TRADE NEGOTIATIONS

The Administration, in conjunction with its major trading partners and numerous developing nations, is committed to resolving these trade problems through the Tokyo Round of the Multilateral Trade Negotiations. The goals of these multilateral negotiations have been to relax tariff and nontariff barriers to trade, to formulate rules for trade and codes of fair conduct, to develop effective mechanisms for settling disputes, and to allow nations to benefit from specialization without unduly losing control over the growth patterns of their own economies.

By the end of 1978 these goals seemed close to achievement when significant agreement was reached on the reduction of most of the tariff and nontariff barriers to trade. The trade package (still subject to final agreement in early 1979 and to legislative approval later in the year) includes codes on subsidies, government procurement, standards, customs valuation, and licensing. It also includes a package of tariff cuts by the United States, with reciprocal cuts from our trading partners. The U.S. cuts are projected to average about 30 percent. In addition, negotiators agreed to remove several particularly burdensome industrial and agricultural nontariff barriers. And finally, the trade package provides measures to improve the General

Agreement on Tariffs and Trade (GATT) framework for dealing with agricultural trade issues, trade with developing countries, balance of payments measures, export restrictions, and the general management of trade disputes.

Among the most significant areas of agreement for U.S. trade interests are the codes on safeguards, on subsidies and countervailing duties, and on government procurement. The safeguards code ensures that countries will observe international trading rules as set forth in the revised GATT Article XIX when they restrict imports of particular products in order to afford temporary relief to domestic producers from injurious foreign competition. This revised article provides for a broad coverage of trade policies, improved criteria and conditions for taking safeguard action, more openness and due process in domestic safeguard procedures, and better international surveillance. There is also likely to be some scope for selective action when an injury can be ascribed to imports from particular countries. Such selectivity would be subject to consultation and negotiation with the affected countries and to surveillance by a GATT committee of representatives from each of the signatories.

The agreement on subsidies and countervailing duties will limit trade-distorting subsidies, and will enunciate more clearly a country's right to take counteractions against such practices. Export subsidies will be defined more broadly than they have been in the past (for example, they can exist even if the domestic price and export price are the same); they must be imposed and regulated with greater "transparency" (that is, so that they are more visible to the domestic and foreign public); they will be prohibited on primary mineral products and nonprimary products; and their use for agricultural products will require greater discipline. In addition, signatories will agree to consider the impact on their trading partners when using economic subsidies in general. Countermeasures can be imposed if a subsidy causes injury to domestic producers, the impairment of benefits from GATT concessions, or serious prejudice to other signatories (if, for example, it reduces a nation's expected benefits from international agreements). This particular code will be enforced through a tightly controlled process for settling disputes (the recommendations of the international committee must be reported within 120 days of a complaint).

The government procurement code is intended to reduce the scope for discrimination against foreign suppliers when governments purchase articles for their own use. It entails agreement on greater transparency in the bidding and awarding of government contracts for purchases of goods; and, since the elimination of all discrimination is unlikely, it also requires agreement about the official entities that would be covered by the code. The latter problem is particularly difficult since many of the entities which are private in the United States are governmental in many foreign countries. Nevertheless significant reduction of discrimination in government procurement, subject to settlement of disputes by an international panel, should be achieved.

Taken together, the tentative agreements reached in the Tokyo Round of the Multilateral Trade Negotiations represent significant progress in our continuing efforts to reduce barriers to international commerce and to strengthen and expand international trading rules, and they should contribute to an increase in trade and investment around the world. This agreement represents the first time since the 1960s that the international community has reduced the barriers to trade across such a broad spectrum of tariff and nontariff measures. For the United States in particular, the lowering of our own import barriers should help reduce inflationary pressures by increasing the competitiveness of imports and of import-competing products. At the same time, our export capabilities will receive a boost through the lowering of both tariff and nontariff barriers in our major export markets.

#### U.S. DOMESTIC TRADE POLICY

Despite increasing trade problems and pressures for protectionist trade policies around the world, the Administration remains committed to a free and open trading system. In many highly concentrated domestic industries, foreign competition helps prevent market power from becoming excessive. Nevertheless cases occur from time to time where, under U.S. law, import relief is necessary: where injury exists, where imports are the major cause of injury, and where such temporary actions can contribute to adjustment.

In 1978 the International Trade Commission investigated petitions for import relief by over 30 industries, covering imports valued at over \$2 billion. The International Trade Commission recommended increased protection in the form of tariffs or quantitative restrictions on more than \$1.3 billion of trade in such goods as stainless steel flatware, high-carbon ferrochrome, CB radios, refined copper, industrial fasteners, and bicycle tires and tubes. Relief was granted in escape clause cases involving approximately \$750 million in imports (for example, CB radios, high-carbon ferrochrome, and industrial fasteners). In these cases the Administration decided in favor of import relief because it would aid substantially in the development of more efficient industries, and because the direct benefits of relief were sufficiently high to outweigh the costs to consumers and other sectors of the economy.

#### THE NATIONAL EXPORT POLICY

Faced with the large external deficit and the need for action, the Administration felt that increasing U.S. exports could be a valuable way to move toward adjustment. In the light of the weak dollar, the deteriorating position of U.S. manufactured exports, and the low profile accorded export efforts in the United States, the Administration announced the National Export Policy on September 26, 1978. This National Export Policy, in conjunction with the successful conclusion of the Multilateral Trade Negotiations, will ensure a strong export industry and an environment for fair competition from imports for the period ahead.

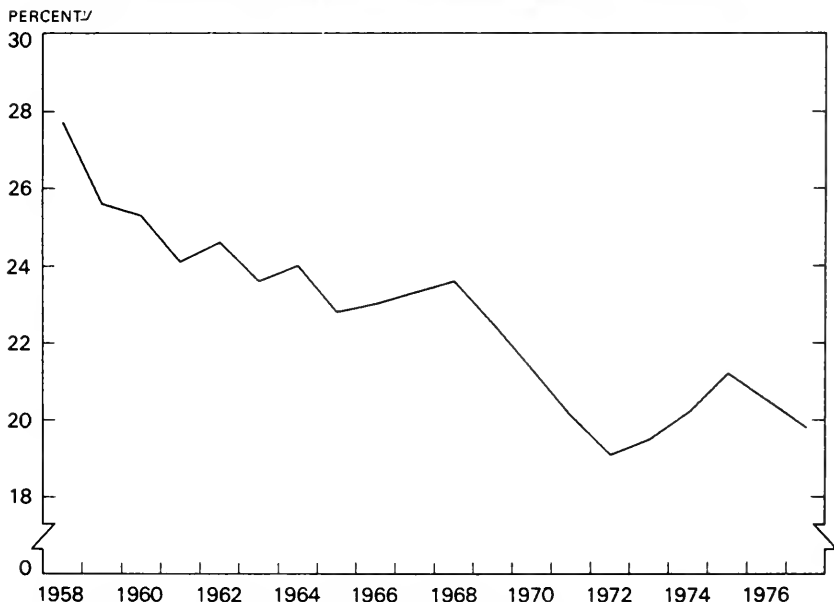


Before 1976 the largest U.S. trade deficits for a full year were the \$5.3-billion deficit in 1974 and the \$6.4-billion deficit in 1972. In comparison, the trade deficits in 1976, 1977, and 1978 were \$9 billion, \$31 billion, and an estimated \$35 billion respectively. The U.S. share of total manufactured exports of 15 industrial countries fell from almost 30 percent in the late 1950s to 19.2 percent in 1972. It rose to 21.1 percent in 1975 but has declined steadily since then, falling to 18.9 percent by the first quarter of 1978, the lowest since mid-1972 (Chart 13).

The outlook for 1979 and the early 1980s is much brighter. U.S. exports of manufactured goods have already shown a strong turnaround in 1978. This improvement, and the favorable outlook, derive from several factors. First, some of the trade deficit can be explained by our faster growth compared to that of our major trading partners. As their growth rates abroad increase in relation to ours, in accord with recent trends and commitments made at the Bonn Summit, our exports should increase relative to our imports. Second, the depreciation of the dollar over the last 18 months will provide a continuing spur to exports in the coming years. Third, by reducing inflationary pressures, the Administration's anti-inflation program will improve our international competitiveness, increasing our exports and reducing our imports. Fourth, the successful conclusion of the Multilateral

Chart 13

### U.S. Share of Fifteen Industrial Countries' Exports of Manufactured Goods



U.S. EXPORTS OF MANUFACTURES AS PERCENT OF TOTAL INDUSTRIAL COUNTRIES' EXPORTS OF MANUFACTURED GOODS  
SOURCE: DEPARTMENT OF COMMERCE.

Trade Negotiations in Geneva will reduce tariff and nontariff barriers in our export markets and should improve our export capabilities.

Finally, the Administration has committed itself to a stronger emphasis on foreign markets for U.S. goods by developing the National Export Policy. This policy includes the following major provisions: an increase in the size and the flexibility of the Eximbank's activities; a commitment from the Small Business Administration to channel up to \$100 million of its loan guarantees to small export businesses; an earmarking of \$20 million of the Commerce and State Departments' budgets to assist small- and medium-sized businesses in their marketing efforts abroad; an increase in the level of short-term agricultural export credits by almost \$1 billion; and a decision to ask the Justice Department to clarify ambiguities about the enforcement of the Foreign Corrupt Practices Act and the international application of our antitrust laws.

Perhaps the most important contribution the Federal Government can make to improving our trade position is to assure a more sensible regulatory environment. Too frequently, obstacles to production or investment have raised domestic costs or encouraged imports. If agencies are required to take into account the effects on trade and other costs of regulations, greater scope can exist for competitive forces, thereby allowing domestic producers to gain a greater share of domestic and foreign markets.

**Appendix A**

**REPORT TO THE PRESIDENT ON THE ACTIVITIES  
OF THE  
COUNCIL OF ECONOMIC ADVISERS DURING 1978**



LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,  
*Washington, D.C., December 29, 1978.*

MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1978 in accordance with the requirements of the Congress, as set forth in section 10(d) of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Cordially,

CHARLES L. SCHULTZE, *Chairman*  
LYLE E. GRAMLEY  
WILLIAM D. NORDHAUS



## Report to the President on the Activities of the Council of Economic Advisers During 1978

With the enactment of the Full Employment and Balanced Growth Act of 1978, the chartering legislation of the Council of Economic Advisers was substantially revised for the first time since the Council was created by the Employment Act of 1946. The new act, which was signed by the President on October 27, 1978, is better known as the Humphrey-Hawkins Act, after the primary sponsors of the law, Senators Hubert and Muriel Humphrey and Congressman Augustus Hawkins.

Under the Full Employment and Balanced Growth Act, the basic mission of the Council of Economic Advisers is unchanged. The Council is to continue to advise and assist the President in the formulation of national economic policies and in Presidential decisions on other matters that affect the economic life of the Nation. However, the Humphrey-Hawkins Act creates an important new framework within which the government is to pursue policies designed to reach our economic objectives.

The act reaffirms and enlarges upon the commitment of the Employment Act of 1946 by declaring that it is a national objective to provide full opportunities for useful employment to all Americans willing and able to work. The Humphrey-Hawkins Act also legislates for the first time a national commitment to reduce the rate of inflation. The act recognizes as well the need for better coordination of monetary and fiscal policies, and to that end establishes new procedures and requirements for the President, the Congress, and the Federal Reserve System.

The new law requires that the President each year set forth in the *Economic Report of the President* numerical goals for employment, unemployment, production, real income, productivity, and prices during the next 5 years. Short-term goals for these key indicators of the economy's health are to be established for 2 years, and medium-term goals for the subsequent 3 years.

The Full Employment and Balanced Growth Act sets forth specific numerical goals for unemployment and inflation for the 5-year period now ahead. The act states that the goal for unemployment in 1983 should be 4 percent overall and 3 percent for workers aged 20 and over. For inflation, the act sets a goal of 3 percent by 1983 and, after that goal is achieved, zero percent by 1988. These are highly ambitious goals that cannot be realized

solely through fiscal and monetary measures. The act recognizes this in two ways.

First, it recommends to the President a wide range of policies that might serve to attack the problems of unemployment and inflation. The act does not require him to pursue any specific policies, nor does it authorize spending on any new programs. If the President wishes to adopt policies mentioned in the act, he must seek congressional authorization to fund the new programs.

Second, the act authorizes the President, beginning with the second *Economic Report* published after passage of the act, to recommend goals for unemployment and inflation in 1983 that differ from those provided for in the act, if economic circumstances make such changes necessary. The act provides, however, for continued commitment by the Congress and the President to the objective of reducing unemployment to 4 percent as soon as feasible.

If the President recommends a change in the 1983 goal for reducing unemployment, his *Economic Report* must designate the year in which he believes that the 4 percent goal can be achieved. The Congress may then include in its first concurrent budget resolution its own timetable for attaining the 4 percent unemployment goal. The budget resolution may also contain such a statement if the President should, in subsequent years, recommend a year for reaching 4 percent unemployment other than that set in a future congressional budget resolution.

Each year the President is required by the new act to present budget recommendations for the 2 years immediately ahead that are consistent with the short-term goals set forth in his *Economic Report*. He is also required to present projections for the budget in the subsequent 3 years that are consistent with the medium-term goals set out in the *Economic Report*. Similarly, the act calls upon the Congress, in its consideration of the budget, to take into account the economic goals recommended by the President. Every year, when debate on the first concurrent budget resolution is begun in each House of Congress, up to 4 hours of debate are to be reserved for discussion of the economic situation and its implications for budgetary policy.

The Federal Reserve Board is required by the act to review the President's budget and *Economic Report* and to report to the Congress regarding the President's recommendations and the manner in which monetary policies are related to his goals. The Congress, in its yearly deliberations on the budget, is to take into account not only the President's program but the views and policies of the Federal Reserve Board as well. Through this process, the act should promote a better coordination of the Nation's economic policies.

The Council of Economic Advisers played an active role in the development of the Full Employment and Balanced Growth Act. During 1977 the



Council joined sponsors of the act in discussions that led to the legislation introduced in mid-1977 with the President's full support and passed by the Congress in 1978. During congressional consideration of the act, the Council worked closely with members of Congress, their staffs, and other government agencies to achieve passage of the legislation.

The *Economic Report of the President* and the *Budget of the United States*, published in January 1979, will be the first issued under the new act, and the first to set forth economic goals in the fashion required by the new act. They will also carry out the requirement of the Humphrey-Hawkins Act that each year the Office of Management and Budget review selectively a number of national priority programs and policies that can further the purposes of the act. The act particularly directs the Office of Management and Budget to study such significant issues as government policies affecting energy and agriculture, the problems of urban areas, and the expansion of exports. Similarly, the act requires that the *Economic Report of the President* include a report on investment policy that discusses both the needs of businesses for investment capital and the government's policies to support adequate rates of capital formation.

## FUNCTIONS OF THE COUNCIL OF ECONOMIC ADVISERS

The Employment Act of 1946 challenged the government to pursue policies that would achieve maximum employment, production, and purchasing power. Recognizing the evolution of the economy since 1946, and the increasing importance of the inflation problem in today's economy, the Full Employment and Balanced Growth Act adds to that mandate. The Federal Government still is to promote high levels of employment and production. Now, however, the government is also called upon to pursue prudent budgetary policies, to seek an improved international trading position for the United States, and to take steps to assure reasonable price stability.

These new legislative objectives are fully consistent with the Council of Economic Advisers' current role in the Administration, a role that has grown steadily since 1946 as new economic problems placed new demands on the Council and its staff. Today the Council is responsible for advising the President on such widely differing matters as Federal fiscal policies, efforts to reform the Federal regulatory system, and the international economic policies of the U.S. Government.

## MACROECONOMIC POLICIES

From the outset the Council's fundamental role has been to advise the President on comprehensive economic policies designed to achieve the government's objectives for employment, output, and price stability. To fulfill this responsibility the Council develops economic forecasts several times each year with the assistance of an interagency forecasting committee. The members of this committee include, in addition to the Council, representa-

tives from the Office of Management and Budget and the Departments of the Treasury, Commerce, and Labor. This group, which is chaired by a Member of the Council, meets to analyze the outlook for individual sectors of the economy and to develop detailed economic forecasts for the period immediately ahead. The Chairman of the Council presents these forecasts to the Economic Policy Group (EPG), made up of the President's principal economic advisers, which meets each week to discuss and develop the Administration's economic policy proposals. The Chairman of the Council of Economic Advisers is a member of the EPG and of its steering group.

In the final months of each year, during the preparation of the President's annual budget, the Council also presents to the Economic Policy Group, and later to the President, proposals for Federal fiscal policies during the coming fiscal year. The development of advice to the President on macroeconomic policy thus remains one of the Council's major responsibilities.

The Council also worked actively during 1978 with the Council on Wage and Price Stability to develop and apply measures to combat inflation, including the program that the President announced to the Nation on October 24, 1978. The Council on Wage and Price Stability was chaired by the Chairman of the Council of Economic Advisers, Charles L. Schultze, until October 1978, when Alfred E. Kahn was named Advisor to the President on Inflation, and Chairman of the Council on Wage and Price Stability.

#### MICROECONOMIC POLICIES

In addition to its work on overall economic policies, the Council of Economic Advisers is increasingly involved in the analysis of microeconomic issues—those policy actions and economic developments that affect individual sectors of the economy, or even individual industries and markets. During 1978 the Council helped form the Administration's policies regarding agriculture, energy, financial institutions, health insurance, welfare reform, and other major issues. The Council and its staff were also actively involved in developing the tax program that the President submitted to the Congress in January 1978.

During 1978 the Council continued to chair the interagency Regulatory Analysis Review Group (RARG), created late in 1977 to review selected analyses of the economic effects of major regulatory proposals. The President has ordered that each major regulatory proposal must be accompanied by a regulatory analysis. The analysis is to be developed by the regulatory agency originating the proposal and submitted for public comment before the final regulation takes effect. During the period for public comment the Regulatory Analysis Review Group evaluates the regulatory analysis, and its appraisal is filed in the agency's record of public commentary. In 1978 five major regulations were reviewed by the RARG: the Occupational Safety and Health Administration's standard on workers' exposure to acrylonitrile, and its generic carcinogen policy; the Environmental Protection Agency's

ambient air quality standard for ozone; the Department of Transportation's regulation on access to mass transit facilities for the handicapped; and the Department of the Interior's surface coal mining and reclamation regulations. At year's end, reviews were under way of the Environmental Protection Agency's new source performance standards for steam-powered electric generating plants and the Department of Energy's coal conversion regulations. The Council's staff took an active part in preparing several of the review group's comments on these regulations and in coordinating the activities of the RARG.

The Council of Economic Advisers continued during 1978 to participate in developing the Administration's international economic policies. The Chairman of the Council also served during the year as the Chairman of the Economic Policy Committee of the Organization for Economic Cooperation and Development (OECD). In that capacity he chaired three meetings of the committee, which consists of senior economic officials from OECD member governments.

The Council also participates in the working parties of the OECD Economic Policy Committee on inflation, balance of payments adjustment, and medium-term growth, as well as the ad hoc group on positive adjustment policies. Council Members or staff economists, representing the U.S. Government, attend periodic meetings of these working parties during the year.

#### PUBLIC INFORMATION

The Full Employment and Balanced Growth Act retained the requirement, originally set forth by the Employment Act of 1946, that the President submit a report to the Congress each year on the state of the economy. As noted earlier, however, the Humphrey-Hawkins Act requires new information to be included in the *Economic Report of the President*.

The Council assumes major responsibility for the preparation of the *Economic Report of the President*, which also contains the annual report of the Council. This publication is the principal channel through which the public is informed of the Council's work and views, and it is of further importance in presenting and explaining the Administration's domestic and international economic policies. In recent years about 50,000 copies of the *Report* have been distributed annually.

The Council prepares a monthly publication, *Economic Indicators*, which is a compendium of statistical information developed by the Council's Statistical Office for the Joint Economic Committee of the Congress. Each month about 10,000 copies of *Economic Indicators* are distributed.

Information is also provided to members of the public through speeches and other public appearances by the Chairman, Members, and staff economists of the Council. In 1978 the Chairman and Members made 23 appearances before committees of the Congress to testify on the Administration's economic policies. Among its publications this year the Council in-

cluded a Staff Paper on the taxation of capital gains, prepared by John Yinger, a senior staff economist, with the help of other members of the Council's staff. Less formally, the Council answered numerous requests from the press in 1978 and provided information on a wide range of economic topics in response to inquiries from individual citizens.

## ORGANIZATION AND STAFF OF THE COUNCIL

### OFFICE OF THE CHAIRMAN

Charles L. Schultze, appointed Chairman of the Council in 1977, communicates the Council's views to the President through direct consultation as well as through written reports dealing with particular economic developments, programs, and proposals. The Chairman represents the Council at meetings of the Cabinet and other official events.

### COUNCIL MEMBERS

The two Council Members supervise the work of the Council's professional staff. Members also represent the Council at meetings of public and private groups concerned with economic affairs, and they assume major responsibility for the Council's involvement in the activities of the government that affect the economy. Lyle E. Gramley and William D. Nordhaus continued to serve as Council Members during 1978.

*Past Council Members and their dates of service are listed below*

Name	Position	Oath of office date	Separation date
Edwin G. Nourse	Chairman	August 9, 1946	November 1, 1949.
Leon H. Keyserling	Vice Chairman	August 9, 1946	
	Acting Chairman	November 2, 1949	
John D. Clark	Chairman	May 10, 1950	January 20, 1953.
	Member	August 9, 1946	
	Vice Chairman	May 10, 1950	February 11, 1953.
Roy Blough	Member	June 29, 1950	August 20, 1952.
Robert C. Turner	Member	September 8, 1952	January 20, 1953.
Arthur F. Burns	Chairman	March 19, 1953	December 1, 1956.
Neil H. Jacoby	Member	September 15, 1953	February 9, 1955.
Walter W. Stewart	Member	December 2, 1953	April 29, 1955.
Raymond J. Saulnier	Member	April 4, 1955	
Joseph S. Davis	Chairman	December 3, 1956	January 20, 1961.
Paul W. McCracken	Member	May 2, 1955	October 31, 1958.
Karl Brandt	Member	December 3, 1956	January 31, 1959.
Henry C. Wallich	Member	November 1, 1958	January 20, 1961.
Walter W. Heller	Member	May 7, 1959	January 20, 1961.
James Tobin	Chairman	January 29, 1961	November 15, 1964.
Kermit Gordon	Member	January 29, 1961	July 31, 1962.
Gardner Ackley	Member	January 29, 1961	December 27, 1962.
	Member	August 3, 1962	
John P. Lewis	Chairman	November 16, 1964	February 15, 1968.
Otto Eckstein	Member	May 17, 1963	October 31, 1964.
Arthur M. Okun	Member	September 2, 1964	February 1, 1966.
	Member	November 16, 1964	
James S. Duesenberry	Chairman	February 15, 1963	January 20, 1969
Merton J. Peck	Member	February 2, 1966	June 30, 1968.
Warren L. Smith	Member	February 15, 1968	January 20, 1969.
Paul W. McCracken	Member	July 1, 1968	January 20, 1969.
Hendrik S. Houthakker	Chairman	February 4, 1969	December 31, 1971.
Herbert Stein	Member	February 4, 1969	July 15, 1971.
	Member	February 4, 1969	
Ezra Solomon	Chairman	January 1, 1972	August 31, 1974.
Marina v.N. Whitman	Member	September 9, 1971	March 26, 1973.
Gary L. SeEVERS	Member	March 13, 1972	August 15, 1973.
William J. Feilner	Member	July 23, 1973	April 15, 1975.
Alan Greenspan	Member	October 31, 1973	February 25, 1975.
Paul W. MacAvoy	Chairman	September 4, 1974	January 20, 1977.
Burton G. Malkiel	Member	June 13, 1975	November 15, 1976.
	Member	July 22, 1975	January 20, 1977.

The Council staff is small enough to permit the Chairman and Members to work together as a team on most major policy issues. To facilitate coordination of the staff's work, however, responsibility for the major economic topics of concern to the Council has been informally divided between the two Members. Mr. Gramley has continued to take primary responsibility in 1978 for macroeconomic analysis, including the preparation of economic forecasts, and for labor market policies. Mr. Nordhaus has supervised international economic analysis and microeconomic analysis, including analysis of policies in such areas as energy, agriculture, social welfare, and oversight of regulatory reform activities.

#### PROFESSIONAL STAFF

At the end of 1978 the professional staff consisted of the Special Assistant to the Chairman, 10 senior staff economists, 2 staff economists, 1 statistician, and 5 junior staff economists.

The professional staff and their special fields at the end of the year were:

Peter G. Gould . . . . . Special Assistant to the Chairman

#### *Senior Staff Economists*

Thomas C. Earley . . . . . Agriculture and Food Policy  
 Robert J. Flanagan . . . . . Labor Market and Anti-Inflation Policies  
 Steven W. Kohlhagen . . . . . International Financial Developments and Trade  
 Val L. Koromzay . . . . . International Financial and Economic Developments, and Trade  
 Susan J. Lepper . . . . . Monetary and Financial Policies, Housing, State and Local Finance, and General Macroeconomic Analysis  
 David C. Munro . . . . . Business Conditions Analysis and Forecasting  
 David S. Sibley . . . . . Regulation  
 Lawrence J. White . . . . . Regulation  
 David A. Wyss . . . . . Business Conditions Analysis and Forecasting, and Health Policy  
 John M. Yinger . . . . . Public Finance and Income Maintenance Policy

#### *Statistician*

Catherine H. Furlong . . . . . Senior Statistician

#### *Staff Economists*

Robert E. Litan . . . . . Regulation and Energy  
 Michael J. McKee . . . . . Business Conditions Analysis and Forecasting

### Junior Economists

James P. Luckett . . . . .	Labor Market Policies
Robert S. Lurie . . . . .	Regulation and Energy
Frederick W. McKinney . . . . .	Public Finance, Income Maintenance, and Health Policy
Elizabeth A. Savoca . . . . .	Business Conditions Analysis and Forecasting
Wanda S. Tseng . . . . .	International Economic Developments and Trade

Catherine H. Furlong, Senior Statistician, is in charge of the Council's Statistical Office. Mrs. Furlong has primary responsibility for managing the Council's statistical information system. She supervises the publication of *Economic Indicators* and the preparation of the statistical appendix to the *Economic Report*. She also oversees the verification of statistics in memoranda, testimony, and speeches. Natalie V. Rentfro, Earnestine Reid, and Elizabeth A. Kaminski assist Mrs. Furlong.

From time to time during the year, the Council calls upon outside economists to provide special assistance on projects relating to their particular specialty. During 1978 consultants to the Council included Peter K. Clark (Stanford University), Donald H. Fullerton (Stanford University), Frank S. Levy (The Urban Institute), and John B. Shoven (Stanford University).

During the summer James R. Golden (U. S. Military Academy) was a member of the professional staff.

In preparing the *Economic Report* the Council relied upon the editorial assistance of Rosannah C. Steinhoff. Also called on for special assistance in connection with the *Report* were Dorothy L. Reid and Dorothy Bagovich, former members of the Council staff.

### SUPPORTING STAFF

The Administrative Office of the Council of Economic Advisers provides general support for the Council's activities. Nancy F. Skidmore, Administrative Officer, prepares and analyzes the Council budget and provides general administrative services.

Elizabeth A. Kaminski, Staff Assistant to the Council, handles general personnel management, serves as Executive Secretary to the Regulatory Analysis Review Group, and provides general assistance to the Council and to the Special Assistant in the management of the Council's activities.

Members of the secretarial staff for the Chairman and Council Members during 1978 were Patricia A. Lee, Linda A. Reilly, Florence T. Torrison, and Alice H. Williams. Secretaries for the professional staff were M. Catherine Fibich, Bessie M. Lafakis, Joyce A. Pilkerton, Bettye T. Siegel, Margaret L. Snyder, and Lillie M. Sturniolo.

Marie G. Boccucci provided secretarial assistance during the summer months.

## DEPARTURES

The Council's professional staff members most often are on leave to the Council from universities, other government agencies, or research institutions. Their tenure with the Council is usually limited to 1 or 2 years. Senior staff economists who completed their appointments with the Council during the year were Roger E. Brinner (Data Resources, Inc.), Peter K. Clark (Stanford University), Nina W. Cornell (Federal Communications Commission), George E. Johnson (University of Michigan), J. B. Penn (Department of Agriculture), Jeffrey R. Shafer (Federal Reserve Board), and William L. Springer (Data Resources, Inc.). Arthur E. Blakemore, staff economist, resigned to accept a position with the Council on Wage and Price Stability.

Junior economists who resigned in 1978 were Michael S. Golden (Congressional Budget Office), Howard K. Gruenspecht (Domestic Policy Staff), Richard I. Kolsky (Yale University), Richard A. Koss (Wharton Econometric Forecasting Associates, Inc.), Julianne M. Malveaux (Rockefeller Foundation), and Martha M. Parry (Stanford University).

James W. Gatling and Frank C. Norman joined the new Office of Administration created in the Executive Office of the President as part of the President's 1977 reorganization of his own staff offices.





**Appendix B**

**STATISTICAL TABLES RELATING TO INCOME,  
EMPLOYMENT, AND PRODUCTION**



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## NATIONAL INCOME OR EXPENDITURE:

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### General Notes

Detail in these tables may not add to totals because of rounding.  
Unless otherwise noted, all dollar figures are in current dollars.

Symbols used:

• Preliminary.

-- Not available (also, not applicable).

# NATIONAL INCOME OR EXPENDITURE

## TABLE B-1.—Gross national product, 1929-78

(Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product	Personal consumption expenditures	Gross private domestic investment	Net exports of goods and services			Government purchases of goods and services				Percent change from preceding period, gross national product <sup>1</sup>	
				Net exports	Exports	Imports	Total	Federal				State and local
								Total	National defense <sup>1</sup>	Non-defense		
1929	103.4	77.3	16.2	1.1	7.0	5.9	8.8	1.4			7.4	
1933	55.8	45.8	1.4	.4	2.4	2.0	8.2	2.1			6.1	-4.2
1939	90.8	67.0	9.3	1.1	4.4	3.4	13.5	5.2	1.2	3.9	8.3	6.9
1940	100.0	71.0	13.1	1.7	5.4	3.6	14.2	6.1	2.2	3.9	8.1	10.1
1941	124.9	80.8	17.9	1.3	5.9	4.6	24.9	16.9	13.7	3.2	8.0	24.9
1942	158.3	88.6	9.9	.0	4.8	4.8	59.8	52.0	49.4	2.6	7.8	26.8
1943	192.0	99.4	5.8	-2.0	4.4	6.5	88.9	81.3	79.7	1.6	7.5	21.3
1944	210.5	108.2	7.2	-1.8	5.3	7.1	97.0	89.4	87.4	2.0	7.6	9.6
1945	212.3	119.5	10.6	-1.6	7.2	7.8	82.8	74.6	73.5	1.1	8.2	.9
1946	209.6	143.8	30.7	7.6	14.8	7.2	27.5	17.6	14.8	2.8	9.9	-1.3
1947	232.8	161.7	34.0	11.6	19.8	8.2	25.5	12.7	9.0	3.7	12.8	11.1
1948	259.1	174.7	45.9	6.5	16.9	10.4	32.0	16.7	10.7	6.0	15.3	11.3
1949	258.0	178.1	35.3	6.2	15.9	9.6	38.4	20.4	13.2	7.2	18.0	-4
1950	286.2	192.0	53.8	1.9	13.9	12.0	38.5	18.7	14.0	4.7	19.8	10.9
1951	330.2	207.1	59.2	3.8	18.9	15.1	60.1	38.3	33.5	4.8	21.8	15.4
1952	347.2	217.1	52.1	2.4	18.2	15.8	75.6	52.4	45.8	6.5	23.2	5.1
1953	366.1	229.7	53.3	.6	17.1	16.6	82.5	57.5	48.6	8.9	25.0	5.5
1954	366.3	235.8	52.7	2.0	18.0	16.0	75.8	47.9	41.1	6.8	27.8	.0
1955	399.3	253.7	68.4	2.2	20.0	17.8	75.0	44.5	38.4	6.0	30.6	9.0
1956	420.7	266.0	71.0	4.3	23.9	19.6	79.4	45.9	40.2	5.7	33.5	5.4
1957	442.8	280.4	69.2	6.1	26.7	20.7	87.1	50.0	44.0	5.9	37.1	5.2
1958	448.9	289.5	61.9	2.5	23.3	20.8	95.0	53.9	45.6	8.3	41.1	1.4
1959	486.5	310.8	77.6	.6	23.7	23.2	97.6	53.9	45.6	8.3	43.7	8.4
1960	506.0	324.9	76.4	4.4	27.6	23.2	100.3	53.7	44.5	9.3	46.5	4.0
1961	523.3	335.0	74.3	5.8	28.9	23.1	108.2	57.4	47.0	10.4	50.8	3.4
1962	563.8	355.2	85.2	5.4	30.6	25.2	118.0	63.7	51.1	12.7	54.3	7.7
1963	594.7	374.6	90.2	6.3	32.7	26.4	123.7	64.6	50.3	14.3	59.0	5.5
1964	635.7	400.4	96.6	8.9	37.4	28.4	129.8	65.2	49.0	16.2	64.6	6.9
1965	688.1	430.2	112.0	7.6	39.5	32.0	138.4	67.3	49.4	17.8	71.1	8.2
1966	753.0	464.8	124.5	5.1	42.8	37.7	158.7	78.8	60.3	18.5	79.8	9.4
1967	796.3	490.4	120.8	4.9	45.6	40.6	180.2	90.9	71.5	19.5	89.3	5.8
1968	868.5	535.9	131.5	2.3	49.9	47.7	198.7	98.0	76.9	21.2	100.7	9.1
1969	935.5	579.7	146.2	1.8	54.7	52.9	207.9	97.5	76.3	21.2	110.4	7.7
1970	982.4	618.8	140.8	3.9	62.5	58.5	218.9	95.6	73.5	22.1	123.2	5.0
1971	1,063.4	668.2	160.0	1.6	65.6	64.0	233.7	96.2	70.2	26.0	137.5	8.2
1972	1,171.1	733.0	188.3	-3.3	72.7	75.9	253.1	102.1	73.5	28.6	151.0	10.1
1973	1,306.6	809.9	220.0	7.1	101.6	94.4	269.5	102.2	73.5	28.7	167.3	11.6
1974	1,412.9	889.6	214.6	6.0	137.9	131.9	302.7	111.1	77.0	34.1	191.5	8.1
1975 I	1,528.8	979.1	190.9	20.4	147.3	126.9	338.4	123.1	83.7	39.4	215.4	8.2
1976	1,700.1	1,090.2	243.0	7.4	163.2	155.7	359.5	129.9	86.8	43.1	229.6	11.2
1977	1,887.2	1,206.5	297.8	-11.1	175.5	186.6	394.0	145.1	94.3	50.8	248.9	11.0
1978 P	2,106.6	1,339.7	344.5	-11.8	205.2	217.0	434.2	154.0	99.5	54.5	280.2	11.6
1976: I	1,649.7	1,053.8	231.5	10.4	154.4	144.1	354.0	127.1	85.9	41.2	226.9	13.6
II	1,685.4	1,075.1	243.5	9.7	160.7	150.9	357.2	127.8	85.6	42.2	229.4	9.0
III	1,715.6	1,098.4	249.9	6.9	168.2	161.3	360.4	129.9	86.5	43.4	230.5	7.3
IV	1,749.8	1,133.7	247.1	2.8	169.4	166.6	366.3	134.6	89.1	45.5	231.7	8.2
1977: I	1,806.8	1,167.7	272.5	-8.5	170.9	179.4	375.0	138.3	91.9	46.4	236.7	13.7
II	1,867.0	1,188.6	295.6	-5.9	178.1	184.0	388.8	142.9	93.7	49.3	245.9	14.0
III	1,916.8	1,214.5	309.7	-7.0	180.8	187.8	399.5	146.8	94.4	52.4	252.7	11.1
IV	1,958.1	1,255.2	313.5	-23.2	172.1	195.2	412.5	152.2	97.1	55.1	260.3	8.9
1978: I	1,992.0	1,276.7	322.7	-24.1	181.7	205.8	416.7	151.5	97.9	53.6	265.2	7.1
II	2,087.5	1,322.9	345.4	-5.5	205.4	210.9	424.7	147.2	98.6	48.6	277.6	20.6
III	2,136.1	1,356.9	350.1	-10.7	210.1	220.8	439.8	154.0	99.6	54.5	285.8	9.6
IV P	2,210.8	1,402.2	359.9	-6.9	223.5	230.4	455.6	163.4	102.1	61.3	292.2	14.7

<sup>1</sup> This category corresponds closely to the national defense classification in "The Budget of the United States Government, Fiscal Year 1980."

<sup>2</sup> Changes are based on unrounded data and therefore may differ slightly from those obtained from data shown here.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-2.—Gross national product in 1972 dollars, 1929-78

(Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment				
		Total	Durable goods	Non-durable goods	Services	Total	Fixed investment			
							Total	Nonresidential		
								Total	Structures	Producers' durable equipment
1929.....	314.6	215.6	21.5	98.1	96.1	55.9	51.3	37.0	20.6	16.4
1933.....	222.1	170.7	10.9	82.9	76.8	8.4	13.3	10.4	4.9	5.5
1939.....	318.8	220.3	19.1	115.1	86.1	33.6	32.0	20.7	8.6	12.1
1940.....	343.3	230.4	21.8	119.9	88.7	44.6	38.4	25.7	9.9	15.8
1941.....	398.5	244.1	24.7	127.6	91.8	55.8	43.8	30.3	11.9	18.5
1942.....	460.3	241.7	16.3	129.9	95.5	29.6	24.4	17.6	6.7	10.9
1943.....	530.6	248.7	14.5	134.0	100.1	18.1	18.0	14.0	4.2	9.8
1944.....	568.6	255.7	13.5	139.4	102.7	19.8	22.1	18.7	5.5	13.2
1945.....	560.0	271.4	14.8	150.3	106.3	27.8	31.4	27.6	8.3	19.2
1946.....	476.9	301.4	25.8	158.9	116.7	71.0	58.8	42.0	18.8	23.2
1947.....	468.3	306.2	30.6	154.8	120.8	70.1	70.4	48.9	17.3	31.6
1948.....	487.7	312.8	33.1	155.0	124.6	82.3	76.8	51.0	18.4	32.7
1949.....	490.7	320.0	36.3	157.4	126.4	65.6	70.0	46.0	17.8	28.2
1950.....	533.5	338.1	43.4	161.8	132.8	93.7	83.2	50.0	19.1	30.9
1951.....	576.5	342.3	39.9	165.3	137.1	94.1	80.4	52.9	20.6	32.3
1952.....	598.5	350.9	38.9	171.2	140.8	83.2	78.9	52.1	20.6	31.5
1953.....	621.8	364.2	43.1	175.7	145.5	85.6	84.1	56.3	22.5	33.8
1954.....	613.7	370.9	43.5	177.0	150.4	83.4	85.6	55.4	23.5	31.8
1955.....	654.8	395.1	52.2	185.4	157.5	104.1	96.3	61.2	25.3	35.9
1956.....	668.8	406.3	49.8	191.6	164.9	102.9	97.1	65.2	28.1	37.1
1957.....	680.9	414.7	49.7	194.9	170.2	97.2	95.7	66.0	28.1	37.9
1958.....	679.5	419.0	46.4	196.8	175.8	87.7	89.6	58.9	26.4	32.5
1959.....	720.4	441.5	51.8	205.0	184.7	107.4	101.0	62.9	26.8	36.1
1960.....	736.8	453.0	52.5	208.2	192.3	105.4	101.0	66.0	28.8	37.2
1961.....	755.3	462.2	50.3	211.9	200.0	103.6	100.7	65.6	29.3	36.3
1962.....	799.1	482.9	55.7	218.5	208.7	117.4	109.3	70.9	30.8	40.1
1963.....	830.7	501.4	60.7	223.0	217.6	124.5	116.8	73.5	30.8	42.7
1964.....	874.4	528.7	65.7	233.3	229.7	132.1	124.8	81.0	33.3	46.0
1965.....	925.9	558.1	73.4	244.0	240.7	150.1	138.8	95.6	39.6	57.7
1966.....	981.0	586.1	79.0	255.5	251.6	161.3	144.6	106.1	42.5	63.6
1967.....	1,007.7	603.2	79.7	259.5	264.0	152.7	140.7	103.5	41.1	62.4
1968.....	1,051.8	633.4	88.2	270.2	275.0	159.5	150.8	108.0	42.0	66.1
1969.....	1,078.8	655.4	91.9	276.4	287.2	168.0	157.5	114.3	44.0	70.3
1970.....	1,075.3	668.9	88.9	282.7	297.3	154.7	150.4	110.0	42.8	67.2
1971.....	1,107.5	691.9	98.1	287.5	306.3	166.8	160.2	108.0	41.7	66.3
1972.....	1,171.1	733.0	111.2	299.3	322.4	188.3	178.8	116.8	42.5	74.3
1973.....	1,235.0	767.7	121.8	309.3	336.5	207.2	190.7	131.0	45.5	85.5
1974.....	1,217.8	760.7	112.5	303.9	344.3	183.6	175.6	130.6	42.5	88.1
1975.....	1,202.3	774.6	112.7	306.6	355.3	142.6	152.4	113.6	37.1	76.5
1976.....	1,271.0	819.4	125.9	320.2	373.2	173.4	166.8	119.9	38.3	80.6
1977.....	1,332.7	857.7	137.8	330.4	389.5	196.3	187.4	128.8	40.0	89.8
1978 <sup>a</sup> .....	1,385.1	891.2	144.7	339.1	407.4	210.1	199.6	139.9	44.3	95.5
1976: I.....	1,255.5	806.3	124.8	314.6	366.9	168.5	161.0	115.5	38.3	77.2
II.....	1,268.0	814.0	125.2	318.2	370.6	174.7	164.6	117.8	38.5	79.3
III.....	1,276.5	820.9	125.3	320.5	375.1	177.1	167.8	121.0	38.3	82.7
IV.....	1,284.0	836.2	128.5	327.7	380.0	173.4	173.6	121.4	38.3	83.1
1977: I.....	1,306.7	846.6	134.9	327.1	384.6	186.1	180.3	126.8	38.3	88.5
II.....	1,325.5	849.5	136.2	327.2	386.0	197.1	187.1	129.1	40.0	89.0
III.....	1,343.9	858.0	136.9	329.2	391.8	201.7	189.5	130.8	40.8	90.0
IV.....	1,354.5	876.6	143.0	338.1	395.6	200.3	192.8	132.5	41.0	91.5
1978: I.....	1,354.2	873.5	137.8	333.3	402.4	205.7	193.4	133.8	41.0	92.9
II.....	1,382.6	886.3	145.8	336.3	404.2	213.1	200.4	140.5	44.6	95.9
III.....	1,391.4	895.1	144.8	340.4	410.0	210.4	201.4	141.7	45.6	96.1
IV <sup>a</sup> .....	1,412.2	910.0	150.2	346.6	413.2	211.1	203.4	143.5	46.2	97.4

See next page for continuation of table.



TABLE B-2.—Gross national product in 1972 dollars, 1929-78—Continued

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment—continued				Change in business inventories	Net exports of goods and services			Government purchases of goods and services			Percent change from preceding period, gross national product <sup>1</sup>
	Fixed investment—continued					Net exports	Exports	Imports	Total	Federal	State and local	
	Residential											
	Total	Non-farm structures	Farm structures	Producers' durable equipment								
1929	14.3	13.6	0.6	0.1	4.6	2.2	15.6	13.4	40.9	7.0	33.8	-----
1933	2.9	2.6	.2	.1	-4.9	.2	9.4	9.3	42.8	10.9	31.9	-2.2
1939	11.3	10.6	.6	.1	1.6	2.0	13.3	11.4	62.9	22.8	40.2	7.6
1940	12.8	11.8	.8	.1	6.2	3.0	14.6	11.5	65.2	26.7	38.5	7.7
1941	13.5	12.5	.9	.2	12.0	.8	14.7	14.0	97.7	61.0	36.7	16.1
1942	6.8	6.1	.6	.1	5.2	-2.5	10.3	12.8	191.5	157.4	34.1	15.5
1943	4.0	3.5	.4	.0	.1	-7.3	9.0	16.3	271.2	239.6	31.6	15.3
1944	3.4	3.0	.4	.0	-2.3	-7.2	10.0	17.3	300.3	269.7	30.6	7.1
1945	3.8	3.5	.3	.1	-3.6	-4.5	13.5	18.0	265.3	233.7	31.6	-1.5
1946	16.8	15.5	1.1	.2	12.2	11.6	26.1	14.6	93.0	58.2	34.7	-14.8
1947	21.5	19.8	1.3	.3	-.2	16.6	30.2	13.6	75.4	36.1	39.3	-1.8
1948	25.8	23.9	1.5	.3	5.5	8.5	24.2	15.7	84.1	42.4	41.8	4.1
1949	24.0	22.3	1.4	.3	-4.4	8.8	24.2	15.4	96.2	48.9	47.4	.6
1950	33.2	31.5	1.3	.3	10.6	4.0	21.7	17.7	97.7	47.0	50.7	8.7
1951	27.5	25.9	1.3	.3	13.7	7.4	25.9	18.5	132.7	81.3	51.3	8.1
1952	26.8	25.3	1.2	.3	4.3	4.9	24.9	20.0	159.5	107.0	52.5	3.8
1953	27.8	26.3	1.2	.3	1.5	2.0	23.8	21.8	170.0	114.6	55.4	3.9
1954	30.2	28.8	1.1	.3	-2.2	4.5	25.3	20.8	154.9	95.2	59.7	-1.3
1955	35.1	33.8	.9	.4	7.7	4.7	27.9	23.2	150.9	86.9	64.0	6.7
1956	31.9	30.4	1.0	.4	5.8	7.3	32.3	25.0	152.4	85.9	66.5	2.1
1957	29.7	28.3	1.0	.4	1.5	8.9	34.8	26.0	160.1	89.8	70.3	1.8
1958	30.6	29.2	.9	.5	-1.8	3.5	30.7	27.2	169.3	92.8	76.4	-2.0
1959	38.1	36.5	1.0	.6	6.5	.9	31.5	30.6	170.7	91.8	78.9	6.2
1960	35.0	33.7	.8	.5	4.4	5.5	35.8	30.3	172.9	90.8	82.0	2.3
1961	35.1	33.6	1.0	.5	2.9	6.7	37.0	30.3	182.8	95.6	87.1	2.5
1962	38.4	36.9	.9	.6	8.1	5.8	39.6	33.9	193.1	103.1	90.0	5.8
1963	43.2	41.7	.9	.6	7.8	7.3	42.2	35.0	197.6	102.2	95.4	4.0
1964	43.8	42.2	.9	.7	7.3	10.9	47.8	36.9	202.7	100.6	102.1	5.3
1965	43.2	41.6	.8	.7	11.3	8.2	49.1	41.0	209.6	100.5	109.1	5.9
1966	38.5	36.9	.9	.8	16.7	4.3	51.6	47.3	229.3	112.5	116.8	5.9
1967	37.2	35.5	.9	.8	12.0	3.5	54.2	50.7	248.3	125.3	123.1	2.7
1968	42.8	41.1	.8	.9	8.7	-.4	58.5	58.9	259.2	128.3	130.9	4.4
1969	43.2	41.5	.9	.9	10.6	-1.3	62.2	63.5	256.7	121.8	134.9	2.6
1970	40.4	38.9	.6	.9	4.3	1.4	67.1	65.7	250.2	110.7	139.5	-.3
1971	52.2	50.5	.7	1.0	6.6	-.6	67.9	68.5	249.4	103.9	145.5	3.0
1972	62.0	60.3	.7	1.1	9.4	-3.3	72.7	75.9	253.1	102.1	151.0	5.7
1973	59.7	57.9	.5	1.2	16.5	7.6	87.4	79.9	252.5	96.6	155.9	5.5
1974	45.0	43.0	.9	1.1	8.0	15.9	93.0	77.1	257.7	95.8	161.8	-1.4
1975	38.8	37.2	.7	.9	-9.8	22.6	90.0	67.5	262.6	96.5	166.1	-1.3
1976	47.8	46.0	.7	1.1	6.7	15.4	95.9	80.5	262.8	96.6	166.2	5.7
1977	57.7	55.6	.9	1.2	8.9	9.5	98.2	88.7	269.2	101.6	167.6	4.9
1978 <sup>a</sup>	59.7	57.6	.8	1.3	10.4	8.6	107.3	98.7	275.2	100.5	174.7	3.9
1976: I	45.5	43.5	1.0	1.1	7.5	16.5	93.2	76.7	264.3	96.2	168.1	9.3
II	46.8	45.2	.6	1.0	10.1	16.1	95.2	79.2	263.2	95.9	167.3	4.0
III	46.8	45.2	.6	1.1	9.3	16.1	98.0	81.9	262.5	96.8	165.7	2.7
IV	52.3	50.2	.9	1.1	-.2	13.1	97.3	84.2	261.3	97.5	163.8	2.3
1977: I	53.5	51.4	1.0	1.1	5.8	11.2	97.1	85.9	262.8	98.7	164.1	7.3
II	58.0	55.9	1.0	1.1	10.0	11.0	98.9	87.9	267.9	101.3	166.6	5.9
III	58.8	56.6	1.0	1.2	12.2	12.5	100.8	88.2	271.7	102.9	168.8	5.7
IV	60.3	58.4	.7	1.2	7.5	3.1	96.0	92.9	274.5	103.6	170.9	3.2
1978: I	59.5	57.4	.8	1.3	12.3	2.9	99.1	96.2	272.1	101.2	170.8	-.1
II	59.9	57.8	.8	1.4	12.7	11.3	108.4	97.1	271.9	97.1	174.8	8.7
III	59.7	57.6	.8	1.3	9.0	9.2	109.0	99.7	276.7	100.4	176.3	2.6
IV <sup>a</sup>	59.8	57.8	.8	1.3	7.7	11.0	112.6	101.6	280.1	103.3	176.8	6.1

<sup>1</sup> Changes are based on unrounded data and therefore may differ slightly from those obtained from data shown here.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-3.—Implicit price deflators for gross national product, 1929-78

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product <sup>1</sup>	Personal consumption expenditures				Gross private domestic investment <sup>1</sup>			
		Total	Durable goods	Non-durable goods	Services	Total	Fixed investment		
							Total	Structures	Producers' durable equipment
1929.....	32.87	35.8	43.1	38.4	31.6	28.2	28.2	24.1	33.4
1933.....	25.14	26.8	31.7	26.8	26.1	22.4	22.8	19.1	26.2
1939.....	28.48	30.4	34.9	30.5	29.2	27.6	28.2	22.8	32.0
1940.....	29.13	30.8	35.7	30.9	29.5	28.5	29.1	23.1	32.8
1941.....	31.34	33.1	39.1	33.6	30.8	30.6	30.9	24.7	34.9
1942.....	34.39	36.7	42.1	39.1	32.4	33.4	33.8	28.1	37.3
1943.....	36.18	40.0	45.0	43.7	34.2	35.6	35.7	32.0	37.3
1944.....	37.03	42.3	49.5	46.2	36.1	36.9	36.6	33.4	38.0
1945.....	37.92	44.0	53.7	47.8	37.3	37.1	36.6	33.6	37.9
1946.....	43.95	47.7	61.1	52.1	38.9	41.3	39.9	36.3	42.8
1947.....	49.70	52.8	66.8	58.7	41.7	48.9	46.8	43.7	48.5
1948.....	53.13	55.9	69.1	62.3	44.4	53.6	51.3	48.4	52.9
1949.....	52.59	55.7	69.1	60.3	46.1	54.8	52.8	48.0	55.9
1950.....	53.64	56.8	70.8	60.7	47.4	56.5	54.3	48.8	57.6
1951.....	57.27	60.5	74.7	65.8	49.9	60.8	58.9	54.7	61.6
1952.....	58.00	61.9	74.8	66.6	52.6	62.1	59.9	55.8	62.5
1953.....	58.88	63.1	75.5	66.3	55.4	62.9	61.0	56.8	63.7
1954.....	59.69	63.6	73.2	66.6	57.2	63.4	61.4	55.9	65.4
1955.....	60.98	64.2	74.0	66.3	58.5	64.8	62.6	57.0	66.5
1956.....	62.90	65.5	76.0	67.3	60.2	68.3	67.0	61.8	71.0
1957.....	65.02	67.6	79.2	69.4	62.2	70.9	70.7	64.4	75.4
1958.....	66.06	69.1	79.4	71.0	64.2	70.8	70.6	63.3	76.5
1959.....	67.52	70.4	81.9	71.4	66.0	71.6	72.0	63.6	78.2
1960.....	68.67	71.7	82.1	72.6	68.0	71.9	72.2	63.1	79.3
1961.....	69.28	72.5	82.7	73.3	69.1	71.6	71.8	62.7	79.2
1962.....	70.55	73.6	83.9	73.9	70.4	72.0	72.3	63.0	79.4
1963.....	71.59	74.7	84.8	74.9	71.7	72.1	72.9	63.5	79.6
1964.....	72.71	75.7	85.7	75.8	72.8	72.8	73.6	64.4	80.1
1965.....	74.32	77.1	85.6	77.3	74.3	73.8	74.5	65.9	80.6
1966.....	76.76	79.3	85.7	80.1	76.5	76.2	76.8	68.8	82.1
1967.....	79.02	81.3	87.4	81.9	78.8	78.7	79.3	71.8	84.3
1968.....	82.57	84.6	90.7	85.3	82.0	82.1	82.6	75.3	87.3
1969.....	86.72	88.5	93.1	89.4	86.1	86.9	86.6	81.1	90.0
1970.....	91.36	92.5	95.5	93.6	90.5	91.1	91.3	88.0	93.4
1971.....	96.02	96.6	99.0	96.6	95.8	95.9	96.4	94.4	97.6
1972.....	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1973.....	105.80	105.5	101.6	107.9	104.7	106.0	103.8	107.8	101.7
1974.....	116.02	116.9	108.4	123.8	113.6	117.1	115.3	128.1	109.2
1975.....	127.15	126.4	117.7	133.4	123.2	132.3	132.2	144.9	126.0
1976.....	133.76	133.1	124.4	138.2	131.6	139.6	138.4	149.5	133.2
1977.....	141.61	140.7	129.5	145.0	141.0	150.6	146.7	159.6	141.0
1978 p.....	152.09	150.3	136.6	155.0	151.3	164.7	158.7	174.8	151.3
1976: I.....	131.40	130.7	122.0	136.8	128.4	136.7	136.6	147.4	131.2
II.....	132.92	132.1	123.6	137.4	130.3	138.5	137.7	149.4	131.9
III.....	134.39	133.8	125.0	138.7	132.5	140.3	138.9	149.7	133.9
IV.....	136.28	135.6	126.8	139.9	134.9	142.6	140.5	151.4	135.5
1977: I.....	138.27	137.9	128.4	142.4	137.4	145.4	142.5	154.9	137.1
II.....	140.86	139.9	128.9	144.7	139.7	148.9	145.0	158.3	139.0
III.....	142.63	141.6	129.5	145.7	142.3	151.9	147.9	160.2	142.4
IV.....	144.56	143.2	130.9	147.0	144.4	155.9	151.2	164.5	145.2
1978: I.....	147.10	146.2	133.1	150.4	147.1	158.2	153.6	167.2	147.6
II.....	150.98	149.3	135.7	154.4	149.9	162.3	156.7	171.8	149.6
III.....	153.52	151.6	137.8	156.2	152.6	167.1	160.6	177.3	152.7
IV p.....	156.54	154.1	139.5	158.9	155.3	170.8	163.7	182.0	155.0

See next page for continuation of table.

TABLE B-3.—Implicit price deflators for gross national product, 1929-78—Continued

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross private domestic investment <sup>1</sup> —continued				Exports and imports of goods and services <sup>1</sup>		Government purchases of goods and services			Gross domestic product	Percent change from preceding period <sup>2</sup>	
	Fixed investment—continued											
	Residential				Exports	Imports	Total	Federal	State and local		Gross national product implicit price deflator	Gross domestic product implicit price deflator
	Total	Non-farm structures	Farm structures	Producers' durable equipment								
1929.....	28.2	27.8	28.6	77.2	45.0	43.8	21.6	20.5	21.8	32.8	-----	-----
1933.....	20.7	19.8	19.5	58.8	25.5	22.1	19.3	19.4	19.2	25.2	-2.1	-2.0
1939.....	26.6	26.3	23.4	61.1	33.3	29.6	21.5	22.7	20.7	28.5	-.7	-.7
1940.....	27.4	27.2	23.6	59.6	36.8	31.5	21.7	22.7	21.0	29.1	2.3	2.3
1941.....	29.9	29.7	26.6	63.8	40.2	33.2	25.5	27.8	21.7	31.3	7.6	7.6
1942.....	32.4	31.8	30.7	71.3	46.5	37.4	31.2	33.0	22.9	34.4	9.7	9.7
1943.....	34.9	34.3	35.7	71.4	49.2	39.6	32.8	34.0	23.8	36.2	5.2	5.2
1944.....	38.1	37.3	40.8	75.0	52.6	41.1	32.3	33.1	24.9	37.0	2.3	2.3
1945.....	40.8	40.0	42.9	84.6	53.6	43.6	31.2	31.9	25.9	37.9	2.4	2.4
1946.....	44.6	43.9	46.6	95.2	56.7	49.7	29.6	30.2	28.6	43.9	15.9	15.9
1947.....	53.7	53.0	52.8	105.6	65.8	60.7	33.8	35.1	32.5	49.7	13.1	13.0
1948.....	58.1	57.4	57.3	111.5	69.8	66.1	38.0	39.4	36.6	53.1	6.9	6.9
1949.....	58.7	58.1	58.0	107.9	65.5	62.7	39.9	41.8	38.0	52.6	-1.0	-1.0
1950.....	60.0	59.5	59.4	107.4	64.0	67.8	39.4	39.9	39.0	53.6	2.0	2.0
1951.....	64.4	63.8	63.8	114.9	73.1	81.8	45.3	47.1	42.4	57.2	6.8	6.7
1952.....	66.4	65.8	65.7	114.6	73.0	79.1	47.4	48.9	44.2	57.9	1.3	1.3
1953.....	66.9	66.3	66.2	114.2	71.9	75.8	48.5	50.2	45.1	58.8	1.5	1.5
1954.....	67.1	66.6	66.5	112.4	71.2	76.9	48.9	50.4	46.6	59.6	1.4	1.4
1955.....	68.7	68.2	68.3	109.1	71.8	76.8	49.7	51.1	47.8	60.9	2.2	2.2
1956.....	70.9	70.5	70.6	104.3	73.9	78.3	52.1	53.4	50.4	62.8	3.2	3.2
1957.....	71.3	70.8	70.9	103.4	76.4	79.5	54.4	55.7	52.8	65.0	3.4	3.4
1958.....	71.2	70.7	70.8	101.9	75.7	76.5	56.1	58.1	53.8	66.0	1.6	1.6
1959.....	71.0	70.6	70.8	101.8	75.4	75.7	57.2	58.7	55.4	67.5	2.2	2.2
1960.....	71.4	70.9	71.2	100.8	77.1	76.7	58.0	59.1	56.8	68.6	1.7	1.7
1961.....	71.3	70.9	70.7	99.1	78.0	76.1	59.2	60.0	58.3	69.2	.9	.9
1962.....	71.5	71.1	71.3	96.8	77.3	74.5	61.1	61.8	60.3	70.5	1.8	1.9
1963.....	70.9	70.5	70.7	95.3	77.5	75.6	62.6	63.8	61.9	71.6	1.5	1.5
1964.....	71.2	70.8	71.0	94.3	78.3	77.1	64.0	64.8	63.3	72.7	1.6	1.6
1965.....	72.3	72.0	72.3	92.1	80.5	78.0	66.0	67.0	65.1	74.3	2.2	2.2
1966.....	74.6	74.2	74.3	90.8	82.8	79.7	69.2	70.1	68.4	76.8	3.3	3.3
1967.....	77.0	76.7	76.7	91.0	84.0	80.1	72.6	72.6	72.5	79.0	2.9	3.0
1968.....	80.7	80.4	80.5	93.2	85.3	80.9	76.7	76.4	76.9	82.6	4.5	4.5
1969.....	87.7	87.5	87.5	95.2	87.9	83.3	81.0	80.0	81.9	86.8	5.0	5.1
1970.....	90.6	90.4	90.5	97.5	93.1	89.1	87.5	86.4	88.3	91.4	5.4	5.3
1971.....	94.9	94.8	95.0	99.3	96.6	93.5	93.7	92.6	94.5	96.0	5.1	5.1
1972.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4.1	4.1
1973.....	110.8	111.0	110.7	100.1	116.2	118.2	106.7	105.8	107.3	105.7	5.8	5.7
1974.....	122.3	122.7	122.7	105.3	148.3	171.0	117.5	115.9	118.4	115.6	9.7	9.3
1975.....	132.8	133.2	132.9	116.2	163.6	188.0	128.9	127.5	129.7	126.8	9.6	9.7
1976.....	142.5	143.0	142.6	122.2	170.1	193.5	136.8	134.4	138.1	133.3	5.2	5.2
1977.....	159.4	160.0	159.7	126.2	178.7	210.3	146.3	142.7	148.5	141.1	5.9	5.8
1978 p.....	178.7	179.8	178.9	132.2	191.2	219.9	157.8	153.2	160.4	151.5	7.4	7.4
1976: I.....	137.2	137.6	137.2	120.2	165.7	187.8	134.0	132.1	135.0	131.0	3.9	3.6
II.....	140.7	141.1	141.0	121.8	168.7	190.7	135.7	133.3	137.1	132.5	4.7	4.8
III.....	143.8	144.2	144.4	123.0	171.7	197.0	137.3	134.2	139.1	133.9	4.5	4.4
IV.....	147.6	148.1	148.0	123.6	174.0	197.8	140.2	138.0	141.5	135.8	5.7	5.8
1977: I.....	152.3	152.9	153.3	124.3	176.1	208.9	142.7	140.1	144.3	137.7	6.0	5.7
II.....	157.6	158.2	158.7	126.2	180.0	209.3	145.1	141.1	147.6	140.3	7.7	7.7
III.....	160.6	161.3	161.8	126.6	179.4	212.9	147.1	142.7	149.7	142.1	5.1	5.1
IV.....	166.1	166.9	167.5	127.5	179.2	210.2	150.3	146.9	152.3	144.1	5.5	5.8
1978: I.....	168.6	169.5	168.9	128.8	183.3	213.8	153.2	149.6	155.2	146.6	7.2	7.1
II.....	175.7	176.7	176.5	131.8	189.4	217.2	156.2	151.5	158.8	150.4	11.0	10.9
III.....	182.6	183.7	182.8	133.3	192.8	221.5	158.9	153.4	162.1	153.0	6.9	7.0
IV p.....	187.9	189.1	186.9	135.1	198.4	226.8	162.7	158.2	165.2	156.0	8.1	8.1

<sup>1</sup> Separate deflators are not available for gross private domestic investment, change in business inventories, and net exports of goods and services.<sup>2</sup> Changes are based on unrounded data and therefore may differ slightly from those obtained from data shown here. Quarterly data are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-4.—Implicit price deflators and alternative price measures for gross national product and gross domestic product, 1929-78

[Quarterly data seasonally adjusted]

Year or quarter	Index numbers, 1972=100				Percent change from preceding period <sup>1</sup>					
	Gross national product		Gross domestic product		Gross national product			Gross domestic product		
	Implicit price deflator	Fixed-weighted price index (1972 weights)	Implicit price deflator	Fixed-weighted price index (1972 weights)	Implicit price deflator	Fixed-weighted price index (1972 weights)	Chain price index	Implicit price deflator	Fixed-weighted price index (1972 weights)	Chain price index
1929	32.87		32.8							
1933	25.14		25.2		-2.1			-2.0		
1939	28.48		28.5		-0.7			-0.7		
1940	29.13		29.1		2.3			2.3		
1941	31.34		31.3		7.6			7.6		
1942	34.39		34.4		9.7			9.7		
1943	36.18		36.2		5.2			5.2		
1944	37.03		37.0		2.3			2.3		
1945	37.92		37.9		2.4			2.4		
1946	43.95		43.9		15.9			15.9		
1947	49.70		49.7		13.1			13.0		
1948	53.13		53.1		6.9			6.9		
1949	52.59		52.6		-1.0			-1.0		
1950	53.64		53.6		2.0			2.0		
1951	57.27		57.2		6.8			6.7		
1952	58.00		57.9		1.3			1.3		
1953	58.88		58.8		1.5			1.5		
1954	59.69		59.6		1.4			1.4		
1955	60.98		60.9		2.2			2.2		
1956	62.90		62.8		3.2			3.2		
1957	65.02		65.0		3.4			3.4		
1958	66.06	68.1	66.0	68.0	1.6			1.6		
1959	67.52	69.1	67.5	69.1	2.2	1.6	1.6	2.2	1.6	1.6
1960	68.67	70.3	68.6	70.2	1.7	1.7	1.7	1.7	1.7	1.7
1961	69.28	71.1	69.2	71.1	.9	1.1	1.2	.9	1.2	1.2
1962	70.55	72.0	70.5	72.0	1.8	1.3	1.4	1.9	1.3	1.5
1963	71.59	72.8	71.6	72.8	1.5	1.1	1.3	1.5	1.1	1.3
1964	72.71	73.7	72.7	73.7	1.6	1.2	1.4	1.6	1.2	1.4
1965	74.32	75.0	74.3	75.0	2.2	1.8	1.9	2.2	1.8	1.9
1966	76.76	77.2	76.8	77.2	3.3	2.9	3.1	3.3	3.0	3.1
1967	79.02	79.5	79.0	79.6	2.9	3.0	3.0	3.0	3.0	3.1
1968	82.57	83.0	82.6	83.0	4.5	4.3	4.4	4.5	4.4	4.4
1969	86.72	87.1	86.8	87.1	5.0	5.0	5.0	5.1	5.0	5.0
1970	91.36	91.6	91.4	91.7	5.4	5.2	5.3	5.3	5.2	5.3
1971	96.02	96.1	96.0	96.2	5.1	4.9	5.0	5.1	4.9	5.0
1972	100.00	100.0	100.0	100.0	4.1	4.0	4.1	4.1	4.0	4.1
1973	105.80	106.0	105.7	105.9	5.8	6.0	6.0	5.7	5.9	5.9
1974	116.02	116.8	115.6	116.4	9.7	10.2	9.9	9.3	9.9	9.6
1975	127.15	127.7	126.8	127.2	9.6	9.3	9.4	9.7	9.3	9.4
1976	133.76	134.9	133.3	134.4	5.2	5.6	5.6	5.2	5.7	5.7
1977	141.61	143.3	141.1	142.8	5.9	6.3	6.2	5.8	6.3	6.1
1978 <sup>p</sup>	152.09	154.3	151.5	153.8	7.4	7.6	7.5	7.4	7.7	7.6
1976: I	131.40	132.2	131.0	131.8	3.9	4.3	4.5	3.6	4.2	4.5
1976: II	132.92	133.8	132.5	133.4	4.7	4.9	5.0	4.8	4.9	5.0
1976: III	134.39	135.5	133.9	135.0	4.5	5.1	5.2	4.4	5.0	5.1
1976: IV	136.28	137.6	135.8	137.2	5.7	6.4	6.3	5.8	6.5	6.4
1977: I	138.27	139.9	137.7	139.4	6.0	7.0	6.6	5.7	6.8	6.4
1977: II	140.86	142.5	140.3	142.0	7.7	7.4	7.3	7.7	7.5	7.4
1977: III	142.63	144.1	142.1	143.6	5.1	4.7	4.6	5.1	4.6	4.5
1977: IV	144.56	146.5	144.1	146.0	5.5	6.8	6.5	5.8	7.0	6.7
1978: I	147.10	149.0	146.6	148.5	7.2	7.0	7.1	7.1	7.0	7.1
1978: II	150.98	152.9	150.4	152.5	11.0	11.0	10.8	10.9	11.0	10.9
1978: III	153.52	155.8	153.0	155.3	6.9	7.6	7.6	7.0	7.6	7.5
1978: IV <sup>p</sup>	156.54	159.0	156.0	158.6	8.1	8.7	8.5	8.1	8.7	8.4

<sup>1</sup> Changes are based on unrounded data and therefore may differ slightly from those obtained from published indexes shown here. Quarterly data are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-5.—Gross national product by industry in 1972 dollars, 1947-77

[Billions of 1972 dollars]

Year	Gross national product	Agriculture, forestry, and fisheries	Construction	Manufacturing			Transportation, communication, and utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	All other <sup>1</sup>
				Total	Durable goods industries	Non-durable goods industries						
1947	468.3	26.1	22.9	114.9	68.5	46.4	38.3	76.1	55.4	55.1	68.5	11.1
1948	487.7	28.0	26.5	121.5	72.0	49.6	38.7	78.0	57.1	56.7	69.0	12.0
1949	490.7	27.8	26.5	115.0	66.3	48.8	36.4	79.9	60.7	57.2	73.1	14.1
1950	533.5	29.1	29.3	131.3	78.1	53.2	39.6	87.6	64.4	59.4	75.4	17.5
1951	576.5	28.2	32.5	146.0	89.9	56.1	44.2	88.3	65.7	60.6	89.8	20.2
1952	598.5	29.0	33.8	150.7	94.3	56.4	44.3	91.1	71.1	61.6	96.6	20.2
1953	621.8	30.3	34.8	161.2	102.6	58.6	45.9	94.0	74.0	63.0	96.4	22.3
1954	613.7	31.1	36.0	149.6	91.7	57.9	45.6	94.6	77.7	63.1	94.9	21.1
1955	654.8	31.9	38.2	165.8	103.4	62.4	49.4	103.2	82.0	67.5	95.4	21.4
1956	668.8	31.4	40.9	166.9	102.5	64.4	52.3	106.2	85.7	71.1	97.6	16.6
1957	680.9	30.8	40.9	167.8	102.9	64.9	53.4	108.0	89.8	73.3	100.1	16.8
1958	679.5	32.0	42.1	153.3	88.8	64.5	52.2	107.9	93.5	75.8	101.7	21.0
1959	720.4	30.9	45.5	170.7	100.7	70.0	55.7	115.8	98.1	80.3	103.6	20.0
1960	736.8	32.2	46.1	172.0	101.5	70.5	58.0	117.9	101.9	82.2	107.2	19.4
1961	755.3	32.3	46.6	171.2	99.3	72.0	59.1	119.2	106.8	85.4	111.1	23.6
1962	799.1	32.3	48.3	186.2	110.1	76.2	62.1	126.7	115.3	88.6	115.1	24.5
1963	830.7	32.8	49.8	201.0	119.0	82.1	65.6	131.7	115.3	92.2	118.3	24.1
1964	874.4	32.1	53.7	215.7	129.3	86.4	68.9	139.7	119.3	96.9	122.6	25.6
1965	925.9	33.0	57.0	235.1	144.1	91.0	74.3	148.6	127.2	101.2	127.4	22.1
1966	981.0	31.3	59.0	254.0	157.0	97.0	80.0	156.9	131.4	106.5	136.4	25.4
1967	1,007.7	32.6	59.5	254.1	157.2	96.9	82.3	160.7	136.5	112.7	143.5	25.7
1968	1,051.8	32.4	62.5	268.4	165.5	102.9	88.2	170.6	142.9	116.3	148.1	22.4
1969	1,078.8	33.0	61.2	276.2	169.1	107.2	92.9	174.5	149.3	121.4	151.8	18.4
1970	1,075.3	34.3	57.1	260.6	154.4	106.2	95.1	178.4	152.9	124.7	152.0	20.4
1971	1,107.5	36.1	57.1	264.1	155.3	108.7	97.3	186.8	160.6	126.6	153.1	25.7
1972	1,171.1	35.4	58.0	288.8	171.9	116.8	103.6	201.2	167.3	134.5	154.9	27.7
1973	1,235.0	35.9	58.3	313.0	189.0	124.1	112.6	212.0	171.1	143.1	157.3	31.6
1974	1,217.8	35.7	56.0	291.9	176.0	115.9	112.4	205.7	180.3	144.7	160.0	31.1
1975	1,202.3	37.0	49.8	277.1	162.2	114.9	113.5	206.2	182.3	145.2	162.7	28.6
1976	1,271.0	36.0	53.4	303.2	178.1	125.0	119.7	218.0	193.0	151.6	164.5	31.6
1977	1,332.7	38.3	56.9	322.3	190.9	131.5	124.0	227.9	204.0	159.0	165.7	34.5

<sup>1</sup> Mining, rest of the world, and residual (GNP in 1972 dollars measured as the sum of final products less GNP in 1972 dollars measured as the sum of gross product by industry).

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-6.—Gross national product by major type of product, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods						Services	Structures	Auto output	
				Total			Durable goods		Nondurable goods				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales				Inventory change
1929..	103.4	101.7	1.7	56.1	54.4	1.7	16.1	1.4	38.3	0.3	35.9	11.4	---
1933..	55.8	57.4	-1.6	27.0	28.6	-1.6	5.4	- .5	23.2	-1.1	25.9	2.9	---
1939..	90.8	90.4	.4	49.0	48.6	.4	12.4	.3	36.2	.1	34.3	7.5	---
1940..	100.0	97.8	2.2	56.0	53.8	2.2	15.4	1.2	38.4	1.0	35.7	8.3	---
1941..	124.9	120.4	4.5	72.5	68.0	4.5	23.3	3.1	44.2	1.4	40.6	11.8	---
1942..	158.3	156.5	1.8	93.7	91.9	1.8	34.5	1.0	57.4	.7	50.6	14.0	---
1943..	192.0	192.5	- .6	120.4	121.0	- .6	54.2	.0	66.8	- .6	62.9	8.7	---
1944..	210.5	211.5	-1.0	132.3	133.3	-1.0	58.5	- .6	74.8	- .3	72.2	6.1	---
1945..	212.3	213.4	-1.0	128.9	129.9	-1.0	50.1	-1.3	79.8	.2	76.9	6.5	---
1946..	209.6	203.2	6.4	125.3	118.9	6.4	31.8	5.3	87.1	1.1	68.6	15.7	---
1947..	232.8	233.2	- .5	139.8	140.3	- .5	44.1	1.7	96.2	-2.2	71.3	21.7	7.3
1948..	259.1	254.4	4.7	154.4	149.7	4.7	46.9	.7	102.8	4.0	76.7	28.0	8.9
1949..	258.0	261.1	-3.1	147.7	150.8	-3.1	48.3	-2.1	102.5	-1.0	81.9	28.4	12.0
1950..	286.2	279.4	6.8	162.4	155.6	6.8	54.7	4.1	100.9	2.7	88.2	35.6	15.5
1951..	330.2	319.9	10.3	189.5	179.2	10.3	62.5	6.9	116.7	3.4	102.9	37.8	13.4
1952..	347.2	344.0	3.1	194.6	191.5	3.1	67.6	1.1	123.9	2.0	113.1	39.4	12.2
1953..	366.1	365.7	.4	203.1	202.7	.4	71.5	.9	131.2	.5	121.0	42.0	16.3
1954..	366.3	367.8	-1.5	196.1	197.6	-1.5	69.0	-2.5	128.7	-1.0	125.7	44.5	14.9
1955..	399.3	393.3	6.0	214.5	208.5	6.0	78.2	3.0	130.3	2.9	135.3	49.5	21.5
1956..	420.7	416.0	4.7	223.3	218.6	4.7	82.3	2.8	136.3	1.9	145.2	52.2	17.2
1957..	442.8	441.4	1.3	232.3	231.0	1.3	87.3	1.3	143.7	.0	157.5	53.0	19.6
1958..	448.9	450.4	-1.5	228.2	229.7	-1.5	80.5	-2.8	149.2	1.3	166.9	53.8	14.6
1959..	486.5	481.2	5.2	247.4	242.2	5.2	87.4	2.7	154.8	2.5	179.5	59.5	19.6
1960..	506.0	502.2	3.8	254.3	250.6	3.8	89.1	2.4	161.4	1.4	193.2	58.4	21.6
1961..	523.3	521.1	2.2	256.5	254.3	2.2	90.2	- .1	164.1	2.3	206.7	60.1	18.1
1962..	563.8	557.3	6.5	278.0	271.5	6.5	98.4	3.6	173.2	2.9	221.5	64.3	22.9
1963..	594.7	588.8	6.0	289.7	283.7	6.0	105.4	2.7	178.3	3.3	236.2	68.9	25.6
1964..	635.7	629.9	5.8	309.0	303.2	5.8	115.0	3.9	188.2	1.9	254.4	72.4	26.5
1965..	688.1	678.6	9.5	336.6	327.1	9.5	127.0	6.6	200.1	2.9	272.7	78.8	31.8
1966..	753.0	738.7	14.3	373.9	359.6	14.3	139.0	10.0	220.6	4.3	297.7	81.4	31.1
1967..	796.3	786.2	10.1	387.3	377.2	10.1	143.5	5.3	233.7	4.8	326.1	82.9	28.8
1968..	868.5	860.8	7.7	418.9	411.2	7.7	157.4	5.0	253.8	2.8	356.6	93.0	36.6
1969..	935.5	926.2	9.4	446.2	436.8	9.4	169.2	6.1	267.6	3.3	388.7	100.7	36.8
1970..	982.4	978.6	3.8	456.2	452.4	3.8	170.7	.0	281.7	3.7	424.6	101.6	30.6
1971..	1,063.4	1,057.1	6.4	479.8	473.5	6.4	179.8	1.8	293.7	4.6	465.5	118.1	42.2
1972..	1,171.1	1,161.7	9.4	526.0	516.6	9.4	202.1	6.3	314.5	3.2	510.8	134.3	45.1
1973..	1,306.6	1,288.6	17.9	598.8	580.9	17.9	229.6	10.9	351.3	7.0	560.5	147.2	50.7
1974..	1,412.9	1,404.0	8.9	638.6	629.7	8.9	240.8	7.1	389.0	1.8	626.8	147.4	42.9
1975..	1,528.8	1,539.6	-10.7	686.6	697.3	-10.7	267.9	-8.9	429.4	-1.8	697.6	144.7	45.6
1976..	1,700.1	1,689.9	10.2	760.3	750.1	10.2	299.3	5.3	450.7	4.9	778.0	161.9	61.4
1977..	1,887.2	1,871.6	15.6	832.6	817.0	15.6	332.9	8.4	484.1	7.2	862.8	191.8	72.3
1978 p.	2,106.6	2,090.9	15.7	917.5	901.8	15.7	364.8	11.5	537.0	4.2	962.9	226.2	77.4
1976:													
I..	1,649.7	1,638.3	11.4	741.9	730.5	11.4	288.4	.1	442.1	11.3	749.7	158.1	60.5
II..	1,685.4	1,670.1	15.4	758.0	742.6	15.4	295.3	6.5	447.3	8.9	766.9	160.5	61.9
III..	1,715.6	1,701.0	14.5	768.1	753.6	14.5	303.1	9.3	450.4	5.3	787.1	160.3	59.5
IV..	1,749.8	1,750.4	- .6	772.9	773.5	- .6	310.4	5.2	463.1	-5.8	803.1	168.7	63.8
1977:													
I..	1,806.8	1,796.5	10.3	800.2	789.9	10.3	326.1	6.1	463.8	4.2	832.3	174.3	72.7
II..	1,867.0	1,850.0	17.0	825.8	808.8	17.0	330.0	9.1	478.8	7.9	850.0	191.3	72.1
III..	1,916.8	1,894.9	21.9	844.7	822.8	21.9	334.6	11.9	488.2	10.0	875.3	196.8	70.0
IV..	1,958.1	1,945.0	13.1	859.6	846.5	13.1	341.1	6.3	505.4	6.8	893.6	204.9	74.5
1978:													
I..	1,992.0	1,975.3	16.7	861.8	845.1	16.7	336.3	14.8	508.7	1.9	926.4	203.8	73.8
II..	2,087.5	2,067.4	20.1	912.2	892.1	20.1	365.0	10.8	527.1	9.3	952.0	223.4	79.5
III..	2,136.1	2,122.5	13.6	927.3	913.7	13.6	369.8	10.2	543.9	3.4	973.7	235.0	75.8
IV p.	2,210.8	2,198.4	12.4	968.6	956.2	12.4	388.0	10.1	568.2	2.4	999.4	242.8	80.7

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-7.—Gross national product by major type of product in 1972 dollars, 1929-78

[Billions of 1972 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods								Services	Structures	Auto output
				Total			Durable goods		Nondurable goods					
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change				
1929..	314.6	310.0	4.6	143.9	139.3	4.6	40.7	3.5	98.6	1.1	126.8	44.0	-----	
1933..	222.1	226.9	-4.9	97.2	102.1	-4.9	17.6	-2.1	84.5	-2.8	110.9	14.0	-----	
1939..	318.8	317.2	1.6	153.9	152.3	1.6	35.6	.7	116.7	.9	134.6	30.3	-----	
1940..	343.3	337.1	6.2	171.2	165.0	6.2	43.1	3.4	121.8	2.8	139.5	32.6	-----	
1941..	398.5	386.4	12.0	197.4	185.4	12.0	57.5	8.2	127.9	3.8	157.6	43.4	-----	
1942..	460.3	455.1	5.2	221.1	215.9	5.2	76.0	3.5	140.0	1.7	192.7	46.4	-----	
1943..	530.6	530.5	.1	263.5	263.4	.1	119.3	.7	144.1	-.6	240.9	26.3	-----	
1944..	568.6	570.9	-2.3	286.8	289.1	-2.3	135.9	-1.8	153.2	-.5	263.6	18.1	-----	
1945..	560.0	563.6	-3.6	279.2	282.8	-3.6	121.9	-3.7	161.0	.1	261.9	18.9	-----	
1946..	476.9	464.7	12.2	238.0	225.8	12.2	60.5	10.8	165.3	1.3	199.7	39.2	-----	
1947..	468.3	468.5	-.2	236.8	237.0	-.2	74.9	1.8	162.1	-2.0	186.9	44.7	12.9	
1948..	487.7	482.2	5.5	244.2	238.7	5.5	75.6	1.5	163.1	4.0	190.9	52.5	14.7	
1949..	490.7	495.1	-4.4	239.9	244.3	-4.4	76.1	-3.7	168.2	-.8	197.0	53.7	18.9	
1950..	533.5	522.9	10.6	261.5	250.9	10.6	84.4	6.3	166.5	4.2	206.0	66.0	24.0	
1951..	576.5	562.8	13.7	283.1	269.4	13.7	92.6	9.8	176.8	3.9	229.0	64.4	20.4	
1952..	598.5	594.2	4.3	292.3	288.0	4.3	100.6	1.8	187.4	2.5	240.6	65.6	18.4	
1953..	621.8	620.3	1.5	306.9	305.4	1.5	105.9	1.4	199.5	.1	245.5	69.4	23.9	
1954..	613.7	615.8	-2.2	292.2	294.4	-2.2	101.7	-3.6	192.7	1.4	247.0	74.5	22.9	
1955..	654.8	647.1	7.7	316.3	308.6	7.7	112.9	4.2	195.7	3.5	257.6	80.9	31.3	
1956..	668.8	663.0	5.8	320.9	315.1	5.8	113.5	3.7	201.6	2.1	267.2	80.7	24.4	
1957..	680.9	679.4	1.5	321.8	320.3	1.5	114.6	1.5	205.6	0	279.3	79.9	25.8	
1958..	679.5	681.3	-1.8	312.0	313.8	-1.8	104.8	-3.4	209.0	1.6	285.6	81.9	20.0	
1959..	720.4	714.0	6.5	332.5	326.1	6.5	110.6	3.3	215.5	3.2	298.0	89.9	24.7	
1960..	736.8	732.4	4.4	337.1	332.8	4.4	111.6	2.9	221.2	1.5	310.7	89.0	26.8	
1961..	755.3	752.4	2.9	338.1	335.2	2.9	112.6	-.1	222.7	3.0	325.5	91.7	22.6	
1962..	799.1	791.0	8.1	362.0	353.8	8.1	121.1	4.4	232.7	3.7	339.9	97.2	27.5	
1963..	830.7	823.0	7.8	373.0	365.2	7.8	128.4	3.4	236.8	4.3	354.0	103.8	30.3	
1964..	874.4	867.1	7.3	394.0	386.7	7.3	139.2	5.0	247.5	2.3	372.2	108.1	31.1	
1965..	925.9	914.6	11.3	421.5	410.2	11.3	152.6	8.0	257.7	3.3	389.1	115.3	37.4	
1966..	981.0	964.3	16.7	455.6	438.9	16.7	165.2	11.9	273.7	4.8	410.2	115.2	36.7	
1967..	1,007.7	995.7	12.0	461.9	449.9	12.0	166.6	6.4	283.3	5.6	432.7	113.1	33.5	
1968..	1,051.8	1,043.1	8.7	481.1	472.4	8.7	175.7	6.6	296.7	3.2	449.9	120.9	40.6	
1969..	1,078.8	1,068.2	10.6	492.3	481.7	10.6	183.3	6.8	298.4	3.7	465.4	121.1	40.0	
1970..	1,075.3	1,071.0	4.3	483.4	479.1	4.3	179.1	.1	300.0	4.2	477.2	114.6	32.5	
1971..	1,107.5	1,100.9	6.6	491.6	484.9	6.6	181.5	1.8	303.4	4.8	491.1	124.9	42.1	
1972..	1,171.1	1,161.7	9.4	526.0	516.6	9.4	202.1	6.2	314.5	3.2	510.8	134.3	45.1	
1973..	1,235.0	1,218.5	16.5	569.0	552.5	16.5	225.9	10.6	326.6	5.9	531.1	134.8	50.6	
1974..	1,217.8	1,209.9	8.0	554.2	546.2	8.0	222.7	5.6	323.5	2.4	546.4	117.2	40.1	
1975..	1,202.3	1,212.1	-9.8	538.3	548.0	-9.8	219.8	-7.0	328.2	-2.7	560.1	104.0	39.4	
1976..	1,271.0	1,264.4	6.7	576.5	569.8	6.7	232.5	3.6	337.3	3.0	583.0	111.6	49.2	
1977..	1,332.7	1,323.8	8.9	608.4	599.6	8.9	248.0	5.8	351.6	3.1	602.9	121.3	55.2	
1978 p.	1,385.1	1,374.7	10.4	629.1	618.7	10.4	257.8	7.2	360.8	3.3	627.2	128.8	55.2	
1976:														
I...	1,255.5	1,248.0	7.5	568.5	561.0	7.5	228.7	.2	332.3	7.3	575.5	111.5	49.7	
II...	1,268.0	1,258.0	10.1	576.3	566.2	10.1	231.1	4.6	335.2	5.4	580.5	111.2	50.1	
III...	1,276.5	1,267.3	9.3	580.8	571.5	9.3	234.0	6.3	337.4	3.0	585.8	109.9	47.3	
IV...	1,284.0	1,284.2	-.2	580.3	580.5	-.2	236.2	3.5	344.3	-3.7	589.9	113.8	49.7	
1977:														
I...	1,306.7	1,300.9	5.8	596.0	590.1	5.8	246.5	4.4	343.6	1.4	596.3	114.5	56.2	
II...	1,325.5	1,315.5	10.0	604.4	594.3	10.0	246.9	6.1	347.5	3.9	598.8	122.3	55.6	
III...	1,343.9	1,331.7	12.2	613.3	601.1	12.2	248.0	7.9	353.1	4.3	606.9	123.7	53.7	
IV...	1,354.5	1,347.1	7.5	620.1	612.7	7.5	250.5	4.6	362.1	2.9	609.6	124.8	55.4	
1978:														
I...	1,354.2	1,341.8	12.3	611.8	599.4	12.3	245.0	9.6	354.5	2.7	620.1	122.3	54.1	
II...	1,382.6	1,369.9	12.7	627.7	615.0	12.7	260.2	6.4	354.8	6.3	625.6	129.3	57.0	
III...	1,391.4	1,382.4	9.0	630.2	621.2	9.0	258.7	6.1	362.5	2.9	629.7	131.6	53.5	
IV p.	1,412.2	1,404.5	7.7	646.8	639.1	7.7	267.6	6.6	371.5	1.1	633.3	132.2	56.3	

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-8.—*Gross national product: Receipts and expenditures by major economic groups, 1929-78*

[Billions of dollars]

Year or quarter	Persons					Government						Surplus or deficit (-), national income and product accounts
	Disposable personal income			Personal consumption expenditures	Personal saving or dis-saving (-)	Net receipts			Expenditures			
	Total <sup>1</sup>	Less: Interest paid and transfers <sup>2</sup>	Equals: Total excluding interest paid and transfers			Tax and non-tax receipts or accruals	Less: Transfers, interest, and subsidies <sup>3</sup>	Equals: Net receipts	Total expenditures	Less: Transfers, interest, and subsidies <sup>2</sup>	Equals: Purchases of goods and services	
1929.....	82.3	1.9	80.4	77.3	3.1	11.3	1.5	9.8	10.3	1.5	8.8	1.0
1933.....	45.5	.7	44.8	45.8	-1.0	9.3	2.5	6.9	10.7	2.5	8.2	-1.4
1939.....	69.9	.9	69.1	67.0	2.1	15.4	4.1	11.3	17.6	4.1	13.5	-2.2
1940.....	75.2	1.0	74.3	71.0	3.3	17.7	4.3	13.5	18.4	4.3	14.2	-.7
1941.....	92.0	1.1	91.0	80.8	10.2	25.0	3.8	21.2	28.8	3.8	24.9	-3.8
1942.....	116.5	.8	115.6	88.6	27.0	32.6	4.2	28.4	64.0	4.2	59.8	-31.4
1943.....	132.9	.7	132.1	99.4	32.7	49.2	4.4	44.7	93.3	4.4	88.9	-44.1
1944.....	145.5	.8	144.6	108.2	36.5	51.2	6.0	45.2	103.0	6.0	97.0	-51.8
1945.....	149.0	.9	148.0	119.5	28.5	53.2	9.9	43.3	92.7	9.9	82.8	-39.5
1946.....	158.6	1.4	157.3	143.8	13.4	51.0	18.0	33.0	45.6	18.0	27.5	5.4
1947.....	168.4	1.7	166.7	161.7	4.9	56.9	17.1	39.9	42.5	17.1	25.5	14.4
1948.....	187.4	2.1	185.3	174.7	10.6	58.9	18.5	40.4	50.5	18.5	32.0	8.4
1949.....	187.1	2.3	184.9	178.1	6.7	55.9	20.9	35.0	59.3	20.9	38.4	-3.4
1950.....	205.5	2.7	202.8	192.0	10.8	69.0	22.5	46.5	61.0	22.5	38.5	8.0
1951.....	224.8	2.9	221.9	207.1	14.8	85.2	19.1	66.2	79.2	19.1	60.1	6.1
1952.....	236.4	3.3	233.1	217.1	16.0	90.1	18.3	71.8	93.9	18.3	75.6	-3.8
1953.....	250.7	4.0	246.6	229.7	17.0	94.6	19.0	75.6	101.6	19.0	82.5	-6.9
1954.....	255.7	4.3	251.4	235.8	15.6	89.9	21.3	68.6	97.0	21.3	75.8	-7.1
1955.....	273.4	4.8	268.6	253.7	14.9	101.1	23.0	78.1	98.0	23.0	75.0	3.1
1956.....	291.3	5.6	285.7	266.0	19.7	109.7	25.1	84.6	104.5	25.1	79.4	5.2
1957.....	306.9	5.9	301.0	280.4	20.6	116.2	28.2	88.0	115.3	28.2	87.1	.9
1958.....	317.1	6.0	311.1	289.5	21.7	115.0	32.6	82.4	127.6	32.6	95.0	-12.6
1959.....	336.1	6.5	329.6	310.8	18.8	129.4	33.4	96.0	131.0	33.4	97.6	-1.6
1960.....	349.4	7.4	342.0	324.9	17.1	139.5	36.1	103.4	136.4	36.1	100.3	3.1
1961.....	362.9	7.7	355.2	335.0	20.2	144.8	40.9	103.9	149.1	40.9	108.2	-4.3
1962.....	383.9	8.3	375.6	355.2	20.4	156.7	42.4	114.3	160.5	42.4	118.0	-3.8
1963.....	402.8	9.4	393.4	374.6	18.8	168.5	44.1	124.4	167.8	44.1	123.7	.7
1964.....	437.0	10.5	426.5	400.4	26.1	174.0	46.5	127.5	176.3	46.5	129.8	-2.3
1965.....	472.2	11.7	460.4	430.2	30.3	188.3	49.5	138.9	187.8	49.5	138.4	.5
1966.....	510.4	12.6	497.8	464.8	33.0	212.3	54.9	157.4	213.6	54.9	158.7	-1.3
1967.....	544.5	13.3	531.2	490.4	40.9	228.2	62.2	166.0	242.4	62.2	180.2	-14.2
1968.....	588.1	14.1	574.0	535.9	38.1	263.4	70.2	193.2	268.9	70.2	198.7	-5.5
1969.....	630.4	15.6	614.8	579.7	35.1	296.3	77.8	218.5	285.6	77.8	207.9	10.7
1970.....	685.9	16.6	669.4	618.8	50.6	302.6	93.1	209.5	311.9	93.1	218.9	-9.4
1971.....	742.8	17.3	725.5	668.2	57.3	322.2	106.8	215.5	340.5	106.8	233.7	-18.3
1972.....	801.3	18.9	782.4	733.0	49.4	367.4	117.8	249.6	370.9	117.8	253.1	-3.5
1973.....	901.7	21.5	880.2	809.9	70.3	411.2	135.4	275.8	404.9	135.4	269.5	6.3
1974.....	984.6	23.4	961.3	889.6	71.7	455.1	155.6	299.5	458.2	155.6	302.7	-3.2
1975.....	1,086.7	23.9	1,062.7	979.1	83.6	468.5	194.4	274.1	532.8	194.4	338.4	-64.4
1976.....	1,184.4	26.1	1,158.3	1,090.2	68.0	537.2	210.9	326.3	570.4	210.9	359.5	-33.2
1977.....	1,303.0	29.6	1,273.4	1,206.5	66.9	603.3	227.9	375.4	621.8	227.9	394.0	-18.6
1978 P.....	1,451.2	34.8	1,416.4	1,339.7	76.7	682.7	250.0	432.7	684.2	250.0	434.2	-1.5

See next page for continuation of table.



TABLE B-8.—Gross national product: Receipts and expenditures by major economic groups, 1929-78—Continued

(Billions of dollars)

Year or quarter	Business			International				Total income or receipts	Statistical discrepancy	Gross national product or expenditure	
	Gross retained earnings <sup>1</sup>	Gross private domestic investment <sup>2</sup>	Excess of earnings or of investment (-)	Net transfers and interest paid to foreigners <sup>3</sup>	Net exports of goods and services						Excess of net transfers and interest or of net exports (-) <sup>7</sup>
					Exports	Less: Imports	Equals: Net exports				
1929.....	11.7	16.2	-4.4	0.4	7.0	5.9	1.1	-0.7	102.3	1.1	103.4
1933.....	3.2	1.4	1.8	.2	2.4	2.0	.4	-.2	55.1	.7	55.8
1939.....	8.8	9.3	-.5	.2	4.4	3.4	1.1	-.9	89.4	1.4	90.8
1940.....	10.9	13.1	-2.2	.2	5.4	3.6	1.7	-1.5	98.9	1.1	100.0
1941.....	12.0	17.9	-5.8	.2	5.9	4.6	1.3	-1.1	124.3	.5	124.9
1942.....	14.8	9.9	4.9	.2	4.8	4.8	.0	.2	159.1	-.8	158.3
1943.....	16.7	5.8	10.9	.2	4.4	6.5	-2.0	2.2	193.8	-1.8	192.0
1944.....	17.7	7.2	10.5	.3	5.3	7.1	-1.8	2.1	207.8	2.7	210.5
1945.....	16.0	10.6	5.4	.8	7.2	7.8	-.6	1.4	208.2	4.1	212.3
1946.....	15.8	30.7	-14.9	2.9	14.8	7.2	7.6	-4.6	208.9	.7	209.6
1947.....	21.8	34.0	-12.1	2.6	19.8	8.2	11.6	-9.0	231.0	1.8	232.8
1948.....	30.0	45.9	-15.8	4.5	16.9	10.4	6.5	-2.0	260.3	-1.2	259.1
1949.....	31.4	35.3	-3.8	5.6	15.9	9.6	6.2	-6	257.0	1.0	258.0
1950.....	30.8	53.8	-23.0	4.0	13.9	12.0	1.9	2.1	284.1	2.0	286.2
1951.....	34.6	59.2	-24.6	3.5	18.9	15.1	3.8	-.3	326.2	4.0	330.2
1952.....	37.1	52.1	-15.1	2.6	18.2	15.8	2.4	-.2	344.5	2.7	347.2
1953.....	38.0	53.3	-15.3	2.5	17.1	16.6	.6	1.9	362.8	3.3	366.1
1954.....	41.0	52.7	-11.7	2.3	18.0	16.0	2.0	.3	363.3	3.0	366.3
1955.....	47.5	68.4	-20.8	2.5	20.0	17.8	2.2	.3	396.8	2.5	399.3
1956.....	48.7	71.0	-22.3	2.5	23.9	19.6	4.3	-1.8	421.5	-.8	420.7
1957.....	51.1	69.2	-18.1	2.5	26.7	20.7	6.1	-3.6	442.6	.2	442.8
1958.....	51.3	61.9	-10.6	2.4	23.3	20.8	2.5	-.1	447.2	1.7	448.9
1959.....	58.5	77.6	-19.0	2.6	23.7	23.2	.6	2.0	486.7	-.2	486.5
1960.....	58.7	76.4	-17.7	2.6	27.6	23.2	4.4	-1.7	506.7	-.7	506.0
1961.....	59.8	74.3	-14.5	2.8	28.9	23.1	5.8	-3.0	521.7	1.6	523.3
1962.....	67.0	85.2	-18.2	3.0	30.6	25.2	5.4	-2.4	559.8	4.0	563.8
1963.....	70.1	90.2	-20.1	3.1	32.7	26.4	6.3	-3.2	591.0	3.7	594.7
1964.....	76.2	96.6	-20.4	3.2	37.4	28.4	8.9	-5.7	633.5	2.2	635.7
1965.....	84.6	112.0	-27.4	3.3	39.5	32.0	7.6	-4.3	687.2	.9	688.1
1966.....	91.2	124.5	-33.3	3.5	42.8	37.7	5.1	-1.6	749.8	3.2	753.0
1967.....	93.7	120.8	-27.1	3.7	45.6	40.6	4.9	-1.2	794.6	1.7	796.3
1968.....	98.2	131.5	-33.3	3.6	49.9	47.7	2.3	1.4	869.1	-.6	868.5
1969.....	101.7	146.2	-44.5	3.8	54.7	52.9	1.8	2.0	938.8	-3.3	935.5
1970.....	101.4	140.8	-39.5	4.3	62.5	58.5	3.9	.3	984.5	-2.1	982.4
1971.....	115.7	160.0	-44.3	5.5	65.6	64.0	1.6	3.9	1,062.1	1.3	1,063.4
1972.....	131.0	188.3	-57.3	6.5	72.7	75.9	-3.3	9.8	1,169.4	1.7	1,171.1
1973.....	140.2	220.0	-79.8	7.7	101.6	94.4	7.1	.6	1,303.9	2.6	1,306.6
1974.....	137.9	214.6	-76.7	8.5	137.9	131.9	6.0	2.5	1,407.1	5.8	1,412.9
1975.....	176.2	190.9	-14.8	8.5	147.3	126.9	20.4	-11.9	1,521.5	7.4	1,528.8
1976.....	202.6	243.0	-40.3	8.7	163.2	155.7	7.4	1.2	1,695.9	4.2	1,700.1
1977.....	223.9	297.8	-74.0	9.7	175.5	186.6	-11.1	20.9	1,882.4	4.7	1,887.2
1978 p.....	243.6	344.5	-100.9	13.0	205.2	217.0	-11.8	24.8	2,105.7	.9	2,106.6

<sup>1</sup> Personal income less personal tax and nontax payments (fines, penalties, etc.).

<sup>2</sup> Interest paid by consumers to business and net personal transfer payments to foreigners.

<sup>3</sup> Government transfer payments to persons and foreigners, net interest paid by government, subsidies less current surplus of government enterprises, and disbursements less wage accruals.

<sup>4</sup> Undistributed corporate profits with inventory valuation and capital consumption adjustments, corporate and non-corporate capital consumption allowances with capital consumption adjustment, and private wage accruals less disbursements.

<sup>5</sup> See Table B-14.

<sup>6</sup> Net transfers to foreigners by persons and government and interest paid by government to foreigners.

<sup>7</sup> Capital grants received by the United States (net) less net foreign investment.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-9.—Gross national product by sector, 1929-78

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world	Percent change from preceding period, gross domestic product <sup>3</sup>
		Total	Business				Households and institutions	Government <sup>2</sup>				
			Total	Non-farm <sup>1</sup>	Farm	Statistical discrepancy		Total	Federal	State and local		
1929	103.4	102.6	95.4	84.7	9.7	1.1	2.9	4.3	0.9	3.5	0.8	-----
1933	55.8	55.5	49.1	43.8	4.6	.7	1.7	4.7	1.2	3.5	.3	-4.1
1939	90.8	90.5	80.6	72.9	6.3	1.4	2.3	7.6	3.4	4.2	.3	7.0
1940	100.0	99.6	89.4	81.8	6.5	1.1	2.4	7.8	3.5	4.3	.4	10.1
1941	124.9	124.5	112.6	103.1	8.9	.5	2.5	9.4	5.0	4.4	.4	25.0
1942	158.3	157.9	139.9	127.7	13.0	-.8	2.9	15.1	10.6	4.5	.4	26.8
1943	192.0	191.6	162.8	149.3	15.3	-1.8	3.2	25.6	20.9	4.7	.3	21.4
1944	210.5	210.1	174.2	156.2	15.3	2.7	3.7	32.2	27.2	4.9	.4	9.6
1945	212.3	212.0	172.8	152.7	16.0	4.1	4.1	35.2	29.8	5.4	.3	.9
1946	209.6	209.0	183.8	164.2	18.9	7.7	4.5	20.8	14.6	6.2	.5	-1.4
1947	232.8	231.8	210.0	188.0	20.2	1.8	5.1	16.7	9.4	7.3	.9	10.9
1948	259.1	257.9	234.9	212.7	23.3	-1.2	5.6	17.4	8.9	8.5	1.2	11.3
1949	258.0	256.9	231.5	211.7	18.8	1.0	5.9	19.4	10.0	9.4	1.1	-4
1950	286.2	284.8	257.5	235.5	20.0	2.0	6.4	20.9	10.7	10.1	1.3	10.9
1951	330.2	328.7	294.4	267.4	22.9	4.0	6.9	27.4	16.2	11.2	1.5	15.4
1952	347.2	345.7	307.3	282.5	22.2	2.7	7.2	31.2	18.9	12.3	1.5	5.2
1953	366.1	364.6	324.9	301.2	20.3	3.3	7.8	31.9	18.6	13.3	1.5	5.5
1954	366.3	364.5	323.9	301.3	19.6	3.0	8.1	32.5	17.8	14.7	1.8	-0.0
1955	399.3	397.3	354.0	332.8	18.8	2.5	9.1	34.2	18.4	15.8	2.0	9.0
1956	420.7	418.5	372.1	354.3	18.6	-.8	9.8	36.6	19.0	17.6	2.2	5.3
1957	442.8	440.5	390.8	372.3	18.4	-.2	10.5	39.1	19.6	19.6	2.3	5.2
1958	448.9	446.6	393.1	370.7	20.7	1.7	11.4	42.1	20.5	21.6	2.2	1.4
1959	486.5	484.0	427.7	408.9	19.1	-2	12.3	44.0	20.9	23.1	2.4	8.4
1960	506.0	503.5	442.5	423.0	20.2	-7	13.8	47.1	21.7	25.5	2.5	4.0
1961	523.3	520.2	455.3	433.4	20.2	1.6	14.4	50.5	22.6	27.9	3.1	3.3
1962	563.8	560.2	490.4	465.9	20.5	4.0	15.5	54.3	24.1	30.2	3.6	7.7
1963	594.7	591.1	516.5	492.2	20.5	3.7	16.6	58.0	25.2	32.9	3.7	5.5
1964	635.7	631.4	550.7	529.2	19.3	2.2	17.8	62.9	27.0	35.9	4.3	6.8
1965	688.1	683.4	596.6	573.8	22.0	.9	19.2	67.6	28.3	39.3	4.7	8.2
1966	753.0	748.8	651.1	625.0	22.9	3.2	21.1	76.5	32.4	44.1	4.2	9.6
1967	796.3	791.8	682.7	658.8	22.2	1.7	23.9	85.1	35.6	49.5	4.6	5.7
1968	868.5	863.7	742.2	720.2	22.6	-.6	26.4	95.2	39.3	55.9	4.8	9.1
1969	935.5	931.1	798.1	776.2	25.2	-3.3	29.2	103.7	41.8	61.9	4.5	7.8
1970	982.4	977.8	831.5	807.6	25.9	-2.1	31.6	114.7	44.7	70.0	4.6	5.0
1971	1,063.4	1,056.8	896.9	867.9	27.7	1.3	34.7	125.2	46.8	78.5	6.6	8.1
1972	1,171.1	1,164.1	989.5	955.8	32.0	1.7	37.2	137.4	50.1	87.3	7.0	10.1
1973	1,306.6	1,297.5	1,108.0	1,055.2	50.1	2.6	40.5	149.1	51.9	97.1	9.1	11.5
1974	1,412.9	1,399.8	1,193.7	1,139.9	48.0	5.8	44.8	161.4	54.9	106.5	13.1	7.9
1975	1,528.8	1,518.3	1,289.2	1,232.6	49.2	7.4	50.5	178.6	59.0	119.6	10.5	8.5
1976	1,700.1	1,685.7	1,436.7	1,385.6	46.9	4.2	56.5	192.5	62.4	130.1	14.4	11.0
1977	1,887.2	1,869.9	1,599.3	1,544.0	50.5	4.7	62.7	208.0	66.4	141.5	17.3	10.9
1978 <sup>p</sup>	2,106.6	2,087.1	1,789.1	1,730.5	57.8	.9	71.5	226.5	71.1	155.4	19.5	11.6
1976: I	1,649.7	1,635.3	1,392.8	1,340.9	48.5	3.4	54.2	188.3	61.5	126.8	14.4	12.7
II	1,685.4	1,671.9	1,425.4	1,373.5	47.8	4.1	55.9	190.7	61.6	129.1	13.5	9.3
III	1,715.6	1,700.7	1,450.7	1,401.0	45.7	4.0	57.0	193.0	61.8	131.2	14.9	7.1
IV	1,749.8	1,734.9	1,478.1	1,427.1	45.6	5.3	58.9	197.9	64.6	133.3	14.9	8.3
1977: I	1,806.8	1,789.7	1,527.8	1,474.9	49.5	3.4	60.0	201.9	65.2	136.8	17.1	13.3
II	1,867.0	1,849.0	1,582.5	1,528.0	50.8	3.7	61.3	205.2	65.4	139.8	18.0	13.9
III	1,916.8	1,898.7	1,626.4	1,571.6	47.7	7.1	63.5	208.9	65.7	143.2	18.1	11.2
IV	1,958.1	1,942.2	1,660.4	1,601.6	54.0	4.8	65.9	215.9	69.5	146.4	15.9	9.5
1978: I	1,992.0	1,973.8	1,684.1	1,628.9	53.0	2.2	68.8	221.0	69.9	151.1	18.2	6.7
II	2,087.5	2,066.5	1,771.8	1,714.9	56.4	.5	70.5	224.1	70.1	154.1	21.1	20.1
III	2,136.1	2,117.3	1,817.5	1,758.5	58.6	.4	72.3	227.5	70.5	157.0	18.8	10.2
IV <sup>p</sup>	2,210.8	2,190.8	1,883.1	-----	63.0	-----	74.4	233.4	74.0	159.4	20.0	14.6

<sup>1</sup> Includes compensation of employees in government enterprises.<sup>2</sup> Compensation of government employees.<sup>3</sup> Changes are based on unrounded data and therefore may differ slightly from those obtained from data shown here. See Table B-1 for percent changes in gross national product.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-10.—Gross national product by sector in 1972 dollars, 1929-78

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world	Percent change from preceding period, gross domestic product <sup>4</sup>
		Total	Business				Households and institutions	Government <sup>3</sup>				
			Total	Non-farm <sup>1</sup>	Farm	Residual <sup>2</sup>		Total	Federal	State and local		
1929	314.6	312.8	271.1	244.2	23.8	3.1	15.6	26.1	5.2	20.9	1.9	-----
1933	222.1	220.5	179.7	152.1	25.0	2.6	12.2	28.7	6.6	22.0	1.6	-2.2
1939	318.8	317.7	260.6	230.7	25.3	4.7	15.1	42.0	16.9	25.1	1.2	7.7
1940	343.3	342.0	282.0	253.8	24.7	3.6	16.1	43.9	18.6	25.3	1.3	7.7
1941	398.5	397.2	326.3	299.1	26.3	.9	15.9	55.1	29.6	25.5	1.2	16.1
1942	460.3	459.2	361.0	336.0	28.7	-3.8	16.4	81.8	56.7	25.0	1.1	15.6
1943	530.6	529.7	385.2	363.9	27.8	-6.6	15.2	129.3	105.0	24.4	1.0	15.4
1944	568.6	567.5	403.5	372.7	27.3	3.5	15.1	149.0	125.2	23.8	1.0	7.2
1945	560.0	559.2	437.9	366.4	25.8	5.8	15.0	146.2	121.8	24.5	.8	-1.5
1946	476.9	475.8	384.9	362.2	25.8	-3.0	15.1	75.8	49.7	26.1	1.1	-14.9
1947	468.3	466.7	392.8	370.8	23.9	-1.9	16.0	57.9	29.8	28.1	1.6	-1.9
1948	487.7	485.9	411.2	387.2	25.7	-1.7	16.7	58.0	29.2	28.8	1.8	4.1
1949	490.7	488.8	409.4	382.1	25.5	1.8	17.3	62.2	31.3	30.9	1.9	.6
1950	533.5	531.5	448.6	417.9	26.9	3.8	18.3	64.6	32.7	31.9	1.9	8.7
1951	576.5	574.7	477.2	445.9	25.8	5.5	18.7	78.8	46.2	32.6	1.8	8.1
1952	598.5	596.7	492.8	460.7	26.3	5.7	18.6	85.3	51.6	33.7	1.8	3.8
1953	621.8	619.9	515.6	480.6	27.6	7.3	19.3	85.0	49.6	35.5	2.0	3.9
1954	613.7	611.4	508.0	473.4	28.3	6.2	19.4	83.9	47.2	36.7	2.3	-1.4
1955	654.8	652.2	546.5	512.5	29.2	4.8	21.4	84.4	45.9	38.4	2.5	6.7
1956	668.8	666.1	557.2	529.3	28.8	-9.9	22.5	86.5	45.6	40.8	2.7	2.1
1957	680.9	678.0	566.0	538.7	28.1	-8.8	23.1	88.9	45.8	43.1	2.9	1.8
1958	679.5	676.5	561.9	528.2	29.3	4.4	24.2	90.4	44.5	45.8	3.0	-2.2
1959	720.4	717.3	600.5	569.6	28.2	2.7	24.9	91.8	44.5	47.3	3.2	6.0
1960	736.8	733.6	611.8	580.5	29.5	1.8	26.8	94.9	45.2	49.7	3.2	2.3
1961	755.3	751.2	625.6	590.9	29.6	5.1	27.2	98.5	46.2	52.3	4.1	2.4
1962	799.1	794.3	663.9	629.6	29.5	4.8	28.3	102.1	48.3	53.9	4.8	5.7
1963	830.7	825.8	692.0	658.4	30.0	3.6	29.0	104.8	48.2	56.6	4.9	4.0
1964	874.4	868.7	730.4	697.1	29.2	4.0	29.9	109.4	48.5	60.0	5.7	5.2
1965	925.9	919.9	776.4	746.7	30.1	-4.4	31.1	112.4	48.7	63.6	6.1	5.9
1966	981.0	975.6	822.4	791.1	28.5	2.8	32.8	120.4	53.0	67.5	5.4	6.1
1967	1,007.7	1,001.9	839.8	807.8	29.6	2.4	34.8	127.2	57.2	70.0	5.8	2.7
1968	1,051.8	1,045.7	878.2	850.6	29.4	-1.8	35.9	131.7	58.1	73.6	6.1	4.4
1969	1,078.8	1,073.1	901.5	877.4	29.9	-5.9	36.6	135.0	58.2	76.8	5.7	2.6
1970	1,075.3	1,069.8	898.3	871.3	31.1	-4.2	36.3	135.2	55.2	80.1	5.5	-3.3
1971	1,107.5	1,100.3	927.6	894.9	32.8	-1.1	36.6	136.0	52.5	83.5	7.2	2.8
1972	1,171.1	1,164.1	989.5	955.8	32.0	1.7	37.2	137.4	50.1	87.3	7.0	5.8
1973	1,235.0	1,227.4	1,050.4	1,013.2	32.3	4.9	38.1	138.9	48.3	90.6	7.6	5.4
1974	1,217.8	1,211.0	1,031.2	993.7	32.2	5.3	38.0	141.9	48.6	93.3	6.8	-1.3
1975	1,202.3	1,197.5	1,013.6	975.3	33.7	4.7	39.4	144.4	48.5	96.0	4.9	-1.1
1976	1,271.0	1,264.3	1,077.9	1,040.1	32.2	5.6	40.7	145.6	48.5	97.1	6.8	5.6
1977	1,332.7	1,325.3	1,135.9	1,094.2	34.4	7.3	42.2	147.2	48.7	98.4	7.3	4.8
1978 <sup>p</sup>	1,385.1	1,377.2	1,183.1	1,146.0	32.5	4.6	44.6	149.6	48.9	100.7	7.9	3.9
1976: I	1,255.5	1,248.6	1,063.0	1,025.5	34.1	3.4	40.2	145.4	48.3	97.0	7.0	8.7
II	1,268.0	1,261.6	1,075.3	1,039.6	30.5	5.2	40.7	145.6	48.4	97.1	6.4	4.2
III	1,276.5	1,269.7	1,083.4	1,045.7	31.5	6.2	40.6	145.7	48.6	97.1	6.8	2.6
IV	1,284.0	1,277.1	1,090.0	1,049.6	32.6	7.8	41.3	145.8	48.6	97.1	6.8	2.4
1977: I	1,306.7	1,299.4	1,112.1	1,072.7	32.9	6.4	41.2	146.1	48.6	97.5	7.4	7.1
II	1,325.5	1,317.7	1,129.6	1,088.9	34.1	6.6	41.7	146.3	48.7	97.6	7.8	5.8
III	1,343.9	1,336.3	1,146.1	1,102.6	34.5	9.0	42.5	147.7	48.8	99.0	7.6	5.8
IV	1,354.5	1,347.9	1,155.9	1,112.4	36.1	7.4	43.6	148.4	48.8	99.6	6.6	3.5
1978: I	1,354.2	1,346.6	1,153.5	1,115.4	32.5	5.5	43.8	149.4	48.8	100.6	7.5	-4.4
II	1,382.6	1,373.9	1,180.0	1,145.2	30.5	4.3	44.3	149.6	48.8	100.8	8.8	8.3
III	1,391.4	1,383.9	1,189.3	1,151.8	33.2	4.3	44.9	149.8	49.0	100.8	7.5	3.0
IV <sup>p</sup>	1,412.2	1,404.4	1,209.5	1,171.5	33.7	4.3	45.3	149.6	48.9	100.7	7.8	6.1

<sup>1</sup> Includes compensation of employees in government enterprises.

<sup>2</sup> The difference between gross product in 1972 dollars measured as the sum of final products and that measured as the sum of gross product by industry.

<sup>3</sup> Compensation of government employees.

<sup>4</sup> Changes are based on unrounded data and therefore may differ slightly from those obtained from data shown here. See Table B-2 for percent changes in gross national product in 1972 dollars.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-11.—Gross domestic product of nonfinancial corporate business, 1929-78

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross domestic product of nonfinancial corporate business	Capital consumption allowances with capital consumption adjustment	Net domestic product													Net interest	
			Total	Indirect business tax, etc. <sup>1</sup>	Total	Compensation of employees	Domestic income								Inventory valuation adjustment		Capital consumption adjustment
							Corporate profits with inventory valuation and capital consumption adjustments										
							Total	Profits before tax	Profits after tax			Inventory valuation adjustment	Capital consumption adjustment				
									Total	Profits tax liability	Total			Dividends			
1929..	50.1	5.4	44.7	3.4	41.3	32.3	7.6	8.4	1.2	7.3	5.2	2.0	0.5	-1.3	1.4		
1933..	24.4	4.2	20.2	3.8	16.4	16.7	-2.0	.6	.5	.1	2.0	-1.9	-2.1	-.5	1.7		
1939..	43.7	4.7	39.1	5.1	34.0	28.2	4.3	6.1	1.4	4.7	3.3	1.4	-.7	-1.0	1.5		
1940..	50.4	4.8	45.6	5.5	40.1	31.2	7.5	8.8	2.7	6.1	3.6	2.5	-.2	-1.1	1.4		
1941..	65.6	5.3	60.4	6.4	53.9	39.8	12.8	16.4	7.5	9.0	4.0	4.9	-2.5	-1.1	1.3		
1942..	82.5	6.0	77.0	6.8	70.1	51.0	17.9	20.1	11.2	8.9	3.8	5.1	-1.2	-1.0	1.3		
1943..	98.7	6.1	92.6	7.3	85.3	62.2	22.0	23.6	13.8	9.8	4.0	5.7	-.8	-.8	1.1		
1944..	102.1	6.2	95.9	8.1	87.8	65.1	21.7	22.2	12.6	9.6	4.2	5.4	-.3	-.2	1.0		
1945..	95.3	6.4	88.9	8.9	80.0	61.9	17.2	17.8	10.2	7.6	4.2	3.4	-.6	-1.1	1.0		
1946..	99.3	7.3	92.1	10.1	81.9	67.2	14.1	22.0	8.6	13.4	5.1	8.3	-5.3	-2.7	.7		
1947..	120.0	9.1	110.9	11.2	99.8	79.1	19.9	29.1	10.8	18.3	5.9	12.4	-5.9	-3.3	.8		
1948..	137.3	10.7	126.5	12.1	114.4	87.8	25.8	31.8	11.8	20.0	6.5	13.5	-2.2	-3.9	.9		
1949..	133.5	11.6	121.9	12.6	109.3	85.3	23.0	24.9	9.3	15.6	6.5	9.1	1.9	-3.8	1.0		
1950..	151.9	12.6	139.3	14.1	125.2	94.7	29.6	38.5	16.9	21.6	7.9	13.6	-5.0	-3.9	.9		
1951..	174.5	14.6	159.9	15.2	144.7	110.2	33.4	39.1	21.2	17.9	7.8	10.1	-1.2	-4.5	1.1		
1952..	182.3	15.7	166.7	16.8	149.8	118.3	30.3	33.8	17.8	16.0	7.8	8.1	1.0	-4.4	1.2		
1953..	195.0	17.0	178.1	18.2	159.9	128.7	29.9	34.9	18.5	16.4	8.0	8.4	-1.0	-4.0	1.3		
1954..	191.9	17.9	174.1	17.4	156.6	126.5	28.6	32.1	15.6	16.4	8.2	8.2	-.3	-3.2	1.6		
1955..	216.7	19.2	197.5	19.2	178.3	138.5	38.2	42.0	20.2	21.8	9.4	12.4	-1.7	-2.1	1.6		
1956..	231.6	21.5	210.1	20.8	189.2	151.4	36.1	41.8	20.1	21.8	10.1	11.6	-2.7	-3.0	1.7		
1957..	242.3	23.7	218.5	22.4	196.2	159.1	35.0	39.8	19.1	20.7	10.4	10.3	-1.5	-3.3	2.2		
1958..	236.3	24.9	211.4	22.8	188.6	155.9	30.1	33.7	16.2	17.5	10.2	7.3	-.3	-3.4	2.7		
1959..	265.7	26.0	239.7	25.4	214.4	171.6	39.7	43.1	20.7	22.3	10.8	11.5	-.5	-2.9	3.1		
1960..	277.3	27.0	250.3	28.3	222.0	181.1	37.4	39.5	19.2	20.3	11.5	8.7	.3	-2.3	3.5		
1961..	284.5	27.8	256.7	30.1	226.5	185.1	33.4	39.1	19.5	19.7	11.7	8.0	.1	-1.8	3.9		
1962..	311.0	28.7	282.3	33.0	249.2	199.8	44.9	43.7	20.6	23.1	12.7	10.3	.1	1.0	4.5		
1963..	330.9	29.8	301.1	35.6	265.6	210.7	50.0	48.3	22.8	25.5	14.1	11.4	-.2	1.9	4.8		
1964..	357.6	31.0	326.6	38.4	288.3	226.3	56.7	54.6	24.0	30.7	15.3	15.4	-.5	2.6	5.3		
1965..	392.1	32.8	359.3	41.1	318.2	246.1	66.1	64.4	27.2	37.2	17.2	20.0	-1.9	3.6	6.1		
1966..	430.7	35.7	394.9	42.9	352.0	273.5	71.2	69.5	29.5	40.0	18.1	21.9	-2.1	3.8	7.4		
1967..	452.9	39.3	413.6	45.8	367.9	291.9	77.2	65.4	27.7	37.7	18.9	18.8	-1.7	3.6	8.7		
1968..	498.4	43.0	455.4	51.6	403.8	321.6	62.1	71.9	33.6	38.3	20.7	17.6	-3.4	3.6	10.1		
1969..	541.8	47.8	494.0	57.1	437.0	357.4	66.4	68.4	33.3	35.1	20.7	14.4	-5.5	3.5	13.1		
1970..	560.6	53.1	507.5	61.8	445.7	377.1	51.6	55.1	27.3	27.9	19.9	8.0	-5.1	1.5	17.0		
1971..	602.5	58.2	544.2	68.2	476.0	399.4	58.7	63.3	29.9	33.3	20.0	13.3	-5.0	.5	17.9		
1972..	671.0	62.6	608.4	73.5	534.8	443.8	72.0	75.9	33.5	42.4	21.7	20.7	-6.6	2.7	19.1		
1973..	752.0	68.7	683.3	80.5	602.8	503.8	76.0	92.7	39.6	53.1	23.9	29.2	-18.6	1.8	23.1		
1974..	808.8	80.8	728.0	85.7	642.3	552.9	59.5	102.9	42.7	60.2	26.0	34.2	-40.4	-.3	29.9		
1975..	874.1	96.8	777.3	92.6	684.6	576.9	76.9	101.3	40.6	60.7	28.5	32.2	-12.4	-11.9	30.8		
1976..	988.5	106.7	881.8	99.5	782.2	650.2	101.3	130.2	53.0	77.2	33.5	43.7	-14.5	-14.3	30.7		
1977..	1,103.2	115.6	987.6	107.8	879.8	732.1	113.9	143.5	59.0	84.5	39.1	45.5	-14.8	-14.7	33.7		
1978..	1,240.5	126.5	1,114.0	117.9	996.1	833.9	125.1	167.0	68.6	98.4	45.0	53.5	-24.3	-17.7	37.2		
1976:																	
I..	959.4	103.6	855.8	96.4	759.4	626.3	102.2	127.8	53.1	74.8	28.7	46.1	-11.4	-14.2	30.9		
II..	982.0	105.4	876.6	98.9	777.7	642.9	104.2	134.1	55.3	78.8	33.2	45.6	-15.7	-14.3	30.7		
III..	999.3	107.7	891.6	100.5	791.1	656.9	103.6	131.4	53.1	78.3	34.4	43.9	-13.3	-14.4	30.5		
IV..	1,013.1	109.9	903.2	102.5	800.7	674.8	95.3	127.3	50.4	76.9	37.9	39.0	-17.6	-14.4	30.6		
1977:																	
I..	1,048.5	111.5	936.9	104.8	832.1	699.5	100.6	135.4	56.1	79.3	36.4	43.0	-20.3	-14.5	32.0		
II..	1,093.3	114.6	978.7	106.8	871.9	725.3	113.5	144.7	59.9	84.8	37.9	46.9	-16.6	-14.7	33.2		
III..	1,124.6	117.2	1,007.4	108.7	898.7	741.6	122.8	145.3	59.4	85.9	39.5	46.4	-7.7	-14.8	34.4		
IV..	1,146.3	119.0	1,027.3	110.9	916.4	762.2	118.7	148.5	60.4	88.0	42.5	45.6	-14.8	-15.0	35.4		
1978:																	
I..	1,161.6	121.6	1,040.0	113.5	926.5	789.9	100.9	140.0	55.9	84.2	43.0	41.2	-23.5	-15.7	35.7		
II..	1,233.0	124.6	1,108.5	118.0	990.5	826.0	127.8	169.5	71.1	99.4	42.9	56.5	-24.9	-16.8	36.6		
III..	1,260.6	128.6	1,132.0	118.4	1,013.6	845.5	130.6	170.3	70.2	100.1	46.2	53.9	-20.9	-18.9	37.6		

<sup>1</sup> Indirect business tax and nontax liability plus business transfer payments less subsidies.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-12.—Output, costs, and profits of nonfinancial corporate business, 1948-78

[Quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business (billions of dollars)		Current-dollar cost and profit per unit of output (dollars) <sup>1</sup>								Output per hour of all employees (1972 dollars)	Compensation per hour of all employees (dollars)
			Total cost and profit <sup>2</sup>	Capital consumption allowances with capital consumption adjustment	Indirect business tax, etc. <sup>3</sup>	Compensation of employees	Net interest	Corporate profits with inventory valuation and capital consumption adjustments				
	Current dollars	1972 dollars						Total	Profits tax liability	Profits after tax <sup>4</sup>		
1948	137.3	229.7	0.598	0.047	0.053	0.382	6.004	0.112	0.051	0.061		
1949	133.5	219.9	.607	.053	.057	.388	.004	.105	.042	.062		
1950	151.9	247.5	.614	.051	.057	.383	.004	.120	.068	.051		
1951	174.5	270.2	.646	.054	.056	.408	.004	.124	.079	.045		
1952	182.3	275.2	.663	.057	.061	.430	.004	.110	.065	.046		
1953	195.0	292.0	.668	.058	.062	.441	.004	.102	.063	.039		
1954	191.9	283.5	.677	.063	.061	.446	.006	.101	.055	.046		
1955	216.7	315.1	.688	.061	.061	.439	.005	.121	.064	.057		
1956	231.6	324.1	.715	.066	.064	.467	.005	.112	.062	.050		
1957	242.3	328.3	.738	.072	.068	.484	.007	.106	.058	.048		
1958	236.3	313.4	.754	.080	.073	.497	.009	.096	.052	.044	5.110	2.541
1959	265.7	347.3	.765	.075	.073	.494	.009	.114	.060	.055	5.333	2.635
1960	277.3	358.9	.773	.075	.079	.505	.010	.104	.053	.051	5.455	2.752
1961	284.5	366.7	.776	.076	.082	.505	.011	.102	.053	.049	5.634	2.844
1962	311.0	399.7	.778	.072	.083	.500	.011	.112	.052	.061	5.912	2.956
1963	330.9	425.4	.778	.070	.084	.495	.011	.118	.054	.064	6.167	3.054
1964	357.6	455.2	.786	.068	.084	.497	.012	.125	.053	.072	6.427	3.195
1965	392.1	494.6	.793	.066	.083	.497	.012	.134	.055	.079	6.625	3.296
1966	430.7	532.9	.808	.067	.080	.513	.014	.134	.055	.078	6.777	3.478
1967	452.9	545.8	.830	.072	.084	.535	.016	.123	.051	.072	6.873	3.676
1968	498.4	581.6	.857	.074	.089	.553	.017	.124	.058	.066	7.105	3.929
1969	541.8	607.3	.892	.079	.094	.589	.022	.109	.055	.055	7.139	4.198
1970	560.6	600.6	.933	.088	.103	.628	.028	.086	.045	.041	7.132	4.478
1971	602.5	619.3	.973	.094	.110	.645	.029	.095	.048	.046	7.374	4.757
1972	671.0	671.0	1.000	.093	.110	.661	.028	.107	.050	.057	7.595	5.024
1973	752.0	720.4	1.044	.095	.112	.699	.032	.105	.055	.050	7.788	5.446
1974	808.8	695.0	1.164	.116	.123	.796	.043	.086	.061	.024	7.489	5.958
1975	874.1	680.0	1.285	.142	.136	.848	.045	.113	.060	.053	7.721	6.550
1976	988.5	730.0	1.354	.146	.136	.891	.042	.139	.073	.066	7.962	7.093
1977	1,103.2	769.3	1.434	.150	.140	.952	.044	.148	.077	.071	8.057	7.667
1978	1,240.5	810.3	1.531	.156	.145	1.029	.046	.154	.085	.070		
1976: I	959.4	722.1	1.329	.143	.133	.867	.043	.142	.073	.068	7.917	6.867
II	982.0	731.7	1.342	.144	.135	.879	.042	.142	.076	.067	7.978	7.010
III	999.3	733.5	1.362	.147	.137	.896	.042	.141	.072	.069	8.006	7.170
IV	1,013.1	732.7	1.383	.150	.140	.921	.042	.130	.069	.061	7.957	7.329
1977: I	1,048.5	750.2	1.398	.149	.140	.932	.043	.134	.075	.059	7.991	7.451
II	1,093.3	766.9	1.426	.149	.139	.946	.043	.148	.078	.070	8.025	7.590
III	1,124.6	776.7	1.448	.151	.140	.955	.044	.158	.076	.082	8.113	7.746
IV	1,146.3	783.6	1.463	.152	.142	.973	.045	.151	.077	.074	8.103	7.881
1978: I	1,161.6	783.6	1.482	.155	.145	1.008	.046	.129	.071	.057	8.053	8.117
II	1,233.0	811.9	1.519	.153	.145	1.017	.045	.157	.086	.071	8.139	8.281
III	1,260.6	814.9	1.547	.158	.145	1.038	.046	.160	.086	.074	8.165	8.471

<sup>1</sup> Output is measured by gross domestic product of nonfinancial corporate business in 1972 dollars.

<sup>2</sup> This is equal to the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.

<sup>3</sup> Indirect business tax and nontax liability plus business transfer payments less subsidies.

<sup>4</sup> With inventory valuation and capital consumption adjustments.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

TABLE B-13.—Personal consumption expenditures, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods <sup>1</sup>			Nondurable goods <sup>1</sup>					Services <sup>1</sup>				
		Total	Motor vehicles and parts	Furniture and household equipment	Total	Food	Clothing and shoes	Gasoline and oil	Fuel oil and coal	Total	Housing <sup>2</sup>	Household operation <sup>1</sup>		Transportation
												Total	Electricity and gas	
1929	77.3	9.2	3.3	4.7	37.7	19.5	9.4	1.8	1.6	30.3	11.7	4.0	1.2	2.6
1933	45.8	3.5	1.1	1.9	22.3	11.5	4.6	1.5	1.2	20.1	8.1	2.8	1.1	1.5
1939	67.0	6.7	2.3	3.4	35.1	19.1	7.1	2.2	1.4	25.2	9.4	3.8	1.4	2.0
1940	71.0	7.8	2.8	3.8	37.0	20.2	7.5	2.3	1.5	26.2	9.7	4.0	1.5	2.1
1941	80.8	9.7	3.5	4.8	42.9	23.4	8.8	2.6	1.7	28.2	10.4	4.3	1.5	2.4
1942	88.6	6.9	.7	4.6	50.8	28.4	11.0	2.1	1.9	31.0	11.2	4.8	1.6	2.7
1943	99.4	6.5	.8	3.9	58.6	33.2	13.4	1.3	2.0	34.3	11.8	5.2	1.7	3.4
1944	108.2	6.7	.8	3.8	64.3	36.7	14.6	1.4	2.0	37.1	12.3	5.9	1.8	3.7
1945	119.5	8.0	1.0	4.5	71.9	40.6	16.5	1.8	2.2	39.6	12.8	6.4	1.9	4.0
1946	143.8	15.8	4.1	8.4	82.7	47.4	18.2	3.4	2.5	45.3	14.2	6.8	2.1	5.0
1947	161.7	20.4	6.6	10.6	90.9	52.3	18.8	4.0	3.0	50.4	16.0	7.5	2.3	5.3
1948	174.7	22.9	8.0	11.5	96.6	54.2	20.1	4.8	3.4	55.3	17.9	8.1	2.6	5.8
1949	178.1	25.0	10.6	11.3	94.9	52.5	19.3	5.3	3.1	58.2	19.6	8.5	2.9	5.9
1950	192.0	30.8	13.7	13.7	98.2	53.9	19.6	5.5	3.4	63.0	21.7	9.5	3.3	6.2
1951	207.1	29.8	12.2	14.0	108.8	60.4	21.2	6.1	3.5	68.5	24.3	10.4	3.7	6.7
1952	217.1	29.1	11.3	14.0	113.9	63.4	21.9	6.8	3.4	74.0	27.0	11.1	4.1	7.1
1953	229.7	32.5	13.9	14.6	116.5	64.4	22.1	7.4	3.4	80.6	29.8	12.0	4.5	7.8
1954	235.8	31.8	13.0	14.6	118.0	65.4	22.1	7.8	3.5	86.1	32.2	12.6	5.0	7.9
1955	253.7	38.6	17.8	16.2	122.9	67.2	23.1	8.6	3.8	92.1	34.3	14.0	5.5	8.2
1956	266.0	37.9	15.8	17.1	128.9	69.9	24.1	9.4	3.9	99.2	36.7	15.2	6.1	8.6
1957	280.4	39.3	17.2	16.9	135.2	73.6	24.3	10.2	4.1	105.9	39.3	16.2	6.5	9.0
1958	289.5	36.8	14.8	16.5	139.8	76.4	24.7	10.6	4.2	112.8	42.0	17.3	7.1	9.3
1959	310.8	42.4	18.9	17.8	146.4	79.1	26.1	11.3	4.0	121.9	45.0	18.5	7.6	10.1
1960	324.9	43.1	19.7	17.7	151.1	81.1	26.7	12.0	3.8	130.7	48.1	20.1	8.3	10.7
1961	335.0	41.6	17.8	17.9	155.3	83.2	27.4	12.0	3.7	138.1	51.2	21.0	8.8	11.2
1962	355.2	46.7	21.5	18.9	161.6	85.5	28.7	12.6	3.7	147.0	54.7	22.2	9.4	11.7
1963	374.6	51.4	24.4	20.3	167.1	87.8	29.5	12.9	4.0	156.1	58.0	23.4	9.9	12.2
1964	400.4	56.3	26.0	22.8	176.9	92.7	31.9	13.5	4.1	167.1	61.4	24.8	10.4	12.8
1965	430.2	62.8	29.8	24.7	188.6	98.9	33.5	14.7	4.4	178.7	65.5	26.3	10.9	13.7
1966	464.8	67.7	30.1	27.7	204.7	106.6	36.6	16.0	4.7	192.4	69.5	28.0	11.5	15.0
1967	490.4	69.6	29.7	29.5	212.6	109.6	38.2	17.0	4.8	208.1	74.1	30.6	12.2	16.2
1968	535.9	80.0	35.8	32.6	220.4	118.3	41.8	18.4	5.0	225.6	79.9	32.7	13.1	17.4
1969	579.7	85.5	37.7	35.0	247.0	126.1	45.1	20.4	5.2	247.2	86.8	35.5	14.2	18.9
1970	618.8	84.9	34.9	36.7	264.7	136.3	46.6	22.0	5.4	269.1	94.0	38.3	15.5	21.1
1971	668.2	97.1	43.8	39.4	277.7	140.6	50.5	23.4	5.5	293.4	102.7	41.6	17.0	23.8
1972	733.0	111.2	50.6	44.8	299.3	150.4	55.1	24.9	6.3	322.4	112.3	45.9	18.9	26.0
1973	809.9	123.7	55.2	50.7	333.8	168.1	61.3	27.8	7.7	352.3	123.2	50.2	20.6	27.9
1974	889.6	122.0	48.0	54.9	376.3	189.8	65.3	36.4	9.6	391.3	136.5	56.1	24.1	30.7
1975	979.1	132.6	53.4	58.0	408.9	209.6	70.1	39.5	10.2	437.5	150.2	64.5	29.3	32.6
1976	1,090.2	156.6	69.7	63.9	442.6	225.8	75.7	42.8	12.2	491.0	166.4	72.8	33.0	37.9
1977	1,206.5	178.4	81.5	71.3	479.0	245.2	81.5	46.5	13.5	549.2	184.6	81.6	38.0	44.2
1978 <sup>p</sup>	1,339.7	197.6	89.7	77.6	525.8	269.2	88.9	51.1	14.8	616.3	207.2	90.9	42.7	52.7
1976: I	1,053.8	152.2	67.7	61.9	430.3	219.4	73.8	41.4	11.3	471.3	160.2	69.3	31.3	36.0
II	1,075.1	154.7	69.1	63.0	437.4	223.9	74.2	41.9	11.5	483.0	164.7	70.2	31.0	37.0
III	1,098.4	156.7	69.5	64.2	444.5	227.4	76.1	43.0	12.3	497.2	168.2	73.5	33.0	38.7
IV	1,133.7	162.8	72.6	66.5	458.3	232.3	78.5	45.1	13.7	512.6	172.3	78.2	36.8	39.8
1977: I	1,167.7	173.2	81.3	68.0	465.9	237.5	78.5	46.1	13.9	528.6	177.3	80.2	38.0	40.8
II	1,188.6	175.6	81.2	69.9	473.6	244.5	79.3	46.2	12.9	539.4	182.1	78.0	35.0	43.5
III	1,214.5	177.4	79.5	72.0	479.7	246.4	81.4	46.0	13.1	557.5	186.9	83.7	39.5	45.0
IV	1,255.2	187.2	84.0	75.3	496.9	252.6	86.7	47.5	13.9	571.1	192.0	84.6	39.3	47.3
1978: I	1,276.7	183.5	84.1	72.1	501.4	257.7	82.9	48.3	15.8	591.8	198.1	89.6	43.3	49.7
II	1,322.9	197.8	92.5	76.5	519.3	267.8	87.5	49.1	15.2	605.8	204.1	88.9	41.5	52.1
III	1,356.9	199.5	89.8	78.9	531.7	272.0	90.5	51.5	14.3	625.8	210.1	92.6	43.3	53.7
IV <sup>p</sup>	1,402.2	209.6	92.5	82.9	550.8	279.4	94.6	55.6	13.7	641.8	216.6	92.6	42.7	55.2

<sup>1</sup> Total includes "other" category, not shown separately.<sup>2</sup> Includes imputed rental value of owner-occupied dwellings.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-14.—Gross private domestic investment, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Fixed investment										Change in business inventories		
		Total	Nonresidential						Residential				Total	Non-farm
			Total	Structures		Producers' durable equipment		Total	Non-farm structures	Farm structures	Producers' durable equipment			
				Total	Non-farm	Total	Non-farm							
1929.....	16.2	14.5	10.5	5.0	4.8	5.5	4.8	4.0	3.8	0.2	0.1	1.7	1.8	
1933.....	1.4	3.0	2.4	.9	.9	1.4	1.3	.6	.5	.0	.0	-1.6	-1.4	
1939.....	9.3	8.8	5.8	2.0	1.9	3.9	3.3	3.0	2.8	.1	.1	.4	.3	
1940.....	13.1	10.9	7.5	2.3	2.2	5.2	4.5	3.5	3.2	.2	.1	2.2	1.9	
1941.....	17.9	13.4	9.4	2.9	2.8	6.4	5.5	4.0	3.7	.2	.1	4.5	4.0	
1942.....	9.9	8.1	6.0	1.9	1.8	4.1	3.5	2.2	1.9	.2	.1	1.8	.7	
1943.....	5.8	6.4	5.0	1.3	1.2	3.7	3.2	1.4	1.2	.2	.0	-.6	-.6	
1944.....	7.2	8.1	6.8	1.8	1.7	5.0	4.2	1.3	1.1	.1	.0	-1.0	-.6	
1945.....	10.6	11.7	10.1	2.8	2.6	7.3	6.3	1.6	1.4	.1	.0	-1.0	-.6	
1946.....	30.7	24.3	16.8	6.8	6.1	9.9	9.0	7.5	6.8	.5	.2	6.4	6.4	
1947.....	34.0	34.4	22.9	7.6	6.8	15.3	13.4	11.5	10.5	.7	.3	-.5	1.3	
1948.....	45.9	41.1	26.2	8.9	8.1	17.3	14.7	15.0	13.8	.9	.3	4.7	3.0	
1949.....	35.3	38.4	24.3	8.6	7.8	15.7	12.8	14.1	12.9	.8	.3	-3.1	-2.2	
1950.....	53.8	47.0	27.1	9.3	8.6	17.8	14.9	19.9	18.7	.8	.4	6.8	6.0	
1951.....	59.2	48.9	31.1	11.3	10.5	19.9	16.9	17.7	16.6	.8	.4	10.3	9.1	
1952.....	52.1	49.0	31.2	11.5	10.6	19.7	17.1	17.8	16.6	.8	.4	3.1	2.1	
1953.....	53.3	52.9	34.3	12.8	12.0	21.5	18.7	18.6	17.5	.8	.4	.4	1.1	
1954.....	52.7	54.3	34.0	13.2	12.4	20.8	18.4	20.3	19.2	.7	.4	-1.5	-2.1	
1955.....	68.4	62.4	38.3	14.4	13.7	23.9	21.3	24.1	23.0	.6	.4	6.0	5.5	
1956.....	71.0	66.3	43.7	17.4	16.6	26.3	24.1	22.6	21.4	.7	.5	4.7	5.1	
1957.....	69.2	67.9	46.7	18.1	17.4	28.6	26.2	21.2	20.0	.7	.5	1.3	.8	
1958.....	61.9	63.4	41.6	16.7	16.0	24.9	21.9	21.8	20.7	.7	.5	-1.5	-2.3	
1959.....	77.6	72.3	45.3	17.0	16.1	28.3	25.2	27.0	25.8	.7	.6	5.2	5.3	
1960.....	76.4	72.7	47.7	18.2	17.3	29.5	27.0	25.0	23.9	.6	.5	3.8	3.5	
1961.....	74.3	72.1	47.1	18.4	17.5	28.7	26.1	25.0	23.8	.7	.5	2.2	1.9	
1962.....	85.2	78.7	51.2	19.4	18.5	31.8	28.9	27.4	26.3	.6	.5	6.5	5.8	
1963.....	90.2	84.2	53.6	19.6	18.6	34.0	30.6	30.6	29.4	.7	.6	6.0	5.2	
1964.....	96.6	90.8	59.7	21.5	20.5	38.2	34.6	31.2	29.9	.7	.6	5.8	6.4	
1965.....	112.0	102.5	71.3	26.1	25.1	45.1	41.2	31.2	29.9	.6	.7	9.5	8.5	
1966.....	124.5	110.2	81.4	29.2	28.1	52.2	47.9	28.7	27.4	.7	.7	14.3	14.5	
1967.....	120.8	110.7	82.1	29.5	28.2	52.6	48.0	28.6	27.2	.7	.7	10.1	9.4	
1968.....	131.5	123.8	89.3	31.6	30.4	57.7	53.4	34.5	33.1	.6	.8	7.7	7.6	
1969.....	146.2	136.8	98.9	35.7	34.3	63.3	58.9	37.9	36.3	.7	.9	9.4	9.2	
1970.....	140.8	137.0	100.5	37.7	36.1	62.8	58.1	36.6	35.1	.6	.9	3.8	3.7	
1971.....	160.0	153.6	104.1	39.3	37.8	64.7	59.9	49.6	47.9	.7	1.0	6.4	5.1	
1972.....	188.3	178.8	116.8	42.5	41.1	74.3	69.1	62.0	60.3	.7	1.1	9.4	8.8	
1973.....	220.0	202.1	136.0	49.0	46.9	87.0	80.1	66.1	64.3	.6	1.2	17.9	14.7	
1974.....	214.6	205.7	150.6	54.5	51.8	96.2	88.2	55.1	52.7	1.2	1.2	8.9	10.8	
1975.....	190.9	201.6	150.2	53.8	51.3	96.4	87.4	51.5	49.5	.9	1.1	-10.7	-14.3	
1976.....	243.0	232.8	164.6	57.3	54.7	107.3	97.5	68.2	65.8	1.1	1.3	10.2	12.2	
1977.....	297.8	282.3	190.4	63.9	61.0	126.5	116.7	91.9	88.9	1.5	1.5	15.6	15.0	
1978.....	344.5	328.8	222.0	77.5	74.3	144.5	133.8	106.8	103.6	1.4	1.7	15.7	16.7	
1976: I.....	231.5	220.1	157.7	56.4	53.8	101.3	91.4	62.4	59.8	1.3	1.3	11.4	12.7	
1976: II.....	243.5	228.1	162.2	57.6	55.0	104.6	94.7	65.9	63.8	.8	1.3	15.4	18.8	
1976: III.....	249.9	235.3	168.1	57.3	54.8	110.8	100.5	67.3	65.1	.8	1.3	14.5	15.2	
1976: IV.....	247.1	247.6	170.5	57.9	55.1	112.6	103.3	77.1	74.4	1.4	1.4	-.6	2.2	
1977: I.....	272.5	262.2	180.6	59.3	56.4	121.4	111.0	81.6	78.6	1.6	1.4	10.3	11.1	
1977: II.....	295.6	278.6	187.2	63.4	60.4	123.8	113.8	91.4	88.4	1.6	1.4	17.0	16.5	
1977: III.....	309.7	287.8	193.5	65.4	62.7	128.1	118.6	94.3	91.2	1.6	1.5	21.9	22.0	
1977: IV.....	313.5	300.5	200.3	67.4	64.5	132.8	123.4	100.2	97.5	1.2	1.6	13.1	10.4	
1978: I.....	322.7	306.0	205.6	68.5	65.2	137.1	127.2	100.3	97.3	1.3	1.7	16.7	16.9	
1978: II.....	345.4	325.3	220.1	76.6	73.4	143.5	132.9	105.3	102.1	1.4	1.8	20.1	22.1	
1978: III.....	350.1	336.5	227.5	80.9	78.0	146.6	135.5	109.0	105.7	1.5	1.7	13.6	14.6	
1978: IV.....	359.9	347.4	235.0	84.0	80.8	151.0	139.7	112.5	109.3	1.5	1.7	12.4	13.1	

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-15.—Inventories and final sales of business, 1946-78

[Billions of dollars, except as noted; seasonally adjusted]

Year and quarter	Inventories <sup>1</sup>							Final sales <sup>2</sup>	Inventory-final sales ratio	
	Total	Farm	Nonfarm				Total		Total	Non-farm <sup>3</sup>
			Total	Manufacturing	Wholesale trade	Retail trade				
Fourth quarter:										
1946	73.7	21.8	51.9	26.7	9.6	11.9	3.7	192.0	0.384	0.270
1947	86.9	25.8	61.1	31.8	10.6	14.1	4.6	219.6	.396	.278
1948	90.6	23.4	67.2	34.8	12.1	15.3	4.9	235.7	.384	.285
1949	81.0	19.5	61.4	31.0	11.7	14.3	4.4	234.6	.345	.262
1950	98.8	24.2	74.6	37.4	14.3	17.7	5.2	259.8	.380	.287
1951	112.1	26.5	85.6	46.2	14.9	18.3	6.2	295.6	.379	.290
1952	109.4	23.1	86.3	47.3	14.9	17.9	6.2	313.3	.349	.275
1953	110.1	21.6	88.5	49.3	15.1	18.5	5.5	325.8	.338	.272
1954	107.2	20.5	86.7	47.0	15.4	18.7	5.6	330.1	.325	.263
1955	112.1	17.6	94.6	51.4	16.7	20.9	5.6	356.5	.315	.265
1956	121.8	18.3	103.5	57.5	17.8	21.8	6.4	377.0	.323	.274
1957	126.7	20.9	105.8	57.9	18.1	22.9	6.9	392.7	.323	.269
1958	128.9	24.9	103.9	56.0	18.1	22.9	6.9	405.0	.318	.257
1959	132.3	23.6	108.7	57.5	19.2	24.1	8.0	426.7	.310	.255
1960	136.2	24.8	111.3	58.1	19.6	25.6	8.1	442.1	.308	.252
1961	138.4	25.0	113.4	59.5	20.2	25.1	8.7	465.3	.297	.244
1962	145.2	26.6	118.6	62.5	20.9	26.7	8.6	492.7	.295	.241
1963	151.5	26.9	124.6	64.8	22.4	28.2	9.2	524.2	.289	.238
1964	157.6	25.7	131.8	68.5	23.6	29.8	9.9	553.1	.285	.238
1965	172.7	29.7	143.0	73.7	25.3	33.1	10.9	610.7	.283	.234
1966	189.1	28.9	160.2	83.4	28.6	36.6	11.6	647.5	.292	.247
1967	202.2	29.2	173.0	91.1	30.6	37.8	13.5	688.0	.294	.251
1968	215.3	30.4	184.9	97.4	32.4	40.7	14.4	757.6	.284	.244
1969	236.2	33.4	202.8	107.1	35.3	44.4	16.1	804.5	.294	.252
1970	244.2	31.7	212.5	110.8	38.3	45.6	17.7	839.4	.291	.253
1971	261.9	36.8	225.1	113.6	41.2	51.0	19.2	915.2	.286	.246
1972	288.6	44.6	243.9	120.4	45.7	55.9	21.8	1,019.9	.283	.239
1973	355.8	66.2	289.6	143.6	55.2	64.4	26.4	1,120.5	.318	.258
1974	425.6	61.9	363.7	186.4	69.8	72.3	35.2	1,216.0	.350	.299
1975	428.3	64.3	364.0	187.9	68.1	72.1	35.9	1,355.1	.316	.269
1976	459.7	60.2	399.5	203.9	76.6	80.2	38.8	1,478.6	.311	.270
1977	498.6	60.3	438.3	219.2	85.9	89.9	43.3	1,647.3	.303	.266
1978	571.0	71.4	499.5	248.4	100.5	103.4	47.2	1,870.6	.305	.267
1976: I	435.9	64.1	371.8	190.5	70.0	74.6	36.7	1,381.4	.316	.269
II	447.0	64.0	383.0	195.3	73.8	76.5	37.3	1,410.0	.317	.272
III	451.8	59.8	392.0	199.7	75.4	78.6	38.3	1,436.1	.315	.273
IV	459.7	60.2	399.5	203.9	76.6	80.2	38.8	1,478.6	.311	.270
1977: I	473.6	62.0	411.6	208.7	80.1	82.9	39.9	1,517.5	.312	.271
II	476.4	58.0	418.4	211.9	80.9	84.8	40.7	1,565.5	.304	.267
III	483.6	55.7	428.0	215.5	82.8	87.5	42.3	1,604.5	.301	.267
IV	498.6	60.3	438.3	219.2	85.9	89.9	43.3	1,647.3	.303	.266
1978: I	520.7	66.3	454.4	225.9	90.9	94.3	43.3	1,667.3	.312	.273
II	536.5	68.0	468.5	232.0	94.2	97.5	44.8	1,751.7	.306	.267
III	548.5	68.1	480.4	239.0	96.4	99.0	45.9	1,803.9	.304	.266
IV	571.0	71.4	499.5	248.4	100.5	103.4	47.2	1,870.6	.305	.267

<sup>1</sup> End of quarter.<sup>2</sup> Annual rates.<sup>3</sup> Ratio based on total final sales, which include a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning in 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.



TABLE B-16.—Inventories and final sales of business in 1972 dollars, 1947-78

[Billions of 1972 dollars, except as noted; seasonally adjusted]

Year and quarter	Inventories <sup>1</sup>							Final sales <sup>2</sup>	Inventory-final sales ratio	
	Total	Farm	Nonfarm				Total		Non-farm <sup>3</sup>	
			Total	Manufacturing	Wholesale trade	Retail trade				Other
Fourth quarter:										
1947.....	118.6	25.7	93.0	49.9	13.8	20.5	8.7	397.2	0.299	0.234
1948.....	124.1	26.7	97.3	51.3	16.1	21.3	8.6	412.0	.301	.236
1949.....	119.7	26.2	93.5	48.5	16.1	20.9	7.8	415.1	.288	.225
1950.....	130.2	27.5	102.7	51.8	18.3	23.9	8.7	442.6	.294	.232
1951.....	143.9	29.1	114.8	62.5	18.9	23.9	9.5	476.5	.302	.241
1952.....	148.2	30.4	117.9	65.2	19.2	23.9	9.6	499.1	.297	.236
1953.....	149.7	30.2	119.6	66.9	19.4	24.5	8.7	516.2	.290	.232
1954.....	147.5	31.1	116.5	63.3	19.7	24.6	8.8	517.0	.285	.225
1955.....	155.3	31.5	123.7	66.7	21.4	27.2	8.4	547.4	.284	.226
1956.....	161.1	30.7	130.3	71.6	22.0	27.5	9.2	557.6	.289	.234
1957.....	162.6	31.4	131.2	71.1	21.9	28.4	9.8	565.3	.288	.232
1958.....	160.8	32.4	128.4	68.6	21.8	28.2	9.8	577.2	.279	.222
1959.....	167.2	32.4	134.8	71.1	23.7	29.6	10.5	596.8	.280	.226
1960.....	171.6	32.8	138.8	72.4	24.3	31.5	10.7	609.0	.282	.228
1961.....	174.5	33.2	141.2	74.2	25.0	30.6	11.4	636.6	.274	.221
1962.....	182.6	34.5	148.1	78.4	25.9	32.5	11.4	664.2	.275	.223
1963.....	190.4	35.7	154.7	80.8	27.8	34.1	12.0	699.3	.272	.221
1964.....	197.7	35.1	162.6	84.7	29.1	36.0	12.8	730.7	.271	.223
1965.....	209.0	36.2	172.8	89.1	30.5	39.4	13.8	781.3	.264	.218
1966.....	225.7	36.0	189.7	99.0	33.7	42.7	14.3	809.2	.279	.234
1967.....	237.7	36.8	200.9	105.9	35.5	43.1	16.3	837.2	.284	.240
1968.....	246.4	37.0	209.4	110.7	36.6	45.3	16.8	882.8	.279	.237
1969.....	257.0	37.3	219.7	115.8	38.2	47.7	18.0	892.2	.288	.246
1970.....	261.3	37.7	223.6	117.1	40.4	47.3	18.8	891.7	.293	.251
1971.....	267.9	39.2	228.8	115.4	42.0	51.9	19.5	935.0	.287	.245
1972.....	277.4	39.8	237.6	117.5	44.4	54.4	21.3	1,007.6	.275	.236
1973.....	293.9	42.1	251.8	123.6	47.4	58.2	22.7	1,031.8	.285	.244
1974.....	301.8	41.8	260.1	128.6	50.6	56.5	24.5	1,005.3	.300	.259
1975.....	292.1	43.0	249.1	124.2	47.2	54.0	23.6	1,043.3	.280	.239
1976.....	298.7	41.1	257.6	126.9	50.4	56.7	23.6	1,090.3	.274	.236
1977.....	307.6	40.6	267.0	128.8	53.7	60.6	23.9	1,148.4	.268	.233
1978.....	318.0	40.0	278.0	133.2	57.8	62.9	24.1	1,201.8	.265	.231
1976: I.....	293.9	42.7	251.3	124.3	48.0	55.2	23.8	1,055.5	.278	.238
II.....	296.5	41.9	254.5	125.3	49.6	55.8	23.9	1,065.3	.278	.239
III.....	298.8	41.8	257.0	126.3	50.3	56.6	23.7	1,074.1	.278	.239
IV.....	298.7	41.1	257.6	126.9	50.4	56.7	23.6	1,090.3	.274	.236
1977: I.....	300.2	40.7	259.5	127.3	51.4	57.3	23.5	1,106.2	.271	.235
II.....	302.7	40.7	262.0	128.3	51.9	58.3	23.5	1,119.6	.270	.234
III.....	305.7	40.3	265.4	129.1	52.7	59.8	23.8	1,133.9	.270	.234
IV.....	307.6	40.6	267.0	128.8	53.7	60.6	23.9	1,148.4	.268	.233
1978: I.....	310.7	40.5	270.2	129.9	55.7	61.1	23.4	1,141.1	.272	.237
II.....	313.9	40.2	273.6	131.5	56.6	61.7	23.9	1,167.3	.269	.234
III.....	316.1	40.1	276.0	132.9	56.8	62.2	24.1	1,180.3	.268	.234
IV.....	318.0	40.0	278.0	133.2	57.8	62.9	24.1	1,201.8	.265	.231

<sup>1</sup> End of quarter.<sup>2</sup> Annual rates.<sup>3</sup> Ratio based on total final sales, which include a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning in 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-17.—Relation of gross national product and national income, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net national product	Plus: Subsidies less current surplus of government enterprises	Less:			Equals: National income
					Indirect business tax and nontax liability	Business transfer payments	Statistical discrepancy	
1929.....	103.4	9.7	93.7	-0.2	7.1	0.6	1.1	84.8
1933.....	55.8	7.5	48.3	-0	7.1	.7	.7	39.9
1939.....	90.8	8.7	82.1	.4	9.4	.5	1.4	71.3
1940.....	100.0	9.0	91.0	.4	10.1	.4	1.1	79.7
1941.....	124.9	10.0	114.9	.1	11.3	.5	.5	102.6
1942.....	158.3	11.2	147.1	.1	11.8	.5	-1.8	135.7
1943.....	192.0	11.5	180.5	.1	12.8	.5	-1.8	169.1
1944.....	210.5	11.8	198.7	.6	14.2	.5	2.7	181.9
1945.....	212.3	12.3	200.0	.7	15.5	.5	4.1	180.6
1946.....	209.6	13.8	195.7	.9	17.1	.5	.7	178.3
1947.....	232.8	17.2	215.6	-2	18.4	.6	1.8	194.6
1948.....	259.1	20.3	238.8	-1	20.1	.7	-1.2	219.0
1949.....	258.0	22.0	236.1	-3	21.3	.8	1.0	212.7
1950.....	286.2	23.9	262.3	.1	23.4	.8	2.0	236.2
1951.....	330.2	27.6	302.6	-1	25.3	.9	4.0	272.3
1952.....	347.2	29.6	317.6	-3	27.7	1.0	2.7	285.8
1953.....	366.1	31.6	334.5	-5	29.7	1.2	3.3	299.7
1954.....	366.3	33.1	333.2	-3	29.6	1.1	3.0	299.1
1955.....	399.3	35.3	364.0	-0	32.2	1.2	2.5	328.0
1956.....	420.7	38.9	381.8	.7	35.1	1.4	-8	346.9
1957.....	442.8	42.0	400.8	.7	37.5	1.5	.2	362.3
1958.....	448.9	44.1	404.8	1.1	38.7	1.6	1.7	364.0
1959.....	486.5	46.1	440.4	.1	41.8	1.8	-2	397.1
1960.....	506.0	47.7	458.3	.4	45.4	2.0	-7	412.0
1961.....	523.3	49.1	474.2	1.7	48.0	2.0	1.6	424.2
1962.....	563.8	50.5	513.3	1.8	51.6	2.1	4.0	457.4
1963.....	594.7	52.2	542.5	1.1	54.6	2.4	3.7	482.8
1964.....	635.7	54.6	581.2	1.7	58.8	2.7	2.2	519.2
1965.....	688.1	57.5	630.6	1.6	62.6	2.8	.9	566.0
1966.....	753.0	61.7	691.3	2.5	65.3	3.0	3.2	622.2
1967.....	796.3	67.0	729.3	1.6	70.2	3.1	1.7	655.8
1968.....	868.5	73.8	794.7	1.3	78.8	3.4	-6	714.4
1969.....	935.5	82.5	853.1	1.8	86.4	3.8	-3.3	767.9
1970.....	982.4	90.8	891.6	2.7	94.0	4.0	-2.1	798.4
1971.....	1,063.4	98.8	964.7	2.4	103.4	4.2	1.3	858.1
1972.....	1,171.1	105.4	1,065.8	3.6	111.0	4.7	1.7	951.9
1973.....	1,306.6	117.7	1,188.9	3.9	120.2	5.4	2.6	1,064.6
1974.....	1,412.9	137.7	1,275.2	1.0	128.6	5.9	5.8	1,136.0
1975.....	1,528.8	162.0	1,366.9	2.3	139.2	7.6	7.4	1,215.0
1976.....	1,700.1	177.8	1,522.3	.7	151.3	8.3	4.2	1,359.2
1977.....	1,887.2	195.2	1,692.0	2.8	165.1	9.6	4.7	1,515.3
1978 P.....	2,106.6	216.9	1,889.7	3.7	178.2	10.7	.9	1,703.6
1976: I.....	1,649.7	172.7	1,477.0	.8	146.4	8.1	3.4	1,319.8
II.....	1,685.4	175.8	1,509.6	.4	149.8	8.2	4.1	1,347.9
III.....	1,715.6	179.2	1,536.3	.9	152.9	8.2	4.0	1,372.1
IV.....	1,749.8	183.4	1,566.4	.8	156.3	8.5	5.3	1,397.0
1977: I.....	1,806.8	187.3	1,619.5	1.0	160.3	9.2	3.4	1,447.5
II.....	1,867.0	192.4	1,674.6	1.1	163.3	9.4	3.7	1,499.3
III.....	1,916.8	198.5	1,718.3	2.7	166.5	9.9	7.1	1,537.6
IV.....	1,958.1	202.6	1,755.5	6.3	170.1	10.0	4.8	1,576.9
1978: I.....	1,992.0	207.3	1,784.7	4.1	173.3	10.2	2.2	1,603.1
II.....	2,087.5	213.3	1,874.2	4.3	179.4	10.5	.5	1,688.1
III.....	2,136.1	220.8	1,915.3	2.1	177.7	10.9	.4	1,728.4
IV P.....	2,210.8	226.3	1,984.5	4.4	182.3	11.3	-----	-----

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-18.—Relation of national income and personal income, 1929-78

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	National income	Less:				Plus:				Equals: Personal income
		Corporate profits with inventory valuation and capital consumption adjustments	Net interest	Contributions for social insurance	Wage accruals less disbursements	Government transfer payments to persons	Personal interest income	Dividends	Business transfer payments	
1929.....	84.8	9.2	4.7	0.2	.0	0.9	6.9	5.8	0.6	84.9
1933.....	39.9	-1.7	4.1	.3	.0	1.5	5.5	2.0	.7	46.9
1939.....	71.3	5.3	3.6	2.1	.0	2.5	5.4	3.8	.5	72.4
1940.....	79.7	8.7	3.3	2.3	.0	2.7	5.3	4.0	.4	77.8
1941.....	102.6	14.1	3.3	2.8	.0	2.6	5.3	4.4	.5	95.3
1942.....	135.7	19.3	3.1	3.5	.0	2.7	5.2	4.3	.5	122.4
1943.....	169.1	23.5	2.7	4.5	.2	2.5	5.1	4.4	.5	150.7
1944.....	181.9	23.6	2.4	5.2	-.2	3.1	5.2	4.6	.5	164.4
1945.....	180.6	19.0	2.2	6.1	.0	5.6	5.9	4.6	.5	169.8
1946.....	178.3	16.6	1.6	6.1	-.0	10.8	6.4	5.6	.5	177.3
1947.....	194.6	22.2	2.1	5.8	.0	11.2	7.3	6.3	.6	189.8
1948.....	219.0	29.1	2.1	5.4	.0	10.6	7.7	7.0	.7	208.5
1949.....	212.7	26.9	2.2	5.9	-.0	11.7	8.2	7.2	.8	205.6
1950.....	236.2	33.7	2.3	7.1	.0	14.4	8.9	8.8	.8	226.1
1951.....	272.3	38.1	2.7	8.5	.1	11.6	9.6	8.5	.9	253.7
1952.....	285.8	35.4	3.0	9.0	-.0	12.1	10.3	8.5	1.0	270.4
1953.....	299.7	35.5	3.4	9.1	-.1	12.9	11.4	8.8	1.2	286.1
1954.....	299.1	34.6	4.3	10.1	.0	15.1	12.7	9.1	1.1	288.2
1955.....	328.0	44.6	4.8	11.5	.0	16.2	13.8	10.3	1.2	308.8
1956.....	346.9	42.9	5.2	12.9	.0	17.3	15.3	11.1	1.4	330.9
1957.....	362.3	42.1	6.5	14.9	.0	20.1	17.4	11.5	1.5	349.3
1958.....	364.0	37.5	8.0	15.2	.0	24.3	18.8	11.3	1.6	359.3
1959.....	397.1	48.2	8.8	18.0	.0	25.2	20.9	12.2	1.8	382.1
1960.....	412.0	46.6	9.8	21.1	.0	27.0	23.3	12.9	2.0	399.7
1961.....	424.2	46.9	11.2	21.9	.0	30.8	24.6	13.3	2.0	415.0
1962.....	457.4	54.9	12.8	24.3	.0	31.6	27.1	14.4	2.1	440.7
1963.....	482.8	59.6	14.3	27.3	.0	33.4	30.2	15.5	2.4	463.1
1964.....	519.2	67.0	15.9	28.7	.0	34.8	33.3	17.3	2.7	495.7
1965.....	566.0	77.1	18.5	30.0	.0	37.6	37.2	19.1	2.8	537.0
1966.....	622.2	82.5	21.9	38.8	.0	41.6	41.8	19.4	3.0	584.9
1967.....	655.8	79.3	24.3	43.4	.0	49.5	45.0	20.1	3.1	626.6
1968.....	714.4	85.8	26.8	48.1	.0	56.5	49.6	21.9	3.4	685.2
1969.....	767.9	81.4	30.8	54.9	.0	62.7	55.9	22.6	3.8	745.8
1970.....	798.4	67.9	37.5	58.7	.0	75.9	64.3	22.9	4.0	801.3
1971.....	858.1	77.2	42.8	64.8	.6	89.9	69.3	23.0	4.2	859.1
1972.....	951.9	92.1	47.0	73.6	.0	99.4	74.6	24.6	4.7	942.5
1973.....	1,064.6	99.1	52.3	91.5	-.1	113.5	84.1	27.8	5.4	1,052.4
1974.....	1,136.0	83.6	69.0	103.8	-.5	134.9	103.0	31.0	5.9	1,154.9
1975.....	1,215.0	95.9	78.6	110.6	.0	170.6	115.5	31.9	7.6	1,255.5
1976.....	1,359.2	127.0	84.3	125.1	.0	185.6	126.3	37.9	8.3	1,380.9
1977.....	1,515.3	144.2	95.4	140.3	.0	199.2	141.2	43.7	9.6	1,529.0
1978 p.....	1,703.6	160.0	106.1	164.3	.0	215.2	158.9	49.3	10.7	1,707.3
1976: I.....	1,319.8	126.8	80.1	121.7	.0	182.1	121.0	34.5	8.1	1,336.9
II.....	1,347.9	128.6	82.0	124.1	.0	181.1	123.5	37.2	8.2	1,363.2
III.....	1,372.1	130.0	86.2	126.1	.0	188.1	128.2	38.4	8.2	1,392.8
IV.....	1,397.0	122.5	88.9	128.7	.0	191.2	132.5	41.4	8.5	1,430.5
1977: I.....	1,447.5	129.9	91.7	136.0	.0	194.2	135.9	41.5	9.2	1,470.7
II.....	1,499.3	143.7	93.7	139.1	.0	194.6	139.1	42.7	9.4	1,508.6
III.....	1,537.6	154.8	97.3	141.3	.0	202.0	143.6	44.1	9.9	1,543.7
IV.....	1,576.9	148.2	99.0	145.0	.0	205.9	146.0	46.3	10.0	1,593.0
1978: I.....	1,603.1	132.6	101.7	157.4	.0	208.9	151.4	47.0	10.2	1,628.9
II.....	1,688.1	163.4	104.6	162.7	.0	210.1	156.3	48.1	10.5	1,682.4
III.....	1,728.4	165.2	107.4	166.2	.2	219.6	161.7	50.1	10.9	1,731.7
IV p.....			110.8	170.7	.0	222.4	166.3	51.9	11.3	1,786.4

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-19.—National income by type of income, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income <sup>1</sup>	Compensation of employees			Proprietors' income with inventory valuation and capital consumption adjustments							
		Total	Wages and salaries	Supplements to wages and salaries <sup>2</sup>	Total	Farm			Nonfarm			
						Total	Income <sup>3</sup>	Capital consumption adjustment	Total	Income <sup>4</sup>	Inventory valuation adjustment	Capital consumption adjustment
1929.....	84.8	51.1	50.5	0.6	14.9	6.2	6.3	-0.1	8.8	8.8	0.1	-0.2
1933.....	39.9	29.5	29.0	.5	5.8	2.6	2.5	.1	3.2	3.9	-.5	-.2
1939.....	71.3	48.1	46.0	2.1	11.7	4.4	4.4	-.0	7.3	7.6	-.2	-.1
1940.....	79.7	52.1	49.9	2.3	12.9	4.5	4.5	-.0	8.4	8.6	-.0	-.1
1941.....	102.6	64.8	62.1	2.7	17.4	6.4	6.5	-.0	10.9	11.7	-.6	-.1
1942.....	135.7	85.3	82.1	3.2	24.0	9.8	10.3	-.5	14.3	14.4	-.4	.2
1943.....	169.1	109.5	105.8	3.8	29.0	11.7	12.2	-.5	17.3	17.1	-.2	.3
1944.....	181.9	121.2	116.7	4.5	30.2	11.6	12.2	-.6	18.6	18.3	-.1	.4
1945.....	180.6	123.1	117.5	5.6	31.7	12.2	12.6	-.4	19.4	19.3	-.1	.2
1946.....	178.3	118.1	112.0	6.0	36.6	14.9	15.1	-.2	21.6	23.3	-1.7	.0
1947.....	194.6	129.2	123.1	6.1	35.8	15.2	15.6	-.4	20.6	21.8	-1.5	.4
1948.....	219.0	141.4	135.5	5.9	40.7	17.5	18.1	-.6	23.2	23.1	-.4	.5
1949.....	212.7	141.3	134.7	6.6	36.1	12.7	13.4	-.7	23.5	22.2	.5	.8
1950.....	236.2	154.8	147.0	7.8	38.4	13.5	14.1	-.7	24.9	25.1	-1.1	.9
1951.....	272.3	181.0	171.3	9.7	42.8	15.8	16.6	-.8	27.0	26.4	-.3	.9
1952.....	285.8	195.7	185.3	10.4	42.9	14.9	15.7	-.8	28.0	26.9	-.2	.9
1953.....	299.7	209.6	198.5	11.0	41.3	12.9	13.7	-.7	28.4	27.6	-.2	.9
1954.....	299.1	208.4	196.8	11.6	40.8	12.3	12.9	-.6	28.5	27.6	-.0	1.0
1955.....	328.0	224.9	211.7	13.2	42.5	11.3	11.9	-.6	31.2	30.5	-.2	1.0
1956.....	346.9	243.5	228.3	15.2	43.6	11.2	11.8	-.6	32.4	31.8	-.5	1.1
1957.....	362.3	256.5	239.3	17.2	45.0	11.0	11.8	-.8	33.9	33.1	-.3	1.1
1958.....	364.0	258.2	240.5	17.7	47.4	13.1	13.9	-.8	34.3	33.2	-.1	1.2
1959.....	397.1	279.6	258.9	20.6	47.2	10.7	11.6	-.9	36.6	35.3	-.1	1.3
1960.....	412.0	294.9	271.9	23.0	47.0	11.4	12.3	-.9	35.6	34.2	-.1	1.3
1961.....	424.2	303.6	279.5	24.1	48.3	11.8	12.7	-.9	36.4	35.3	-.1	1.2
1962.....	457.4	325.1	298.0	27.1	49.6	11.9	12.8	-1.0	37.7	36.4	-.0	1.4
1963.....	482.8	342.9	313.4	29.5	50.3	11.6	12.5	-.9	38.7	37.2	-.0	1.6
1964.....	519.2	368.0	336.1	31.8	52.2	10.3	11.2	-1.0	42.0	40.2	-.0	1.8
1965.....	566.0	396.5	362.0	34.5	56.7	12.6	13.5	-.9	44.1	42.7	-.2	1.6
1966.....	622.2	439.3	398.4	40.9	60.3	13.6	14.6	-1.0	46.7	45.3	-.3	1.6
1967.....	655.8	471.9	427.5	44.4	61.0	12.1	13.2	-1.2	48.9	47.5	-.3	1.7
1968.....	714.4	519.8	469.5	50.3	63.4	12.0	13.3	-1.3	51.4	50.4	-.4	1.5
1969.....	767.9	571.4	514.6	56.8	66.2	13.9	15.4	-1.4	52.3	51.3	-.5	1.4
1970.....	798.4	609.2	546.5	62.7	65.1	13.9	15.3	-1.4	51.2	50.7	-.5	1.0
1971.....	858.1	650.3	580.0	70.3	67.7	14.3	16.0	-1.7	53.4	52.8	-.4	1.1
1972.....	951.9	715.1	633.8	81.4	76.1	18.0	20.0	-2.0	58.1	56.4	-.7	2.5
1973.....	1,064.6	799.2	701.2	98.0	92.4	32.0	34.2	-2.2	60.4	60.3	-1.7	1.8
1974.....	1,136.0	875.8	764.1	111.7	86.2	25.4	27.9	-2.5	60.9	62.9	-3.6	1.6
1975.....	1,215.0	931.1	805.9	125.2	87.0	23.5	27.1	-3.7	63.5	64.0	-1.2	.6
1976.....	1,359.2	1,036.8	890.1	146.7	88.6	18.4	22.4	-4.0	70.2	71.4	-1.2	-.0
1977.....	1,515.3	1,153.4	983.6	169.8	99.8	20.2	24.6	-4.4	79.5	81.4	-1.3	-.6
1978 <sup>a</sup> .....	1,703.6	1,301.2	1,100.7	200.5	112.9	25.1	29.9	-4.8	87.8	91.9	-2.3	-2.0
1976: I.....	1,319.8	1,001.7	861.7	140.0	88.6	20.9	24.9	-4.0	67.7	68.5	-.9	.0
II.....	1,347.9	1,026.0	881.5	144.6	88.8	19.6	23.6	-4.0	69.3	70.6	-1.3	.0
III.....	1,372.1	1,046.1	897.3	148.8	87.4	16.9	20.9	-4.0	71.7	71.7	-1.1	.0
IV.....	1,397.0	1,073.3	919.9	153.4	89.5	16.3	20.3	-4.0	73.2	74.8	-1.6	.0
1977: I.....	1,447.5	1,107.9	946.4	161.5	95.6	19.4	23.4	-4.0	76.1	78.1	-1.8	-.1
II.....	1,499.3	1,140.5	973.4	167.1	98.9	20.0	24.2	-4.2	78.9	80.6	-1.4	-.3
III.....	1,537.6	1,165.8	993.6	172.2	97.2	16.5	21.0	-4.5	80.8	82.2	-.7	-.7
IV.....	1,576.9	1,199.7	1,021.2	178.4	107.3	25.1	29.8	-4.7	82.3	84.8	-1.3	-1.2
1978: I.....	1,603.1	1,241.0	1,050.8	190.2	105.0	21.9	26.6	-4.7	83.1	86.7	-2.1	-1.5
II.....	1,688.1	1,287.8	1,090.2	197.6	110.1	24.0	28.8	-4.8	86.1	90.1	-2.2	-1.8
III.....	1,728.4	1,317.1	1,113.4	203.6	114.5	25.0	29.7	-4.8	89.6	93.5	-1.8	-2.1
IV <sup>a</sup> .....	1,758.9	1,358.9	1,148.5	210.4	121.9	29.5	34.3	-4.8	92.4	97.3	-2.3	-2.6

See next page for continuation of table.

TABLE B-19.—National income by type of income, 1929-78—Continued

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Rental income of persons with capital consumption adjustment			Corporate profits with inventory valuation and capital consumption adjustments										Net interest
	Total	Rental income of persons	Capital consumption adjustment	Profits with inventory valuation adjustment and without capital consumption adjustment								Inventory valuation adjustment	Capital consumption adjustment	
				Total	Profits before tax			Inventory valuation adjustment						
					Total	Profits tax liability	Profits after tax		Total	Dividends	Undistributed profits			
1929	4.9	5.7	-0.8	9.2	10.5	10.0	1.4	8.6	5.8	2.8	0.5	-1.3	4.7	
1933	2.2	2.3	-1	-1.7	-1.2	1.0	.5	.4	2.0	-1.6	-2.1	-5	4.1	
1939	2.6	3.1	-6	5.3	6.3	7.0	1.4	5.6	3.8	1.8	-7	-1.0	3.6	
1940	2.7	3.3	-6	8.7	9.8	10.0	2.8	7.2	4.0	3.2	-2	-1.1	3.3	
1941	3.1	3.9	-8	14.1	15.2	17.7	7.6	10.1	4.4	5.7	-2.5	-1.1	3.3	
1942	4.0	5.0	-1.0	19.3	20.3	21.5	11.4	10.1	4.3	5.9	-1.2	-1.0	3.1	
1943	4.4	5.6	-1.2	23.5	24.4	25.1	14.1	11.1	4.4	6.6	-8	-8	2.7	
1944	4.5	5.9	-1.4	23.6	23.8	24.1	12.9	11.2	4.6	6.5	-3	-2	2.4	
1945	4.6	6.2	-1.6	19.0	19.2	19.7	10.7	9.0	4.6	4.4	-6	-1	2.2	
1946	5.5	7.3	-1.8	16.6	19.3	24.6	9.1	15.5	5.6	9.9	-5.3	-2.7	1.6	
1947	5.3	7.7	-2.5	22.2	25.6	31.5	11.3	20.2	6.3	13.9	-5.9	-3.4	2.1	
1948	5.7	8.5	-2.8	29.1	33.0	35.2	12.4	22.7	7.0	15.7	-2.2	-3.9	2.1	
1949	6.1	8.9	-2.8	26.9	30.8	28.9	10.2	18.7	7.2	11.5	1.9	-3.8	2.2	
1950	7.1	10.0	-2.9	33.7	37.6	42.6	17.9	24.7	8.8	15.9	-5.0	-4.0	2.3	
1951	7.7	11.0	-3.3	38.1	42.7	43.9	22.6	21.3	8.5	12.8	-1.2	-4.6	2.7	
1952	8.8	12.2	-3.4	35.4	39.8	38.9	19.4	19.5	8.5	11.0	1.0	-4.5	3.0	
1953	10.0	13.4	-3.4	35.5	39.5	40.5	20.3	20.2	8.8	11.5	-1.0	-4.1	3.4	
1954	11.0	14.4	-3.3	34.6	37.8	38.1	17.6	20.5	9.1	11.4	-3	-3.2	4.3	
1955	11.3	14.8	-3.5	44.6	46.7	48.4	22.0	26.4	10.3	16.1	-1.7	-2.1	4.8	
1956	11.6	15.2	-3.6	42.9	45.9	48.6	22.0	26.6	11.1	15.5	-2.7	-3.0	5.2	
1957	12.2	15.9	-3.6	41.1	45.4	46.9	21.4	25.5	11.5	14.0	-1.5	-3.3	6.5	
1958	12.9	16.7	-3.8	37.5	40.8	41.1	19.0	22.1	11.3	10.8	-3	-3.4	8.0	
1959	13.2	17.3	-4.0	48.2	51.2	51.6	23.6	28.0	12.2	15.8	-5	-2.9	8.8	
1960	13.8	17.8	-4.1	46.6	48.9	48.5	22.7	25.8	12.9	13.0	.3	-2.3	9.8	
1961	14.3	18.3	-4.0	46.9	48.7	48.6	22.8	25.8	13.3	12.5	.1	-1.8	11.2	
1962	15.0	19.0	-4.0	54.9	53.7	53.6	24.0	29.6	14.4	15.2	.1	1.2	12.8	
1963	15.7	19.6	-3.9	59.6	57.6	57.7	26.2	31.5	15.5	16.0	-2	2.1	14.3	
1964	16.1	20.1	-4.0	67.0	64.2	64.7	28.0	36.7	17.3	19.4	-5	2.8	15.9	
1965	17.1	21.0	-3.9	77.1	73.3	75.2	30.9	44.3	19.1	25.2	-1.9	3.8	18.5	
1966	18.2	22.1	-3.9	82.5	78.6	80.7	33.7	47.1	19.4	27.6	-2.1	3.9	21.9	
1967	19.4	23.4	-4.0	79.3	75.6	77.3	32.5	44.9	20.1	24.7	-1.7	3.7	24.3	
1968	18.6	23.8	-5.2	85.8	82.1	85.6	39.4	46.2	21.9	24.2	-3.4	3.7	26.8	
1969	18.1	24.8	-6.7	81.4	77.9	83.4	39.7	43.8	22.6	21.2	-5.5	3.5	30.8	
1970	18.6	25.8	-7.1	67.9	66.4	71.5	34.5	37.0	22.9	14.1	-5.1	1.5	37.5	
1971	20.1	27.7	-7.6	77.2	76.9	82.0	37.7	44.3	23.0	21.3	-5.0	.3	42.8	
1972	21.5	29.4	-7.9	92.1	89.6	96.2	41.5	54.6	24.6	30.0	-6.6	2.5	47.0	
1973	21.6	31.3	-9.8	99.1	97.2	115.8	48.7	67.1	27.8	39.3	-18.6	1.9	52.3	
1974	21.4	33.7	-12.3	83.6	86.5	126.9	52.4	74.5	31.0	43.6	-40.4	-2.9	69.0	
1975	22.4	36.9	-14.5	95.9	107.9	120.4	49.8	70.6	31.9	38.7	-12.4	-12.0	78.6	
1976	22.5	38.7	-16.2	127.0	141.4	155.9	64.3	91.7	37.9	53.8	-14.5	-14.4	84.3	
1977	22.5	42.1	-19.6	144.2	159.1	173.9	71.8	102.1	43.7	58.4	-14.8	-14.9	95.4	
1978 P	23.4	47.6	-24.2	160.0	178.1	202.4	84.1	118.3	49.3	69.1	-24.3	-18.1	106.1	
1976: I	22.5	38.1	-15.6	126.8	141.2	152.6	63.6	89.0	34.5	54.5	-11.4	-14.4	80.1	
II	22.4	38.3	-15.9	128.6	143.0	158.7	66.3	92.4	37.2	55.2	-15.7	-14.4	82.0	
III	22.4	38.8	-16.3	130.0	144.5	157.8	64.7	93.1	38.4	54.7	-13.3	-14.5	86.2	
IV	22.8	39.7	-16.9	122.5	137.0	154.6	62.4	92.2	41.4	50.8	-17.6	-14.5	88.9	
1977: I	22.5	40.4	-17.9	129.9	144.5	164.8	68.3	96.5	41.5	55.0	-20.3	-14.6	91.7	
II	22.4	41.5	-19.0	143.7	158.5	175.1	72.3	102.8	42.7	60.1	-16.6	-14.8	93.7	
III	22.4	42.6	-20.2	154.8	169.9	177.5	72.8	104.8	44.1	60.6	-7.7	-15.0	97.3	
IV	22.7	44.0	-21.3	148.2	163.5	178.3	73.9	104.4	46.3	58.1	-14.8	-15.3	99.0	
1978: I	22.8	44.6	-21.8	132.6	148.7	172.1	70.0	102.1	47.0	55.1	-23.5	-16.1	101.7	
II	22.2	45.5	-23.3	163.4	180.6	205.5	85.0	120.5	48.1	72.4	-24.9	-17.2	104.6	
III	24.3	49.5	-25.2	165.2	184.5	205.4	86.2	119.2	50.1	69.2	-20.9	-19.3	107.4	
IV P	24.4	51.0	-26.6						51.9		-27.8	-19.9	110.8	

<sup>1</sup> National income is the total net income earned in production. It differs from gross national product mainly in that it excludes depreciation charges and other allowances for business and institutional consumption of durable capital goods and indirect business taxes. See Table B-17.

<sup>2</sup> Employer contributions for social insurance and to private pension, health, and welfare funds; workmen's compensation; directors' fees; and a few other minor items.

<sup>3</sup> With inventory valuation adjustment and without capital consumption adjustment.

<sup>4</sup> Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-20.—Sources of personal income, 1929-78  
(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Personal income	Wage and salary disbursements <sup>1</sup>						Other labor income <sup>1</sup>	Proprietors' income with inventory valuation and capital consumption adjustments	
		Total	Commodity-producing industries		Distributive industries	Service industries	Government and government enterprises		Farm	Non-farm
			Total	Manufacturing						
1929	84.9	50.5	21.5	16.1	15.6	8.4	5.0	0.5	6.2	8.8
1933	46.9	29.0	9.8	7.8	8.8	5.2	5.2	.4	2.6	3.2
1939	72.4	46.0	17.4	13.6	13.3	7.1	8.2	.6	4.4	7.3
1940	77.8	49.9	19.7	15.6	14.2	7.5	8.5	.6	4.5	8.4
1941	95.3	62.1	27.5	21.7	16.3	8.1	10.2	.7	6.4	10.9
1942	122.4	82.1	39.1	30.9	18.0	9.0	16.0	.9	9.8	14.3
1943	150.7	105.6	49.0	40.9	20.1	9.9	26.6	1.1	11.7	17.3
1944	164.4	116.9	50.4	42.9	22.7	10.9	33.0	1.5	11.6	18.6
1945	169.8	117.5	45.9	38.2	24.8	11.9	34.9	1.8	12.2	19.4
1946	177.3	112.0	46.0	36.5	31.0	14.3	20.7	2.0	14.9	21.6
1947	189.8	123.1	54.2	42.5	35.2	16.1	17.5	2.4	15.2	20.6
1948	208.5	135.5	61.1	47.1	37.5	17.9	19.0	2.7	17.5	23.2
1949	205.6	134.8	57.8	44.6	37.7	18.5	20.8	2.9	12.7	23.5
1950	226.1	147.0	64.8	50.3	39.8	19.8	22.6	3.7	13.5	24.9
1951	253.7	171.3	76.3	59.3	44.3	21.5	29.2	4.6	15.8	27.0
1952	270.4	185.4	82.0	64.1	46.9	23.1	33.3	5.2	14.9	28.0
1953	286.1	198.6	89.6	71.2	49.7	24.9	34.4	5.9	12.9	28.4
1954	288.2	196.8	85.7	67.5	50.1	26.1	34.9	6.1	12.3	28.5
1955	308.8	211.7	93.1	73.8	53.4	28.6	36.6	7.0	11.3	31.2
1956	330.9	228.3	100.6	79.4	57.7	31.3	38.8	8.0	11.2	32.4
1957	349.3	239.3	104.2	82.4	60.5	33.6	41.0	9.0	11.0	33.9
1958	359.3	240.5	100.0	78.6	60.8	35.6	44.1	9.4	13.1	34.3
1959	382.1	258.9	109.6	86.8	64.8	38.5	46.0	10.6	10.7	36.6
1960	399.7	271.9	113.1	89.7	68.2	41.4	49.2	11.2	11.4	35.6
1961	415.0	279.5	113.7	89.8	69.3	44.1	52.4	11.8	11.8	36.4
1962	440.7	298.0	121.8	96.7	72.8	47.2	56.3	13.0	11.9	37.7
1963	463.1	313.4	126.9	100.6	76.3	50.2	60.0	14.0	11.6	38.7
1964	495.7	336.1	135.4	107.1	81.4	54.4	64.9	15.7	10.3	42.0
1965	537.0	362.0	146.0	115.5	87.2	58.9	69.9	17.8	12.6	46.1
1966	584.9	398.4	161.0	128.0	94.4	64.7	78.3	19.9	13.6	47.7
1967	626.6	427.5	168.3	134.1	100.9	71.8	86.4	21.7	12.1	48.9
1968	685.2	469.5	183.4	145.8	109.9	79.8	96.4	25.1	12.0	51.4
1969	745.8	514.6	199.6	157.5	120.7	89.4	104.9	28.2	13.9	52.3
1970	801.3	546.5	202.9	158.2	130.1	97.5	116.0	32.0	13.9	51.2
1971	859.1	579.4	208.3	160.3	139.3	106.2	125.6	36.2	14.3	53.4
1972	942.5	633.8	227.3	175.4	151.9	117.2	137.3	42.0	18.0	58.1
1973	1,052.4	701.3	254.3	196.2	168.1	130.3	148.6	48.7	32.0	60.4
1974	1,154.9	764.6	274.6	211.4	184.3	145.1	160.5	55.6	25.4	60.9
1975	1,255.5	805.9	275.0	211.0	195.3	160.1	175.4	65.1	23.5	63.5
1976	1,380.9	890.1	307.5	237.5	216.4	178.6	187.6	77.0	18.4	70.2
1977	1,529.0	983.6	343.7	266.3	239.1	200.1	200.8	90.4	20.2	79.5
1978	1,707.3	1,100.7	390.1	299.7	268.7	225.8	216.1	105.9	25.1	87.8
1976: I	1,336.9	861.7	298.4	230.2	208.6	171.0	183.7	72.4	20.9	67.7
II	1,363.2	881.5	305.4	235.8	213.9	176.1	186.1	75.5	19.6	69.3
III	1,392.8	897.3	309.8	239.5	218.9	180.5	188.1	78.6	16.9	70.5
IV	1,430.5	919.9	316.2	244.6	224.4	186.6	192.6	81.6	16.3	73.2
1977: I	1,470.7	946.4	327.3	254.6	231.2	192.7	195.2	84.9	19.4	76.1
II	1,508.6	973.4	342.0	264.1	236.5	196.8	198.1	88.5	20.0	78.9
III	1,543.7	993.6	348.3	269.3	241.2	202.3	201.7	92.2	16.5	80.8
IV	1,593.0	1,021.2	357.1	277.3	247.5	208.5	208.1	96.1	25.1	82.3
1978: I	1,628.9	1,050.8	365.9	286.9	257.0	216.5	211.4	100.0	21.9	83.1
II	1,682.4	1,090.2	387.0	296.1	266.4	222.8	213.9	104.0	24.0	86.1
III	1,731.7	1,113.2	396.4	302.0	271.6	228.5	216.7	107.9	25.0	89.6
IV	1,786.4	1,148.5	410.8	313.6	279.9	235.6	222.2	111.8	29.5	92.4

See next page for continuation of table.

TABLE B-20.—Sources of personal income, 1929-78—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment	Dividends	Personal interest income	Transfer payments						Less: Personal contributions for social insurance	Non-farm personal income <sup>1</sup>
				Total	Old age, survivors, disability, and health insurance benefits	Government unemployment insurance benefits	Veterans benefits	Government employee retirement benefits	Aid to families with dependent children (AFDC)		
1929	4.9	5.8	6.9	1.5			0.6	0.1	0.8	0.1	
1933	2.2	2.0	5.5	2.1			.6	.2	1.4	.2	
1939	2.6	3.8	5.4	3.0	0.0	0.4	.5	.3	1.7	.6	
1940	2.7	4.0	5.3	3.1	.0	.5	.5	.3	1.7	.7	
1941	3.1	4.4	5.3	3.1	.1	.4	.5	.3	1.8	.8	
1942	4.0	4.3	5.2	3.1	.1	.4	.5	.3	1.8	1.2	
1943	4.4	4.4	5.1	3.0	.2	.1	.5	.4	1.8	1.8	
1944	4.5	4.6	5.2	3.6	.2	.1	1.0	.4	2.0	2.2	
1945	4.6	4.6	5.9	6.2	.3	.4	3.0	.5	2.0	2.3	
1946	5.5	5.6	6.4	11.3	.4	1.1	7.0	.7	2.1	2.0	159.6
1947	5.3	6.3	7.3	11.7	.5	.8	7.0	.7	.3	2.5	171.5
1948	5.7	7.0	7.7	11.3	.6	.9	5.9	.7	.4	2.9	187.7
1949	6.1	7.2	8.2	12.5	.7	1.9	5.3	.9	.5	3.3	189.9
1950	7.1	8.8	8.9	15.2	1.0	1.5	7.7	1.0	.6	3.5	209.3
1951	7.7	8.5	9.6	12.6	1.9	.9	4.6	1.1	.6	3.6	234.4
1952	8.8	8.5	10.3	13.1	2.2	1.1	4.3	1.2	.5	3.8	252.0
1953	10.0	8.8	11.4	14.1	3.0	1.0	4.1	1.4	.5	4.1	269.9
1954	11.0	9.1	12.7	16.2	3.6	2.2	4.2	1.5	.6	4.1	4.6
1955	11.3	10.3	13.8	17.5	4.9	1.5	4.4	1.7	.6	4.3	5.2
1956	11.6	11.1	15.3	18.7	5.7	1.5	4.4	1.9	.6	4.5	5.8
1957	12.2	11.5	17.4	21.6	7.3	1.9	4.5	2.2	.7	4.9	6.7
1958	12.9	11.3	18.8	25.9	8.5	4.1	4.7	2.5	.8	5.3	6.9
1959	13.2	12.2	20.9	27.0	10.2	2.8	4.6	2.8	.9	5.8	7.9
1960	13.8	12.9	23.3	28.9	11.1	3.0	4.6	3.1	1.0	6.2	9.3
1961	14.3	13.3	24.6	32.8	12.6	4.3	5.0	3.4	1.1	6.4	9.7
1962	15.0	14.4	27.1	33.8	14.3	3.1	4.7	3.7	1.3	6.7	10.3
1963	15.7	15.5	30.2	35.8	15.2	3.0	4.8	4.2	1.4	7.3	11.8
1964	16.1	17.3	33.3	37.4	16.0	2.7	4.7	4.7	1.5	7.8	12.6
1965	17.1	19.1	37.2	40.4	18.1	2.3	4.9	5.2	1.7	8.3	13.3
1966	18.2	19.4	41.8	44.7	20.8	1.9	4.9	6.1	1.9	9.2	17.8
1967	19.4	20.1	45.0	52.6	25.5	2.2	5.6	6.9	2.3	10.2	20.6
1968	18.6	21.9	49.6	59.9	30.2	2.1	5.9	7.7	2.8	11.1	22.8
1969	18.1	22.6	55.9	66.5	32.9	2.2	6.7	8.6	3.5	12.5	26.3
1970	18.6	22.9	64.3	79.9	38.5	4.0	7.7	10.1	4.8	14.9	28.0
1971	20.1	23.0	69.3	94.1	44.5	5.8	8.8	11.7	6.2	17.2	30.8
1972	21.5	24.6	74.6	104.1	49.6	5.6	9.7	13.5	6.9	18.9	34.2
1973	21.6	27.8	84.1	118.9	60.4	4.3	10.4	15.6	7.2	21.0	42.2
1974	21.4	31.0	103.0	140.8	70.1	6.6	11.8	18.8	7.9	25.5	47.7
1975	22.4	31.9	115.5	178.2	81.4	17.4	14.5	22.7	9.2	33.0	50.5
1976	22.5	37.9	126.3	193.9	92.9	15.5	14.4	25.7	10.1	35.5	55.5
1977	22.5	43.7	141.2	208.8	105.0	12.5	13.8	28.8	10.6	38.1	61.0
1978 p	23.4	49.3	158.9	226.0	117.3	8.9	13.6	32.8	10.8	42.5	69.7
1976:I	22.5	34.5	121.0	190.3	88.0	17.0	15.8	24.5	9.7	35.1	54.2
II	22.4	37.2	123.5	189.3	89.3	14.8	14.3	25.7	10.0	35.2	55.0
III	22.4	38.4	128.2	196.3	95.8	15.2	13.4	26.1	10.2	35.5	55.9
IV	22.8	41.4	132.5	199.7	98.3	14.8	13.8	26.5	10.3	36.1	56.8
1977:I	22.5	41.5	135.9	203.4	99.7	14.8	14.3	27.2	10.4	37.0	59.4
II	22.4	42.7	139.1	204.0	101.8	12.0	13.8	28.4	10.5	37.4	60.5
III	22.4	44.1	143.6	211.9	108.5	11.4	13.4	29.2	10.6	38.7	61.4
IV	22.7	46.3	146.0	215.9	110.1	11.5	13.7	30.5	10.7	39.4	62.6
1978:I	22.8	47.0	151.4	219.2	112.1	10.4	13.8	31.3	10.7	40.9	67.2
II	22.2	48.1	155.3	220.6	113.7	8.5	13.5	32.5	10.8	41.6	69.2
III	24.3	50.1	161.7	230.4	121.1	8.7	13.3	33.2	10.9	43.3	70.5
IV p	24.4	51.9	166.3	233.6	122.4	8.0	13.7	34.4	10.8	44.4	72.0

<sup>1</sup> The total of wage and salary disbursements and other labor income differs from compensation of employees in Table B-19 in that it excludes employer contributions for social insurance and the excess of wage accruals over wage disbursements.

<sup>2</sup> Personal income exclusive of farm proprietors' income, farm wages, other farm labor income, and agricultural net interest.

Note.—The industry classification of wage and salary disbursements and proprietors' income is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-21.—Disposition of personal income, 1929-78

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Less: Personal tax and nontax payments	Equals: Disposable personal income	Less: Personal outlays				Equals: Personal saving	Percent of disposable personal income		
				Total	Personal consumption expenditures	Interest paid by consumers to business	Personal transfer payments to foreigners (net)		Personal outlays		Personal saving
									Total	Consumption expenditures	
1929.....	84.9	2.6	82.3	79.1	77.3	1.5	0.3	3.1	96.2	93.9	3.8
1933.....	46.9	1.4	45.5	46.5	45.8	.5	.2	-1.0	102.2	100.7	-2.2
1939.....	72.4	2.4	69.9	67.8	67.0	.7	.2	2.1	97.0	95.8	3.0
1940.....	77.8	2.6	75.2	72.0	71.0	.8	.2	3.3	95.6	94.3	4.4
1941.....	95.3	3.3	92.0	81.8	80.8	.9	.2	10.2	88.9	87.7	11.1
1942.....	122.4	5.9	116.5	89.4	88.6	.7	.1	27.0	76.8	76.1	23.2
1943.....	150.7	17.8	132.9	100.1	99.4	.5	.2	32.7	75.4	74.8	24.6
1944.....	164.4	18.9	145.5	109.0	108.2	.5	.4	36.5	74.9	74.4	25.1
1945.....	169.8	20.8	149.0	120.4	119.5	.5	.5	28.5	80.8	80.2	19.2
1946.....	177.3	18.7	158.6	145.2	143.8	.7	.7	13.4	91.5	90.6	8.5
1947.....	189.8	21.4	168.4	163.5	161.7	1.0	.7	4.9	97.1	96.1	2.9
1948.....	208.5	21.0	187.4	176.9	174.7	1.4	.7	10.6	94.3	93.2	5.7
1949.....	205.6	18.5	187.1	180.4	178.1	1.7	.5	6.7	96.4	95.2	3.6
1950.....	226.1	20.6	205.5	194.7	192.0	2.3	.4	10.8	94.7	93.4	5.3
1951.....	253.7	28.9	224.8	210.0	207.1	2.5	.4	14.8	93.4	92.1	6.6
1952.....	270.4	34.0	236.4	220.4	217.1	2.9	.4	16.0	93.2	91.8	6.8
1953.....	286.1	35.5	250.7	233.7	229.7	3.6	.5	17.0	93.2	91.6	6.8
1954.....	288.2	32.5	255.7	240.1	235.8	3.8	.5	15.6	93.9	92.2	6.1
1955.....	308.8	35.4	273.4	258.5	253.7	4.4	.4	14.9	94.6	92.8	5.4
1956.....	330.9	39.7	291.3	271.6	266.0	5.1	.5	19.7	93.2	91.3	6.8
1957.....	349.3	42.4	306.9	286.4	280.4	5.5	.5	20.6	93.3	91.4	6.7
1958.....	359.3	42.1	317.1	295.4	289.5	5.6	.4	21.7	93.2	91.3	6.8
1959.....	382.1	46.0	336.1	317.3	310.8	6.1	.4	18.8	94.4	92.5	5.6
1960.....	399.7	50.4	349.4	332.3	324.9	7.0	.4	17.1	95.1	93.0	4.9
1961.....	415.0	52.1	362.9	342.7	335.0	7.3	.4	20.2	94.4	92.3	5.6
1962.....	440.7	56.8	383.9	363.5	355.2	7.8	.5	20.4	94.7	92.5	5.3
1963.....	463.1	60.3	402.8	384.0	374.6	8.8	.6	18.8	95.3	93.0	4.7
1964.....	495.7	58.6	437.0	410.9	400.4	9.9	.6	25.1	94.0	91.6	6.0
1965.....	537.0	64.9	472.2	441.9	430.2	11.1	.7	30.3	93.6	91.1	6.4
1966.....	584.9	74.5	510.4	477.4	464.8	12.0	.6	33.0	93.5	91.1	6.5
1967.....	626.6	82.1	544.5	503.7	490.4	12.5	.9	40.9	92.5	90.0	7.5
1968.....	685.2	97.1	588.1	550.1	535.9	13.3	.8	38.1	93.5	91.1	6.5
1969.....	745.8	115.4	630.4	595.3	579.7	14.7	.9	35.1	94.4	92.0	5.6
1970.....	801.3	115.3	685.9	635.4	618.8	15.5	1.1	50.6	92.6	90.2	7.4
1971.....	859.1	116.3	742.8	685.5	668.2	16.2	1.1	57.3	92.3	90.0	7.7
1972.....	942.5	141.2	801.3	751.9	733.0	17.9	1.0	49.4	93.8	91.5	6.2
1973.....	1,052.4	150.8	901.7	831.3	809.9	20.2	1.3	70.3	92.2	89.8	7.8
1974.....	1,154.9	170.3	984.6	913.0	889.6	22.4	1.0	71.7	92.7	90.3	7.3
1975.....	1,255.5	168.8	1,086.7	1,003.0	979.1	23.0	.9	83.6	92.3	90.1	7.7
1976.....	1,380.9	196.5	1,184.4	1,116.3	1,090.2	25.1	.9	68.0	94.3	92.1	5.7
1977.....	1,529.0	226.0	1,303.0	1,236.1	1,206.5	28.6	1.0	66.9	94.9	92.6	5.1
1978 p.....	1,707.3	256.2	1,451.2	1,374.4	1,339.7	33.8	1.0	76.7	94.7	92.3	5.3
1976: I.....	1,336.9	184.4	1,152.5	1,078.9	1,053.8	24.1	1.0	73.6	93.6	91.4	6.4
II.....	1,363.2	192.6	1,170.6	1,100.7	1,075.1	24.8	.9	69.9	94.0	91.8	6.0
III.....	1,392.8	200.0	1,192.8	1,124.8	1,098.4	25.5	.9	68.1	94.3	92.1	5.7
IV.....	1,430.5	209.0	1,221.5	1,160.9	1,133.7	26.2	1.0	60.7	95.0	92.8	5.0
1977: I.....	1,470.7	222.7	1,248.0	1,195.8	1,167.7	27.1	1.0	52.2	95.8	93.6	4.2
II.....	1,508.6	223.3	1,285.3	1,217.8	1,188.6	28.2	1.0	67.5	94.7	92.5	5.3
III.....	1,543.7	224.6	1,319.1	1,244.8	1,214.5	29.3	.9	74.3	94.4	92.1	5.6
IV.....	1,593.0	233.3	1,359.6	1,285.9	1,255.2	29.8	.9	73.7	94.6	92.3	5.4
1978: I.....	1,628.9	237.3	1,391.6	1,309.2	1,276.7	31.5	1.0	82.4	94.1	91.7	5.9
II.....	1,682.4	249.1	1,433.3	1,357.0	1,322.9	33.0	1.1	76.3	94.7	92.3	5.3
III.....	1,731.7	263.2	1,468.4	1,392.5	1,356.9	34.6	.9	76.0	94.8	92.4	5.2
IV p.....	1,786.4	275.0	1,511.4	1,439.2	1,402.2	36.0	1.0	72.3	95.2	92.8	4.8

Source: Department of Commerce, Bureau of Economic Analysis.



TABLE B-22.—Total and per capita disposable personal income and personal consumption expenditures in current and 1972 dollars, 1929-78

[Quarterly data at seasonally adjusted annual rates, except as noted]

Year or quarter	Disposable personal income				Personal consumption expenditures				Population (thousands) <sup>1</sup>
	Total (billions of dollars)		Per capita (dollars)		Total (billions of dollars)		Per capita (dollars)		
	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	
1929.....	82.3	229.8	675	1,886	77.3	215.6	634	1,769	121,875
1933.....	45.5	169.7	362	1,350	45.8	170.7	364	1,358	125,690
1939.....	69.9	230.1	534	1,756	67.0	220.3	511	1,681	131,028
1940.....	75.2	244.3	570	1,849	71.0	230.4	537	1,744	132,122
1941.....	92.0	278.1	690	2,084	80.8	244.1	605	1,830	133,402
1942.....	116.5	317.3	863	2,353	88.6	241.7	657	1,792	134,860
1943.....	132.9	332.2	972	2,429	99.4	248.7	727	1,819	136,739
1944.....	145.5	343.9	1,051	2,485	108.2	255.7	781	1,847	138,397
1945.....	149.0	338.6	1,065	2,420	119.5	271.4	854	1,939	139,928
1946.....	158.6	332.4	1,122	2,361	143.8	301.4	1,017	2,131	141,389
1947.....	168.4	318.8	1,168	2,212	161.7	306.2	1,122	2,124	144,126
1948.....	187.4	335.5	1,278	2,288	174.7	312.8	1,192	2,133	146,631
1949.....	187.1	336.1	1,254	2,253	178.1	320.0	1,194	2,145	149,188
1950.....	205.5	361.9	1,355	2,386	192.0	338.1	1,266	2,229	151,684
1951.....	224.8	371.6	1,457	2,408	207.1	342.3	1,342	2,219	154,287
1952.....	236.4	382.1	1,506	2,434	217.1	350.9	1,383	2,236	156,954
1953.....	250.7	397.5	1,571	2,491	229.7	364.2	1,439	2,283	159,565
1954.....	255.7	402.1	1,574	2,476	235.8	370.9	1,452	2,284	162,391
1955.....	273.4	425.9	1,654	2,577	253.7	395.1	1,535	2,391	165,275
1956.....	291.3	444.9	1,731	2,643	266.0	406.3	1,581	2,415	168,221
1957.....	306.9	453.9	1,792	2,650	280.4	414.7	1,637	2,421	171,274
1958.....	317.1	459.0	1,821	2,636	289.5	419.0	1,662	2,406	174,141
1959.....	336.1	477.4	1,898	2,696	310.8	441.5	1,755	2,493	177,073
1960.....	349.4	487.3	1,934	2,697	324.9	453.0	1,798	2,507	180,671
1961.....	362.9	500.6	1,976	2,725	335.0	462.2	1,824	2,516	183,691
1962.....	383.9	521.6	2,058	2,796	355.2	482.9	1,904	2,589	186,538
1963.....	402.8	539.2	2,128	2,849	374.6	501.4	1,979	2,649	189,242
1964.....	437.0	577.3	2,278	3,009	400.4	528.7	2,087	2,755	191,889
1965.....	472.2	612.4	2,430	3,152	430.2	558.1	2,214	2,872	194,303
1966.....	510.4	643.6	2,597	3,274	464.8	586.1	2,365	2,982	196,560
1967.....	544.5	669.8	2,740	3,371	490.4	603.2	2,468	3,035	198,712
1968.....	588.1	695.2	2,930	3,464	535.9	633.4	2,670	3,156	200,706
1969.....	630.4	712.3	3,111	3,515	579.7	655.4	2,860	3,234	202,677
1970.....	685.9	741.6	3,348	3,619	618.8	668.9	3,020	3,265	204,878
1971.....	742.8	769.0	3,588	3,714	668.2	691.9	3,227	3,342	207,053
1972.....	801.3	801.3	3,837	3,837	733.0	733.0	3,510	3,510	208,846
1973.....	901.7	854.7	4,285	4,062	809.9	767.7	3,849	3,648	210,410
1974.....	984.6	842.0	4,646	3,973	889.6	760.7	4,197	3,589	211,945
1975.....	1,086.7	859.7	5,088	4,025	979.1	774.6	4,584	3,627	213,566
1976.....	1,184.4	890.1	5,504	4,136	1,090.2	819.4	5,066	3,808	215,191
1977.....	1,303.0	926.3	6,009	4,271	1,206.5	857.7	5,564	3,955	216,856
1978 P.....	1,451.2	965.5	6,640	4,418	1,339.7	891.2	6,130	4,078	218,554
1976: I.....	1,152.5	881.8	5,370	4,109	1,053.8	806.3	4,910	3,757	214,608
II.....	1,170.6	886.3	5,446	4,124	1,075.1	814.0	5,002	3,787	214,948
III.....	1,192.8	891.5	5,538	4,139	1,098.4	820.9	5,100	3,812	215,380
IV.....	1,221.5	900.9	5,660	4,174	1,133.7	836.2	5,253	3,874	215,827
1977: I.....	1,248.0	904.8	5,772	4,185	1,167.7	846.6	5,401	3,916	216,206
II.....	1,285.3	918.6	5,934	4,241	1,188.6	849.5	5,487	3,922	216,603
III.....	1,319.1	931.9	6,077	4,293	1,214.5	858.0	5,595	3,953	217,073
IV.....	1,359.6	949.6	6,250	4,365	1,255.2	876.6	5,770	4,030	217,541
1978: I.....	1,391.6	952.1	6,387	4,370	1,276.7	873.5	5,859	4,009	217,897
II.....	1,433.3	960.3	6,566	4,399	1,322.9	886.3	6,060	4,060	218,290
III.....	1,468.4	968.7	6,712	4,428	1,356.9	895.1	6,203	4,092	218,768
IV P.....	1,511.4	980.9	6,893	4,474	1,402.2	910.0	6,395	4,150	219,259

<sup>1</sup> Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1960. Annual data are for July 1 through 1973 and are averages of quarterly data beginning 1974. Quarterly data are average for the period.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

TABLE B-23.—Gross saving and investment, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross saving							Gross investment			Statistical discrepancy	
	Total	Gross private saving			Government surplus or deficit (-), national income and product accounts			Capital grants received by the United States (net) <sup>2</sup>	Total	Gross private domestic investment		Net foreign investment <sup>3</sup>
		Total	Personal saving	Gross business saving <sup>1</sup>	Total	Federal	State and local					
1929.....	15.9	14.9	3.1	11.7	1.0	1.2	-0.2	.....	17.0	16.2	0.8	1.1
1933.....	9	2.2	-1.0	3.2	-1.4	-1.3	-1	.....	1.6	1.4	.2	.7
1939.....	8.7	10.9	2.1	8.8	-2.2	-2.2	.0	.....	10.1	9.3	.9	1.4
1940.....	13.5	14.2	3.3	10.9	-.7	-1.3	.6	.....	14.6	13.1	1.5	1.1
1941.....	18.5	22.2	10.2	12.0	-3.8	-5.1	1.3	.....	19.0	17.9	1.1	.5
1942.....	10.5	41.9	27.0	14.8	-31.4	-33.1	1.8	.....	9.7	9.9	-.2	-.8
1943.....	5.3	49.4	32.7	16.7	-44.1	-46.6	2.5	.....	3.5	5.8	-2.2	-1.8
1944.....	2.3	54.1	36.5	17.7	-51.8	-54.5	2.7	.....	5.1	7.2	-2.1	2.7
1945.....	5.1	44.6	28.5	16.0	-39.5	-42.1	2.6	.....	9.2	10.6	-1.4	4.1
1946.....	34.6	29.2	13.4	15.8	5.4	3.5	1.9	.....	35.3	30.7	4.6	.7
1947.....	41.2	26.8	4.9	21.8	14.4	-13.4	1.0	.....	42.9	34.0	9.0	1.8
1948.....	49.0	40.6	10.6	30.0	8.4	8.3	.1	.....	47.8	45.9	2.0	-1.2
1949.....	34.8	38.2	6.7	31.4	-3.4	-2.6	-.7	.....	35.9	35.3	.6	1.0
1950.....	49.7	41.6	10.8	30.8	8.0	9.2	-1.2	.....	51.7	53.8	-2.1	2.0
1951.....	55.5	49.4	14.8	34.6	6.1	6.5	-.4	.....	59.5	59.2	.3	4.0
1952.....	49.3	53.1	16.0	37.1	-3.8	-3.7	-.0	.....	51.9	52.1	-.2	2.7
1953.....	48.1	55.0	17.0	38.0	-6.9	-7.1	.1	.....	51.4	53.3	-1.9	3.3
1954.....	49.4	56.5	15.6	41.0	-7.1	-6.0	-1.1	.....	52.4	52.7	-.3	3.0
1955.....	65.6	62.4	14.9	47.5	3.1	4.4	-1.3	.....	68.0	68.4	-.3	2.5
1956.....	73.6	68.4	19.7	48.7	5.2	6.1	-.9	.....	72.8	71.0	1.8	-.8
1957.....	72.6	71.7	20.6	51.1	.9	2.3	-1.4	.....	72.8	69.2	3.6	.2
1958.....	60.4	73.0	21.7	51.3	-12.6	-10.3	-2.4	.....	62.0	61.9	.1	1.7
1959.....	75.8	77.3	18.8	58.5	-1.6	-1.1	-.4	.....	75.5	77.6	-2.0	-.2
1960.....	78.9	75.8	17.1	58.7	3.1	3.0	.1	.....	78.2	76.4	1.7	-.7
1961.....	75.8	80.0	20.2	59.8	-4.3	-3.9	-.4	.....	77.3	74.3	3.0	1.6
1962.....	83.6	87.4	20.4	67.0	-3.8	-4.2	.5	.....	87.6	85.2	2.4	4.0
1963.....	89.6	88.9	18.8	70.1	.7	.3	.5	.....	93.4	90.2	3.2	3.7
1964.....	100.1	102.4	26.1	76.2	-2.3	-3.3	1.0	.....	102.3	96.6	5.7	2.2
1965.....	115.4	114.9	30.3	84.6	.5	.5	-.0	.....	116.3	112.0	4.3	.9
1966.....	122.9	124.2	33.0	91.2	-1.3	-1.8	.5	.....	126.1	124.5	1.6	3.2
1967.....	120.3	134.6	40.9	93.7	-14.2	-13.2	-1.1	.....	122.1	120.8	1.2	1.7
1968.....	130.8	136.3	38.1	98.7	-5.5	-5.8	.3	.....	130.2	131.5	-1.4	-.6
1969.....	147.5	136.8	35.1	101.7	10.7	8.5	2.1	.....	144.2	146.2	-2.0	-3.3
1970.....	143.4	151.9	50.6	101.4	-9.4	-12.1	2.8	.....	141.4	140.8	.5	-2.1
1971.....	155.4	173.0	57.3	115.7	-18.3	-22.0	3.7	.9	156.8	160.0	-3.2	1.3
1972.....	177.5	180.4	49.4	131.0	-3.5	-17.3	13.7	.7	179.2	188.3	-9.0	1.7
1973.....	216.8	210.5	70.3	140.2	6.3	-6.7	13.0	.0	219.4	220.0	-.6	2.6
1974.....	204.4	209.5	71.7	137.9	-3.2	-10.7	7.6	-2.0	210.1	214.6	-4.5	5.8
1975.....	195.4	259.8	83.6	176.2	-64.4	-70.6	6.2	.0	202.8	190.9	11.9	7.4
1976.....	237.5	270.7	68.0	202.6	-33.2	-53.8	20.7	.0	241.7	243.0	-1.2	4.2
1977.....	272.2	290.8	66.9	223.9	-18.6	-48.1	29.6	.0	276.9	297.8	-20.9	4.7
1978 p.....	318.8	320.4	76.7	243.6	-1.5	-29.4	27.8	.0	319.7	344.5	-24.8	.9
1976: I.....	230.1	275.1	73.6	201.5	-44.9	-57.7	12.8	.0	233.5	231.5	2.0	3.4
II.....	240.9	270.8	69.9	200.9	-29.9	-46.4	16.4	.0	245.0	243.5	1.5	4.1
III.....	243.5	274.1	68.1	206.0	-30.6	-52.0	21.4	.0	247.5	249.9	-2.4	4.0
IV.....	235.6	262.7	60.7	202.0	-27.1	-59.1	32.0	.0	241.0	247.1	-6.1	5.3
1977: I.....	251.8	259.6	52.2	207.4	-7.8	-37.3	29.5	.0	255.2	272.5	-17.3	3.4
II.....	276.8	288.6	67.5	221.1	-11.8	-40.3	28.5	.0	280.4	295.6	-15.2	3.7
III.....	285.5	310.7	74.3	236.4	-25.2	-56.4	31.2	.0	292.6	309.7	-17.1	7.1
IV.....	274.7	304.3	73.7	230.6	-29.6	-58.6	29.0	.0	279.5	313.5	-34.1	4.8
1978: I.....	284.2	305.4	82.4	223.0	-21.1	-52.6	31.5	.0	286.4	322.7	-36.3	2.2
II.....	326.1	319.9	76.3	243.6	6.2	-23.6	29.8	.0	326.6	345.4	-18.9	.5
III.....	326.2	325.7	76.0	249.7	.6	-22.8	23.4	.0	326.6	350.1	-23.5	.4
IV p.....	.....	.....	72.3	.....	.....	.....	.....	.0	339.1	359.9	-20.7	.....

<sup>1</sup> Undistributed corporate profits with inventory valuation and capital consumption adjustments, corporate and non-corporate capital consumption allowances with capital consumption adjustment, and private wage accruals less disbursements.

<sup>2</sup> Allocations of special drawing rights (SDR), except as noted in footnote 4.

<sup>3</sup> Net exports of goods and services less net transfers to foreigners and interest paid by government to foreigners plus capital grants received by the United States, net.

<sup>4</sup> In February 1974, the U.S. Government paid to India \$2,010 million in rupees under provisions of the Agricultural Trade Development and Assistance Act. This transaction is being treated as capital grants paid to foreigners, i.e., a -\$2.0 billion entry in capital grants received by the United States, net.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-24.—Saving by individuals, 1946-78<sup>1</sup>

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Increase in financial assets								Net investment in			Less: Net increase in debt		
	Total	Total <sup>2</sup>	Cur- rency and demand deposits	Sav- ings ac- counts	Securities			Insur- ance and pension reserves <sup>4</sup>	Non- farm homes	Con- sumer du- rables	Non- cor- porate busi- ness assets	Mort- gage debt on non- farm homes	Con- sumer credit	Other debt <sup>5</sup>
					Gov- ern- ment securi- ties <sup>3</sup>	Corpo- rate and for- eign bonds	Corpo- rate equi- ties <sup>4</sup>							
1946	22.2	18.9	5.6	6.3	-1.5	-0.9	1.1	5.3	3.6	3.9	2.1	3.6	2.7	-0.0
1947	21.0	13.2	.1	3.4	1.6	-.8	1.1	5.4	6.7	9.5	2.0	4.7	3.2	2.6
1948	25.3	9.1	-2.9	2.2	1.3	-.1	1.0	5.3	9.1	10.4	7.1	4.6	2.9	3.0
1949	21.4	10.0	-2.0	2.6	1.8	-.1	.7	5.6	8.4	10.9	2.0	4.4	2.9	2.4
1950	30.5	13.7	2.6	2.5	-.1	-.8	.7	6.9	11.8	14.2	7.0	6.7	4.1	5.4
1951	34.1	19.2	4.6	4.8	-.6	-.2	1.8	6.3	11.7	10.4	4.4	6.6	1.2	3.8
1952	29.9	23.1	1.6	7.8	2.5	-.0	1.6	7.7	11.3	7.5	2.0	6.2	4.8	3.0
1953	31.8	22.8	1.0	8.2	2.5	-.1	1.0	7.9	12.3	9.6	.8	7.6	3.9	2.2
1954	27.8	22.1	2.2	9.2	1.0	-.9	.8	7.8	12.7	7.0	1.5	8.7	1.1	5.8
1955	33.3	28.1	1.2	8.6	5.8	.7	1.0	8.5	16.7	11.6	2.4	12.2	6.4	6.9
1956	36.4	30.1	1.8	9.5	3.9	1.0	2.0	9.5	15.6	8.4	.5	11.2	3.5	3.5
1957	36.1	28.6	-.4	12.0	2.3	.9	1.5	9.5	13.2	7.8	2.1	8.9	2.6	4.0
1958	33.5	31.6	3.8	13.9	-2.5	1.2	1.5	10.4	12.1	3.5	2.3	9.5	2.2	6.3
1959	37.5	37.2	.8	11.1	10.1	.4	.6	11.9	15.9	8.0	3.4	12.8	6.4	7.8
1960	35.6	32.6	1.0	12.1	2.4	.7	-.5	11.5	14.3	7.4	3.1	11.7	4.6	5.5
1961	34.9	35.9	-.9	18.3	1.8	-.1	.3	12.1	12.0	4.8	3.3	12.2	1.8	7.1
1962	40.7	40.1	-1.2	26.2	1.3	-.4	-2.1	12.7	12.8	9.1	6.3	14.1	5.8	7.5
1963	46.4	47.7	4.2	26.3	1.7	-.1	-2.5	13.9	13.4	12.2	8.5	16.2	7.9	11.2
1964	55.8	56.2	5.2	26.2	5.1	-.5	-.1	16.1	13.9	15.3	7.7	17.5	8.5	11.2
1965	62.8	59.1	7.5	28.0	3.9	.5	-2.1	16.9	13.4	19.1	11.2	17.0	9.6	13.4
1966	70.3	58.4	2.4	19.1	11.7	1.4	-.7	19.2	12.6	21.2	9.4	13.8	6.4	11.1
1967	75.8	70.9	9.9	35.3	-.7	4.0	-4.2	19.0	10.9	18.7	8.5	12.5	4.5	16.1
1968	81.0	76.4	11.1	31.1	5.7	4.2	-6.5	20.2	14.3	24.3	9.4	17.1	10.0	16.2
1969	71.1	64.2	-2.5	9.1	25.3	5.4	-3.7	21.3	14.2	23.8	11.4	18.5	10.4	13.6
1970	84.0	79.1	8.9	43.6	-7.2	9.5	-1.6	24.4	11.7	17.4	9.8	14.1	5.9	13.9
1971	97.7	103.5	13.1	67.8	-9.9	8.3	-5.1	27.3	18.8	25.1	13.5	27.0	13.1	23.0
1972	115.2	128.3	14.5	74.6	1.6	4.4	-5.7	29.3	26.0	33.6	17.7	41.6	17.1	31.7
1973	134.0	146.8	15.4	64.2	22.0	1.3	-6.9	33.0	28.2	39.0	20.3	47.1	23.8	29.4
1974	125.9	138.8	7.9	57.2	22.6	4.7	-2.2	36.0	23.1	27.0	2.8	35.4	10.2	20.2
1975	145.7	166.4	5.2	84.8	20.6	8.0	-3.6	43.4	20.9	22.5	-.3	38.1	9.4	16.3
1976	154.4	199.8	13.8	108.1	9.9	2.1	-3.4	52.9	33.2	40.1	-3.5	61.3	23.6	30.3
1977	166.3	235.7	20.4	108.3	14.3	1.1	-5.1	63.6	48.0	49.4	5.6	93.0	35.0	44.4
1977: I	148.8	218.7	24.3	110.4	7.2	-.9	-9.6	54.6	39.8	48.9	1.2	75.9	33.2	50.7
II	146.2	213.5	28.0	99.8	3.6	-.0	-4.3	49.9	45.6	48.1	9.1	92.9	38.3	38.8
III	206.4	283.0	22.3	135.2	6.7	3.5	-5.7	91.6	52.1	46.8	4.3	102.4	32.6	44.9
IV	163.7	227.6	6.9	88.0	39.6	.2	-.8	58.4	54.5	53.8	7.7	100.8	36.2	42.9
1978: I	161.2	236.9	22.2	90.1	30.2	-1.0	.1	59.0	57.8	47.4	-3.1	92.1	38.0	47.7
II	195.5	278.8	23.5	111.8	31.3	-4.1	-8.8	72.8	58.2	59.0	1.6	89.4	51.6	61.1
III	180.8	245.8	17.9	107.4	25.8	-.1	-7.5	65.9	59.9	57.7	3.9	92.9	43.4	50.3

<sup>1</sup> Saving by households, personal trust funds, nonprofit institutions, farms, and other noncorporate business.<sup>2</sup> Includes commercial paper and miscellaneous financial assets, not shown separately.<sup>3</sup> Consists of U.S. savings bonds, other U.S. Treasury securities, U.S. Government agency securities and sponsored agency securities, and State and local obligations.<sup>4</sup> Includes investment company shares.<sup>5</sup> Private life insurance reserves, private insured and noninsured pension reserves, and government insurance and pension reserves.<sup>6</sup> Security credit, policy loans, noncorporate business mortgage debt, and other debt.

Source: Board of Governors of the Federal Reserve System.

TABLE B-25.—Money income (in 1977 dollars) and poverty status of families and unrelated individuals by race of head, 1947-77

Year	Total				White				Black and other races				
	Total number (millions)	Median income	Percent with incomes		Total number (millions)	Median income	Percent with incomes		Total number (millions)	Median income	Percent with incomes		
			Below poverty level	\$25,000 and over			Below poverty level	\$25,000 and over			Below poverty level	\$25,000 and over	
<b>FAMILIES</b>													
1947	37.2	\$8,223			34.1	\$8,566			3.1	\$4,378			
1948	38.6	8,024			35.3	8,332			3.3	4,451			
1949	39.3	7,899				8,215				4,195			
1950	39.9	8,356				8,672				4,704			
1951	40.6	8,652				9,003				4,741			
1952	40.8	8,881		3.2		9,393		3.6		5,338		0.5	
1953	41.2	9,611		3.8		9,965		4.1		5,587		.4	
1954	42.0	9,996		4.0	38.2	9,781		4.3	3.8	5,448		.5	
1955	42.9	9,999		4.3	39.0	10,439		4.7	3.9	5,757		.3	
1956	43.5	10,658		5.4	39.5	11,153		5.8	4.0	5,868		.6	
1957	43.7	10,692		4.8	39.7	11,127		5.3	4.0	5,949		.3	
1958	44.2	10,661		5.4	40.2	11,108		5.8	4.0	5,690		1.0	
1959	45.1	11,262		6.6	40.9	11,732		15.2	7.2	4.2	6,060	50.4	1.0
1960	45.5	11,500		18.1	7.4	41.1	11,940	14.9	8.0	4.3	6,610	49.0	1.7
1961	46.4	11,617		18.1	8.4	41.9	12,115	14.8	9.2	4.5	6,463	49.0	2.4
1962	47.1	11,931		17.2	8.8	42.4	12,495	13.9	9.5	4.6	6,666	48.0	1.9
1963	47.5	12,368		15.9	9.8	42.7	12,961	12.8	10.6	4.8	6,857	43.7	2.7
1964	48.0	12,834		15.0	10.7	43.1	13,398	12.2	11.5	4.8	7,498	40.0	3.3
1965	48.5	13,362		13.9	11.8	43.5	13,927	11.1	12.8	4.8	7,670	39.7	3.0
1966	49.2	14,064		11.8	13.4	44.1	14,611	9.3	14.5	5.0	8,759	33.9	3.9
1967	50.1	14,398		11.4	14.6	44.8	14,945	9.0	15.6	5.0	9,246	32.1	5.7
1968	50.8	15,036		10.0	16.7	45.4	15,567	8.0	17.7	5.1	9,737	28.2	7.3
1969	51.6	15,593		9.7	18.8	46.0	16,190	7.7	20.0	5.2	10,234	26.9	8.0
1970	52.2	15,399		10.1	18.2	46.5	15,974	8.0	19.3	5.4	10,169	28.1	8.4
1971	53.3	15,389		10.0	18.0	47.6	15,968	7.9	19.1	5.7	10,046	27.4	8.1
1972	54.4	16,102		9.3	20.5	48.5	16,729	7.1	21.9	5.9	10,293	27.7	9.3
1973	55.1	16,433		8.8	20.9	48.9	17,175	6.6	22.4	6.1	10,358	26.2	9.4
1974	55.7	15,773		9.2	18.9	49.5	16,412	7.0	20.2	6.3	10,156	26.0	8.5
1974 <sup>2</sup>	55.7	15,855		8.8	21.4	49.4	16,476	6.8	22.7	6.3	10,541	25.1	10.7
1975	56.2	15,447		9.7	19.4	49.9	16,065	7.7	20.7	6.4	10,495	25.3	9.4
1976	56.7	15,923		9.4	20.8	50.1	16,539	7.1	22.2	6.6	10,455	26.4	10.0
1977	57.2	16,009		9.3	22.4	50.5	16,740	7.0	23.9	6.7	10,142	26.5	10.8
<b>UNRELATED INDIVIDUALS</b>													
1947	8.2	\$2,659			7.2	\$2,809			1.0	\$2,024			
1948	8.4	2,509			7.3	2,651			1.0	1,986			
1949	9.0	2,669				2,881				2,083			
1950	9.4	2,630				2,806				2,056			
1951	9.1	2,787				2,934				2,168		0.6	
1952	9.7	3,218		1.2		3,467		1.2		2,398		.4	
1953	9.5	3,162		1.9		3,338		2.2		2,398		.3	
1954	9.7	2,756		2.1	8.3	2,966		2.4	1.4	2,624		.5	
1955	9.9	2,981		1.8	8.3	3,169		2.0	1.4	1,969		.2	
1956	9.8	3,179		2.2	8.5	3,263		2.5	1.4	2,116		.7	
1957	10.4	3,215		2.3	8.5	3,440		2.5	1.3	2,423		.3	
1958	10.9	3,115		3.2	8.9	3,440		3.7	1.5	2,186		.6	
1959	10.9	3,238		3.7	9.2	3,337		4.2	1.6	2,263		.6	
1960	11.1	3,519		3.7	9.3	3,459		4.2	1.6	2,234	57.4	1.0	
1961	11.1	3,519		3.7	9.6	3,805		4.1	1.5	2,185	59.3	1.1	
1962	11.2	3,552		4.5	9.6	3,819		5.4	1.6	2,345	62.7	1.4	
1963	11.0	3,511		4.5	9.5	3,758		6.5	1.5	2,509	62.1	2.0	
1964	11.2	3,563		4.2	9.7	3,735		6.9	1.5	2,564	58.3	1.2	
1965	12.1	3,874		6.6	10.4	4,080		7.4	1.6	2,796	55.0	2.2	
1966	12.2	4,135		39.8	7.4	4,312		38.1	8.3	1.7	3,144	50.7	1.8
1967	12.5	4,276		38.3	7.4	4,496		36.1	8.2	1.6	2,827	53.1	2.1
1968	13.2	4,318		38.1	8.2	4,483		36.5	8.9	1.8	3,312	48.2	3.3
1969	13.9	4,853		34.0	10.1	5,142		32.2	11.0	1.8	3,482	45.7	4.1
1970	14.6	4,845		34.0	9.9	5,088		32.1	10.9	2.0	3,587	45.5	3.6
1971	15.5	4,896		32.9	10.3	5,124		30.8	11.2	1.9	3,501	46.7	3.4
1972	16.3	4,962		31.6	10.6	5,185		29.6	11.4	2.1	3,479	44.9	4.7
1973	16.8	5,100		29.0	11.2	5,326		27.1	12.0	2.3	3,956	40.9	6.1
1974	18.3	5,637		25.6	12.6	5,823		23.7	13.3	2.5	4,351	37.8	7.9
1974 <sup>2</sup>	18.9	5,455		25.5	11.0	5,697		23.2	11.8	2.6	3,870	40.0	6.1
1975	18.9	5,656		24.1	11.5	5,860		21.8	12.2	2.6	4,097	38.0	6.9
1976	20.2	5,497		25.1	11.0	5,741		22.7	11.7	2.7	3,819	40.9	6.4
1977	21.5	5,722		24.9	11.8	5,968		22.7	12.5	2.9	3,919	39.5	7.0
1977	23.1	5,907		22.6	12.6	6,131		20.4	13.3	3.2	4,642	35.9	8.1

<sup>1</sup> Revised using population controls based on the 1970 census. Such controls are not available by race.  
<sup>2</sup> Based on revised methodology procedures.

Note.—The poverty level is based on the poverty index adopted by a Federal interagency committee in 1969. That index reflects different consumption requirements for families based on size and composition, sex and age of family head, and farm-nonfarm residence. The poverty thresholds are updated every year to reflect changes in the consumer price index. For further details, see "Current Population Reports," Series P-60, No. 116, Bureau of the Census.

Source: Department of Commerce, Bureau of the Census.

# POPULATION, EMPLOYMENT, WAGES, AND PRODUCTIVITY

TABLE E-26.—*Population by age groups, 1929-78*

[Thousands of persons]

July 1	Total	Age (years)						
		Under 5	5-15	16-19	20-24	25-44	45-64	65 and over
1929	121,767	11,734	26,800	9,127	10,694	35,862	21,076	6,474
1933	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,363
1939	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,764
1940	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,031
1941	133,402	10,850	24,516	9,840	11,807	40,383	26,718	9,288
1942	134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,584
1943	136,739	12,016	24,093	9,607	12,064	41,420	27,671	9,867
1944	138,397	12,524	23,949	9,561	12,062	42,016	28,138	10,147
1945	139,928	12,979	23,907	9,361	12,036	42,521	28,630	10,494
1946	141,389	13,244	24,103	9,119	12,004	43,027	29,064	10,828
1947	144,126	14,406	24,468	9,097	11,814	43,657	29,498	11,185
1948	146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,538
1949	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,921
1950	152,271	16,410	26,721	8,542	11,680	45,672	30,849	12,397
1951	154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,803
1952	157,553	17,312	28,894	8,414	11,350	46,495	31,884	13,203
1953	160,184	17,638	30,227	8,460	11,062	46,786	32,394	13,617
1954	163,026	18,057	31,480	8,637	10,832	47,001	32,942	14,076
1955	165,931	18,566	32,682	8,744	10,714	47,194	33,506	14,525
1956	168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,938
1957	171,984	19,494	35,272	9,195	10,603	47,440	34,591	15,388
1958	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,806
1959	177,830	20,175	37,368	10,215	10,969	47,192	35,663	16,248
1960	180,671	20,341	38,494	10,683	11,134	47,140	36,203	16,675
1961	183,691	20,522	39,765	11,025	11,483	47,084	36,722	17,089
1962	186,538	20,469	41,205	11,180	11,959	47,013	37,255	17,457
1963	189,242	20,342	41,626	12,007	12,714	46,994	37,782	17,778
1964	191,889	20,165	42,297	12,736	13,269	46,958	38,338	18,127
1965	194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,451
1966	196,560	19,208	43,702	14,311	14,050	47,001	39,534	18,755
1967	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,071
1968	200,706	17,913	44,622	11,452	15,786	47,721	40,846	19,365
1969	202,677	17,376	44,840	14,800	16,480	48,064	41,437	19,680
1970	204,878	17,148	44,774	15,275	17,184	48,435	41,975	20,087
1971	207,053	17,177	44,441	15,635	18,089	48,811	42,413	20,488
1972	208,846	16,990	43,948	15,946	18,032	50,254	42,785	20,892
1973	210,410	16,694	43,227	16,310	18,345	51,411	43,077	21,346
1974	211,901	16,288	42,538	16,590	18,741	52,593	43,319	21,833
1975	213,559	15,879	41,956	16,793	19,229	53,735	43,546	22,420
1976	215,152	15,345	41,459	16,928	19,629	55,130	43,707	22,954
1977	216,863	15,241	40,574	16,966	20,076	56,705	43,793	23,507
1978	218,548	15,361	39,598	16,921	20,441	58,320	43,852	24,054

Note.— Includes Armed Forces overseas beginning 1940. Includes Alaska and Hawaii beginning 1950.

Source: Department of Commerce, Bureau of the Census.

TABLE B-27.—Noninstitutional population and the labor force, 1929-78

(Monthly data seasonally adjusted, except as noted)

Year or month	Noninstitutional population <sup>1</sup>	Armed Forces <sup>1</sup>	Civilian labor force				Unemployment rate (percent of civilian labor force)	Civilian labor force participation rate <sup>2</sup>			
			Total	Employment		Unemployment		Total	Males	Females	
				Total	Agricultural						Non-agricultural
			Thousands of persons 14 years of age and over				Percent				
1929		260	49,180	47,630	10,450	37,180	1,550	3.2			
1933		250	51,590	38,760	10,090	28,670	12,830	24.9			
1939		370	55,230	45,750	9,610	36,140	9,480	17.2			
1940	100,380	540	55,640	47,520	9,540	37,980	8,120	14.6	55.7	83.7	28.1
1941	101,520	1,620	55,910	50,350	9,100	41,250	5,560	9.9	56.0	84.3	28.7
1942	102,610	3,970	56,410	53,750	9,250	44,500	2,660	4.7	57.2	85.6	31.3
1943	103,660	9,020	55,540	54,470	9,080	45,390	1,070	1.9	58.7	86.4	36.0
1944	104,630	11,410	54,630	53,960	8,950	45,010	670	1.2	58.6	87.0	36.5
1945	105,530	11,440	53,860	52,820	8,580	44,240	1,040	1.9	57.2	84.8	35.9
1946	106,520	3,450	57,520	55,250	8,320	46,930	2,270	3.9	55.8	82.6	31.2
1947	107,608	1,590	60,168	57,812	8,256	49,557	2,356	3.9	56.8	84.0	31.0
			Thousands of persons 16 years of age and over								
1947	103,418	1,591	59,350	57,038	7,890	49,148	2,311	3.9	58.3	86.4	31.8
1948	104,527	1,459	60,621	58,343	7,629	50,714	2,276	3.8	58.8	86.6	32.7
1949	105,611	1,617	61,286	57,651	7,658	49,993	3,637	5.9	58.9	86.4	33.1
1950	106,645	1,650	62,208	58,918	7,160	51,758	3,288	5.3	59.2	86.4	33.9
1951	107,721	3,100	62,017	59,961	6,726	53,235	2,055	3.3	59.3	86.5	34.6
1952	108,823	3,592	62,138	60,250	6,500	53,749	1,883	3.0	59.0	86.3	34.7
1953 <sup>3</sup>	110,601	3,545	63,015	61,179	6,260	54,919	1,834	2.9	58.9	86.0	34.4
1954	111,671	3,350	63,643	60,109	6,205	53,904	3,532	5.5	58.8	85.5	34.6
1955	112,732	3,049	65,023	62,170	6,450	55,722	2,852	4.4	59.3	85.3	35.7
1956	113,811	2,857	66,552	63,799	6,283	57,514	2,750	4.1	60.0	85.5	36.9
1957	115,065	2,800	66,929	64,071	5,947	58,123	2,859	4.3	59.6	84.8	36.9
1958	116,363	2,636	67,639	63,036	5,586	57,450	4,602	6.8	59.5	84.2	37.1
1959	117,881	2,552	68,369	64,630	5,565	59,065	3,740	5.5	59.3	83.7	37.1
1960 <sup>3</sup>	119,759	2,514	69,628	65,778	5,458	60,318	3,852	5.5	59.4	83.3	37.7
1961	121,343	2,572	70,459	65,746	5,200	60,546	4,714	6.7	59.3	82.9	38.1
1962 <sup>3</sup>	122,981	2,828	70,614	66,702	4,944	61,759	3,911	5.5	58.8	82.0	37.9
1963	125,154	2,738	71,833	67,762	4,687	63,076	4,070	5.7	58.7	81.4	38.3
1964	127,224	2,739	73,091	69,305	4,523	64,782	3,786	5.2	58.7	81.0	38.7
1965	129,236	2,723	74,455	71,088	4,361	66,726	3,366	4.5	58.9	80.7	39.3
1966	131,180	3,123	75,770	72,895	3,979	68,915	2,875	3.8	59.2	80.4	40.3
1967	133,319	3,446	77,347	74,372	3,844	70,527	2,975	3.8	59.6	80.4	41.1
1968	135,562	3,535	78,737	75,920	3,817	72,103	2,817	3.6	59.6	80.1	41.6
1969	137,841	3,506	80,734	77,902	3,606	74,296	2,832	3.5	60.1	79.8	42.7
1970	140,182	3,188	82,715	78,627	3,462	75,165	4,088	4.9	60.4	79.7	43.3
1971	142,596	2,817	84,113	79,120	3,387	75,732	4,993	5.9	60.2	79.1	43.3
1972 <sup>3</sup>	145,775	2,449	86,542	81,702	3,472	78,230	4,840	5.6	60.4	79.0	43.9
1973 <sup>3</sup>	148,263	2,326	88,714	84,409	3,452	80,957	4,304	4.9	60.8	78.8	44.7
1974	150,827	2,229	91,011	85,935	3,492	82,443	5,076	5.6	61.2	78.7	45.6
1975	153,449	2,180	92,613	84,783	3,380	81,403	7,830	8.5	61.2	77.9	46.3
1976	156,048	2,144	94,773	87,485	3,297	84,188	7,288	7.7	61.6	77.5	47.3
1977	158,559	2,133	97,401	90,546	3,244	87,302	6,855	7.0	62.3	77.7	48.4
1978 <sup>3</sup>	161,058	2,117	100,420	94,373	3,342	91,031	6,047	6.0	63.2	77.9	50.0

See next page for continuation of table.

TABLE B-27.—Noninstitutional population and the labor force, 1929-78—Continued

[Monthly data seasonally adjusted, except as noted]

Year or month	Non-institutional population <sup>1</sup>	Armed Forces <sup>1</sup>	Civilian labor force					Unemployment rate (percent of civilian labor force)	Civilian labor force participation rate <sup>2</sup>		
			Total	Employment			Unemployment		Total	Males	Females
				Total	Agricultural	Non-agricultural					
Thousands of persons 16 years of age and over							Percent				
1976: Jan.....	154,915	2,140	93,614	86,224	3,342	82,882	7,390	7.9	61.3	77.4	46.8
Feb.....	155,106	2,146	93,683	86,488	3,275	83,213	7,195	7.7	61.2	77.3	46.9
Mar.....	155,325	2,147	93,909	86,805	3,271	83,534	7,104	7.6	61.3	77.3	47.0
Apr.....	155,516	2,144	94,356	87,138	3,398	83,740	7,218	7.6	61.5	77.7	47.1
May.....	155,711	2,142	94,475	87,438	3,302	84,136	7,037	7.4	61.5	77.6	47.1
June.....	155,925	2,137	94,527	87,321	3,272	84,049	7,206	7.6	61.5	77.3	47.3
July.....	156,142	2,140	95,188	87,818	3,320	84,498	7,370	7.7	61.8	77.6	47.6
Aug.....	156,367	2,147	95,285	87,900	3,349	84,551	7,385	7.8	61.8	77.6	47.7
Sept.....	156,595	2,145	95,143	87,863	3,257	84,606	7,280	7.7	61.6	77.5	47.3
Oct.....	156,788	2,147	95,163	87,840	3,286	84,554	7,323	7.7	61.5	77.5	47.3
Nov.....	157,006	2,149	95,745	88,278	3,243	85,035	7,467	7.8	61.8	77.6	47.7
Dec.....	157,176	2,146	95,840	88,454	3,231	85,223	7,386	7.7	61.8	77.5	47.7
1977: Jan.....	157,381	2,133	95,774	88,659	3,130	85,529	7,115	7.4	61.7	77.4	47.6
Feb.....	157,584	2,137	96,316	89,048	3,188	85,860	7,268	7.5	62.0	77.6	47.9
Mar.....	157,782	2,138	96,654	89,503	3,191	86,312	7,151	7.4	62.1	77.6	48.2
Apr.....	157,986	2,132	96,749	89,805	3,261	86,544	6,944	7.2	62.1	77.5	48.3
May.....	158,228	2,128	97,062	90,166	3,349	86,817	6,896	7.1	62.2	77.6	48.4
June.....	158,456	2,129	97,508	90,560	3,291	87,209	7,008	7.2	62.2	77.8	48.5
July.....	158,682	2,135	97,311	90,605	3,198	87,407	6,706	6.9	62.2	77.6	48.3
Aug.....	158,899	2,137	97,698	90,903	3,219	87,684	6,795	7.0	62.3	77.6	48.6
Sept.....	159,114	2,131	97,811	91,187	3,188	87,999	6,624	6.8	62.3	77.3	48.8
Oct.....	159,334	2,134	98,028	91,374	3,238	88,136	6,654	6.8	62.4	77.8	48.5
Nov.....	159,522	2,132	98,838	92,203	3,364	88,839	6,635	6.7	62.8	78.0	49.2
Dec.....	159,736	2,129	98,748	92,561	3,304	89,257	6,187	6.3	62.7	77.9	49.0
1978: Jan <sup>3</sup> .....	159,937	2,121	99,215	92,923	3,363	89,560	6,292	6.3	62.9	78.0	49.2
Feb.....	160,128	2,124	99,139	93,047	3,280	89,767	6,092	6.1	62.7	77.8	49.2
Mar.....	160,313	2,122	99,435	93,282	3,334	89,948	6,153	6.2	62.9	77.9	49.4
Apr.....	160,504	2,118	99,767	93,704	3,274	90,430	6,063	6.1	63.0	77.8	49.7
May.....	160,713	2,113	100,109	93,953	3,243	90,710	6,156	6.1	63.1	77.9	49.9
June.....	160,928	2,098	100,504	94,640	3,424	91,216	5,864	5.8	63.3	78.0	50.1
July.....	161,148	2,116	100,622	94,446	3,377	91,069	6,176	6.1	63.3	77.8	50.3
Aug.....	161,348	2,122	100,663	94,723	3,351	91,372	5,940	5.9	63.2	77.7	50.2
Sept.....	161,570	2,123	100,974	95,010	3,406	91,604	5,964	5.9	63.3	77.7	50.5
Oct.....	161,829	2,122	101,077	95,241	3,374	91,867	5,836	5.8	63.3	77.7	50.3
Nov.....	162,033	2,117	101,628	95,751	3,275	92,476	5,877	5.8	63.6	78.0	50.6
Dec.....	162,250	2,108	101,867	95,855	3,387	92,468	6,012	5.9	63.6	78.0	50.7

<sup>1</sup> Not seasonally adjusted.

<sup>2</sup> Civilian labor force as percent of civilian noninstitutional population.

<sup>3</sup> Not strictly comparable with earlier data due to population adjustments as follows: Beginning 1953, introduction of 1950 census data added about 600,000 to population and about 350,000 to labor force, total employment, and agricultural employment. Beginning 1960, inclusion of Alaska and Hawaii added about 500,000 to population, about 300,000 to labor force, and about 240,000 to nonagricultural employment. Beginning 1962, introduction of 1960 census data reduced population by about 50,000 and labor force and employment by about 200,000. Beginning 1972, introduction of 1970 census data added about 800,000 to civilian noninstitutional population and about 333,000 to labor force and employment. A subsequent adjustment based on 1970 census in March 1973 added 60,000 to labor force and to employment. Beginning 1978, changes in sampling and estimation procedures introduced into the household survey added about 250,000 to labor force and to employment. Unemployment levels and rates were not significantly affected.

Note.—Labor force data in Tables B-27 through B-32 are based on household interviews and relate to the calendar week including the 12th of the month. For definitions of terms, area samples used, historic comparability of the data, comparability with other series, etc., see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-28.—Civilian employment and unemployment by sex and age, 1947-78

(Thousands of persons 16 years of age and over; monthly data seasonally adjusted)

Year or month	Employment						Unemployment							
	Total	Males			Females			Total	Males			Females		
		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1947...	57,038	40,995	2,218	38,776	16,045	1,691	14,354	2,311	1,692	270	1,422	619	144	475
1948...	58,343	41,725	2,345	39,382	16,617	1,683	14,937	2,276	1,559	255	1,305	717	152	564
1949...	57,651	40,925	2,124	38,803	16,723	1,588	15,137	3,637	2,572	352	2,219	1,065	223	841
1950...	58,918	41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049	195	854
1951...	59,961	41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834	145	689
1952...	60,250	41,682	2,106	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698	140	559
1953...	61,179	42,430	2,135	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632	123	510
1954...	60,109	41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188	191	997
1955...	62,170	42,621	2,095	40,526	19,551	1,548	18,002	2,852	1,854	274	1,580	998	176	823
1956...	63,759	43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	191	1,442	1,039	209	832
1957...	64,071	43,357	2,117	41,239	20,714	1,663	19,052	2,859	1,841	299	1,541	1,018	197	821
1958...	63,036	42,423	2,012	40,411	20,613	1,570	19,043	4,602	3,098	416	2,681	1,504	262	1,242
1959...	64,630	43,466	2,198	41,267	21,164	1,640	19,524	3,740	2,420	398	2,022	1,320	256	1,063
1960...	65,778	43,904	2,360	41,543	21,874	1,769	20,105	3,852	2,486	425	2,060	1,366	286	1,080
1961...	65,746	43,656	2,314	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717	349	1,368
1962...	66,702	44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	407	2,016	1,488	313	1,175
1963...	67,762	44,657	2,406	42,251	23,105	1,849	21,257	4,070	2,472	500	1,971	1,598	383	1,216
1964...	69,305	45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581	386	1,195
1965...	71,088	46,340	2,918	43,422	24,748	2,118	22,630	3,366	1,914	479	1,435	1,452	395	1,056
1966...	72,895	46,919	3,252	43,668	25,976	2,469	23,510	2,875	1,551	432	1,120	1,324	404	921
1967...	74,372	47,479	3,186	44,293	26,893	2,497	24,397	2,975	1,508	448	1,060	1,468	391	1,078
1968...	75,920	48,114	3,255	44,859	27,807	2,525	25,281	2,817	1,419	427	993	1,397	412	985
1969...	77,902	48,818	3,430	45,388	29,084	2,686	26,397	2,832	1,403	441	963	1,429	412	1,016
1970...	78,627	48,960	3,407	45,553	29,667	2,734	26,933	4,088	2,235	599	1,636	1,853	506	1,347
1971...	79,120	49,245	3,470	45,775	29,875	2,725	27,149	4,993	2,776	691	2,086	2,217	567	1,650
1972...	81,702	50,630	3,750	46,880	31,072	2,972	28,100	4,840	2,635	707	1,928	2,205	535	1,610
1973...	84,409	51,963	4,017	47,946	32,446	3,219	29,228	4,304	2,240	647	1,594	2,064	579	1,485
1974...	85,935	52,518	4,074	48,445	33,417	3,329	30,088	5,076	2,668	749	1,918	2,408	660	1,748
1975...	84,783	51,230	3,803	47,427	33,553	3,243	30,310	7,830	4,385	957	3,428	3,445	795	2,649
1976...	87,485	52,391	3,904	48,486	35,095	3,365	31,730	7,288	3,968	928	3,041	3,320	773	2,546
1977...	90,546	53,861	4,124	49,737	36,685	3,486	33,199	6,855	3,588	861	2,727	3,267	781	2,486
1978...	94,373	55,491	4,279	51,212	38,882	3,702	35,180	6,047	3,146	799	2,252	2,996	760	2,286
1977:														
Jan...	88,659	52,959	3,941	49,018	35,700	3,332	32,368	7,115	3,849	866	2,983	3,266	813	2,453
Feb...	89,048	53,117	3,977	49,140	35,931	3,444	32,487	7,268	3,948	889	3,059	3,320	781	2,539
Mar...	89,503	53,333	4,022	49,311	36,170	3,463	32,707	7,151	3,772	895	2,877	3,379	797	2,582
Apr...	89,805	53,470	4,082	49,388	36,335	3,442	32,893	6,944	3,622	851	2,776	3,317	802	2,515
May...	90,166	53,597	4,133	49,464	36,569	3,340	33,229	6,896	3,673	871	2,802	3,223	782	2,441
June...	90,500	53,910	4,147	49,763	36,590	3,533	33,057	7,008	3,629	943	2,686	3,379	838	2,541
July...	90,605	53,908	4,170	49,738	36,697	3,507	33,190	6,706	3,506	846	2,660	3,200	757	2,443
Aug...	90,903	53,980	4,131	49,849	36,923	3,661	33,262	6,795	3,542	875	2,667	3,253	764	2,489
Sept...	91,187	54,046	4,104	49,942	37,141	3,474	33,667	6,624	3,352	864	2,488	3,272	796	2,476
Oct...	91,374	54,369	4,222	50,147	37,005	3,514	33,491	6,654	3,433	828	2,605	3,221	781	2,440
Nov...	92,203	54,706	4,276	50,430	37,437	3,550	33,947	6,635	3,331	842	2,489	3,304	780	2,524
Dec...	92,561	54,922	4,308	50,614	37,639	3,573	34,066	6,187	3,146	759	2,387	3,041	679	2,362
1978:														
Jan...	92,923	54,992	4,287	50,705	37,931	3,573	34,358	6,292	3,256	792	2,464	3,036	748	2,288
Feb...	93,047	54,943	4,158	50,785	38,104	3,564	34,540	6,092	3,221	845	2,376	2,871	759	2,112
Mar...	93,282	55,042	4,201	50,841	38,240	3,562	34,678	6,153	3,235	841	2,394	2,918	749	2,169
Apr...	93,704	55,184	4,187	50,997	38,520	3,646	34,874	6,063	3,096	817	2,279	2,967	756	2,211
May...	93,953	55,372	4,253	51,119	38,581	3,695	34,886	6,156	3,032	768	2,264	3,124	802	2,322
June...	94,640	55,766	4,429	51,337	38,874	3,776	35,098	5,864	2,871	704	2,112	3,048	754	2,294
July...	94,446	55,531	4,317	51,214	38,915	3,755	35,160	6,176	2,916	784	2,187	3,205	792	2,413
Aug...	94,723	55,580	4,365	51,215	39,143	3,831	35,312	5,940	2,937	756	2,181	3,003	772	2,231
Sept...	95,010	55,594	4,307	51,287	39,416	3,725	35,691	5,964	2,965	793	2,172	2,999	769	2,230
Oct...	95,241	55,754	4,306	51,448	39,487	3,761	35,726	5,836	2,971	826	2,145	2,865	731	2,134
Nov...	95,751	56,096	4,271	51,825	39,655	3,768	35,887	5,877	2,923	810	2,113	2,954	746	2,208
Dec...	95,855	56,072	4,234	51,838	39,783	3,793	35,990	6,012	3,044	849	2,195	2,968	741	2,227

1 See footnote 3, Table B-27.

Note.—See Note, Table B-27.

Source: Department of Labor, Bureau of Labor Statistics.



TABLE B-29.—Selected employment and unemployment data, 1948-78

[Percent<sup>1</sup>; monthly data seasonally adjusted]

Year or month	Unemployment rate <sup>1</sup>								Employment as percent of population <sup>3</sup>				
	All workers	By sex and age			By selected groups					Total	White	Black and other	
		Both sexes 16-19 years	Males 20 years and over	Females 20 years and over	Experienced wage and salary workers	Married men <sup>2</sup>	Women who head families	Full-time workers <sup>4</sup>	Blue-collar workers <sup>4</sup>				
1948	3.8	9.2	3.2	3.6	4.3			4.2	55.8				
1949	5.9	13.4	5.4	5.3	6.8	3.5		5.4	54.6				
1950	5.3	12.2	4.7	5.1	6.0	4.6		5.0	55.2				
1951	3.3	8.2	2.5	4.0	3.7	1.5		2.6	55.7				
1952	3.0	8.5	2.4	3.2	3.3	1.4		2.5	55.4				
1953	2.9	7.6	2.5	2.9	3.2	1.7		3.4	55.3				
1954	5.5	12.6	4.9	5.5	6.2	4.0		5.2	53.8				
1955	4.4	11.0	3.8	4.4	4.8	2.8		3.8	55.1				
1956	4.1	11.1	3.4	4.2	4.4	2.6		3.7	56.1				
1957	4.3	11.6	3.6	4.1	4.6	2.8		4.0	55.7				
1958	6.8	15.9	6.2	6.1	7.2	5.1		7.2	54.2				
1959	5.5	14.6	4.7	5.2	5.7	3.6		7.6	54.8				
1960	5.5	14.7	4.7	5.1	5.7	3.7		7.8	54.9				
1961	6.7	16.8	5.7	6.3	6.8	4.6		9.2	54.2				
1962	5.5	14.7	4.6	5.4	5.6	3.6		7.4	54.2				
1963	5.7	17.2	4.5	5.4	5.5	3.4		5.5	54.1	54.0	55.2		
1964	5.2	16.2	3.9	5.2	5.0	2.8		4.9	54.5	54.3	56.1		
1965	4.5	14.8	3.2	4.5	4.3	2.4		4.2	55.0	54.8	56.8		
1966	3.8	12.8	2.5	3.8	3.5	1.9		3.5	55.6	55.4	57.2		
1967	3.8	12.8	2.3	4.2	3.6	1.8		4.9	55.8	55.7	56.9		
1968	3.6	12.7	2.2	3.8	3.4	1.6		4.4	56.0	55.9	56.6		
1969	3.5	12.2	2.1	3.7	3.3	1.5		4.4	56.5	56.5	56.7		
1970	4.9	15.2	3.5	4.8	4.8	2.6		5.4	56.1	56.2	55.5		
1971	5.9	16.9	4.4	5.7	5.7	3.2		7.3	55.5	55.7	53.7		
1972	5.6	16.2	4.0	5.4	5.3	2.8		7.2	56.0	56.4	53.0		
1973	4.9	14.5	3.2	4.8	4.5	2.3		7.0	56.3	56.9	57.3		
1974	5.6	16.0	3.8	5.5	5.3	2.7		7.0	57.0	57.5	53.0		
1975	8.5	19.9	6.7	8.0	8.2	5.1		10.0	55.3	55.9	50.0		
1976	7.7	19.0	5.9	7.4	7.3	4.2		10.0	56.1	56.8	50.6		
1977	7.0	17.7	5.2	7.0	6.6	3.6		9.3	56.5	57.1	51.1		
1978	6.0	16.3	4.2	6.0	5.6	2.8		8.5	58.6	59.3	53.3		
1977: Jan	7.4	18.8	5.7	7.0	7.0	4.0		9.5	6.9	8.6	56.3	57.1	50.8
Feb	7.5	18.4	5.9	7.2	7.2	4.1		9.5	7.0	8.8	56.5	57.3	50.9
Mar	7.4	18.4	5.5	7.3	6.9	3.8		9.8	6.8	8.5	56.7	57.5	50.8
Apr	7.2	18.0	5.3	7.1	6.7	3.7		9.4	6.7	8.1	56.8	57.7	50.9
May	7.1	18.1	5.4	6.8	6.7	3.7		9.0	6.6	8.0	57.0	57.8	50.7
June	7.2	18.8	5.1	7.1	6.6	3.5		9.4	6.6	8.0	57.1	58.0	51.2
July	6.9	17.3	5.1	6.9	6.4	3.4		9.1	6.5	8.0	57.1	57.9	50.8
Aug	7.0	17.4	5.1	7.0	6.5	3.5		9.8	6.5	8.2	57.2	58.1	50.7
Sept	6.8	18.0	4.7	6.9	6.3	3.3		10.2	6.3	7.6	57.3	58.2	51.0
Oct	6.8	17.2	4.9	6.8	6.4	3.5		9.3	6.4	7.9	57.3	58.3	50.9
Nov	6.7	17.2	4.7	6.9	6.3	3.3		9.2	6.2	7.5	57.8	58.7	51.5
Dec	6.3	15.4	4.5	6.5	5.9	3.1		7.8	5.8	7.0	57.9	58.7	52.6
1978: Jan	6.3	16.4	4.6	6.2	5.9	3.1		8.2	5.9	7.3	58.1	58.9	52.4
Feb	6.1	17.2	4.5	5.8	5.7	2.9		7.7	5.7	7.2	58.1	58.8	53.0
Mar	6.2	17.0	4.5	5.9	5.7	3.0		8.7	5.6	7.2	58.2	58.9	52.9
Apr	6.1	16.7	4.3	6.0	5.6	2.8		10.1	5.5	6.7	58.4	59.1	52.9
May	6.1	16.5	4.2	6.2	5.7	2.9		9.3	5.6	6.7	58.5	59.2	53.0
June	5.8	15.1	4.0	6.1	5.4	2.7		8.8	5.3	6.6	58.8	59.6	53.4
July	6.1	16.3	4.1	6.4	5.7	2.7		9.8	5.7	6.7	58.6	59.3	53.2
Aug	5.9	15.7	4.1	5.9	5.5	2.8		8.0	5.4	6.9	58.7	59.4	53.5
Sept	5.9	16.3	4.1	5.9	5.6	2.6		8.0	5.4	6.8	58.8	59.5	53.9
Oct	5.8	16.2	4.0	5.6	5.4	2.6		7.5	5.2	6.8	58.9	59.6	53.9
Nov	5.8	16.2	3.9	5.8	5.4	2.4		7.7	5.2	6.4	59.1	59.9	53.7
Dec	5.9	16.5	4.1	5.8	5.6	2.5		7.7	5.3	6.8	59.1	59.9	53.7

<sup>1</sup> Unemployment as percent of civilian labor force in group specified.<sup>2</sup> Married men living with their wives. Data for 1949 and 1951-54 are for April; 1950, for March.<sup>3</sup> Data for 1949-61 are for May.<sup>4</sup> Includes craft and kindred workers, operatives, and nonfarm laborers. Data for 1948-57 are based on data for January, April, July, and October.<sup>5</sup> Civilian employment as percent of total noninstitutional population.

Note.—See footnote 3 and Note, Table B-27.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-3C.—Unemployment rate by demographic characteristic, 1948-78

[Percent †; monthly data seasonally adjusted]

Year or month	White						Black and other							
	Total	Males			Females			Total	Males			Females		
		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1948	3.5						5.9							
1949	5.6						8.9							
1950	4.9						9.0							
1951	3.1						5.3							
1952	2.8						5.4							
1953	2.7						4.5							
1954	5.0	4.8	13.4	4.4	5.5	10.4	5.1	9.9	10.3	14.4	9.9	9.2	20.6	8.4
1955	3.9	3.7	11.3	3.3	4.3	9.1	3.9	8.7	8.8	13.4	8.4	8.5	19.2	7.7
1956	3.6	3.4	10.5	3.0	4.2	9.7	3.7	8.3	7.9	15.0	7.4	8.9	22.8	7.8
1957	3.8	3.6	11.5	3.2	4.3	9.5	3.8	7.9	8.3	18.4	7.6	7.3	20.2	6.4
1958	6.1	6.1	15.7	5.5	6.2	12.7	5.6	12.6	13.7	26.8	12.7	10.8	28.4	9.5
1959	4.8	4.6	14.0	4.1	5.3	12.0	4.7	10.7	11.5	25.2	10.5	9.4	27.7	8.3
1960	4.9	4.8	14.0	4.2	5.3	12.7	4.6	10.2	10.7	24.0	9.6	9.4	24.8	8.3
1961	6.0	5.7	15.7	5.1	6.5	14.8	5.7	12.4	12.8	26.8	11.7	11.9	29.2	10.6
1962	4.9	4.6	13.7	4.0	5.5	12.8	4.7	10.9	10.9	22.0	10.0	11.0	30.2	9.6
1963	5.0	4.7	15.9	3.9	5.8	15.1	4.8	10.8	10.5	27.3	9.2	11.2	34.7	9.4
1964	4.6	4.1	14.7	3.4	5.5	14.9	4.6	9.6	8.9	24.3	7.7	10.7	31.6	9.0
1965	4.1	3.6	12.9	2.9	5.0	14.0	4.0	8.1	7.4	23.3	6.0	9.2	31.7	7.5
1966	3.3	2.8	10.5	2.2	4.3	12.1	3.3	7.3	6.3	21.3	4.9	8.7	31.3	6.6
1967	3.4	2.7	10.7	2.1	4.6	11.5	3.8	7.4	6.1	23.9	4.3	9.1	29.6	7.1
1968	3.2	2.6	10.1	2.0	4.3	12.1	3.4	6.7	5.6	22.1	3.9	8.3	28.7	6.3
1969	3.1	2.5	10.0	1.9	4.2	11.5	3.4	6.4	5.3	21.4	3.7	7.8	27.6	5.8
1970	4.5	4.0	13.7	3.2	5.4	13.4	4.4	8.2	7.3	25.0	5.6	9.3	34.4	6.9
1971	5.4	4.9	15.1	4.0	6.3	15.1	5.3	9.9	9.1	28.9	7.2	10.8	35.4	8.7
1972	5.0	4.5	14.2	3.6	5.9	14.2	4.9	10.0	8.9	29.7	6.8	11.3	38.5	8.8
1973	4.3	3.7	12.3	2.9	5.3	13.0	4.3	8.9	7.6	26.9	5.7	10.5	34.5	8.2
1974	5.0	4.3	13.5	3.5	6.1	14.5	5.0	9.9	9.1	31.6	6.8	10.7	34.6	8.4
1975	7.8	7.2	18.3	6.2	6.6	17.4	7.5	13.9	13.7	35.4	11.7	14.0	38.5	11.5
1976	7.0	6.4	17.3	5.4	7.9	16.4	6.8	13.1	12.7	35.4	10.6	13.6	39.0	11.3
1977	6.2	5.5	15.0	4.6	7.3	15.9	6.2	13.1	12.4	37.0	10.0	14.0	39.9	11.7
1978	5.2	4.5	13.5	3.7	6.2	14.4	5.2	11.9	10.9	34.0	8.6	13.1	38.4	10.6
1977: Jan	6.8	6.1	16.1	5.2	7.7	17.7	6.5	12.7	12.1	34.8	10.0	13.4	38.2	11.2
1977: Feb	6.8	6.2	16.0	5.3	7.7	16.6	6.6	13.2	12.4	38.2	10.0	14.1	36.7	12.2
1977: Mar	6.6	5.9	15.9	4.9	7.7	16.9	6.6	12.9	12.2	39.1	9.8	13.8	37.6	11.8
1977: Apr	6.4	5.7	15.0	4.9	7.5	16.7	6.3	12.4	10.7	34.8	8.6	14.4	37.5	12.3
1977: May	6.3	5.7	15.2	4.8	7.2	16.8	6.1	12.9	12.3	37.8	10.0	13.7	39.0	11.7
1977: June	6.4	5.7	16.8	4.6	7.5	15.9	6.5	13.3	12.3	36.6	10.0	14.4	42.9	11.6
1977: July	6.0	5.3	13.9	4.5	7.1	15.3	6.1	13.1	12.8	39.1	10.2	13.4	41.1	10.9
1977: Aug	6.1	5.3	14.8	4.4	7.2	14.7	6.2	14.1	14.0	38.4	11.4	14.2	41.4	11.7
1977: Sept	6.0	5.1	15.4	4.2	7.2	16.0	6.1	13.2	12.6	34.7	10.5	13.8	41.1	11.3
1977: Oct	5.9	5.1	14.1	4.3	7.1	15.6	6.1	13.6	13.4	36.4	11.2	13.8	40.3	11.3
1977: Nov	5.8	5.0	14.0	4.1	7.0	15.4	6.0	13.5	12.2	38.2	9.6	15.0	40.7	12.6
1977: Dec	5.4	4.7	12.4	4.0	6.5	12.8	5.7	12.6	11.4	36.2	8.9	13.9	40.9	11.4
1978: Jan	5.5	4.8	13.0	4.0	6.5	14.6	5.6	12.8	12.0	36.9	9.6	13.6	41.3	11.1
1978: Feb	5.4	4.8	14.4	3.9	6.2	14.8	5.2	11.9	11.3	35.8	8.8	12.6	41.0	10.0
1978: Mar	5.3	4.8	14.1	3.9	6.0	14.7	5.0	12.5	11.3	37.1	8.8	13.8	40.4	11.3
1978: Apr	5.2	4.5	13.6	3.7	6.3	14.7	5.2	12.0	11.2	34.1	8.9	12.8	37.0	10.6
1978: May	5.3	4.4	12.7	3.7	6.5	15.0	5.5	12.3	11.3	37.4	8.8	13.5	39.2	10.9
1978: June	5.0	4.2	11.9	3.5	6.2	12.9	5.4	12.0	10.3	32.2	8.2	13.9	41.5	11.1
1978: July	5.2	4.4	12.8	3.6	6.5	14.5	5.5	12.3	10.6	32.3	8.3	14.2	40.4	11.4
1978: Aug	5.2	4.4	13.2	3.6	6.3	14.4	5.2	11.5	10.4	28.5	8.7	12.7	36.6	10.3
1978: Sept	5.2	4.5	13.5	3.6	6.2	14.8	5.2	11.3	10.4	33.8	8.2	12.2	36.0	10.0
1978: Oct	5.1	4.5	14.3	3.5	5.9	13.7	4.9	11.3	10.3	31.8	8.3	12.5	37.5	10.1
1978: Nov	5.0	4.2	13.4	3.4	6.0	14.3	5.0	11.7	10.9	37.9	8.3	12.5	35.0	10.3
1978: Dec	5.2	4.5	14.6	3.5	6.1	13.8	5.1	11.5	10.6	34.6	8.4	12.5	35.3	10.2

† Unemployment as percent of civilian labor force in group specified.

Note.—See footnote 3 and Note, Table B-27.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-31.—Unemployment by duration, 1947-78

[Monthly data seasonally adjusted <sup>1</sup>]

Year or month	Total unemployment	Duration of unemployment				Average (mean) duration in weeks
		Less than 5 weeks	5-14 weeks	15-26 weeks	27 weeks and over	
Thousands of persons 16 years of age and over						
1947.....	2,311	1,210	704	234	164	.....
1948.....	2,276	1,300	669	193	116	8.6
1949.....	3,637	1,756	1,194	428	256	10.0
1950.....	3,288	1,450	1,055	425	357	12.1
1951.....	2,055	1,177	574	166	137	9.7
1952.....	1,883	1,135	516	148	84	8.4
1953.....	1,834	1,142	482	132	78	8.0
1954.....	3,532	1,605	1,116	495	317	11.8
1955.....	2,852	1,335	815	366	336	13.0
1956.....	2,750	1,412	805	301	232	11.3
1957.....	2,859	1,408	891	321	239	10.5
1958.....	4,602	1,753	1,396	785	667	13.9
1959.....	3,740	1,585	1,114	469	571	14.4
1960.....	3,852	1,719	1,176	503	454	12.8
1961.....	4,714	1,806	1,376	728	804	15.6
1962.....	3,911	1,663	1,134	534	585	14.7
1963.....	4,070	1,751	1,231	535	553	14.0
1964.....	3,786	1,697	1,117	491	482	13.3
1965.....	3,366	1,628	983	404	351	11.8
1966.....	2,875	1,573	779	287	239	10.4
1967.....	2,975	1,634	893	271	177	8.8
1968.....	2,817	1,594	810	256	156	8.4
1969.....	2,832	1,629	827	242	133	7.9
1970.....	4,088	2,137	1,289	427	235	8.7
1971.....	4,993	2,234	1,578	665	517	11.3
1972.....	4,840	2,223	1,459	597	562	12.0
1973.....	4,304	2,196	1,296	475	337	10.0
1974.....	5,076	2,567	1,572	563	373	9.7
1975.....	7,830	2,894	2,452	1,290	1,193	14.1
1976.....	7,288	2,790	2,159	1,003	1,336	15.8
1977.....	6,855	2,856	2,089	896	1,015	14.3
1978.....	6,047	2,793	1,875	746	633	11.9
1977: Jan.....	7,115	2,820	2,153	993	1,199	15.2
Feb.....	7,268	2,928	2,192	954	1,202	14.8
Mar.....	7,151	2,913	2,168	878	1,153	14.5
Apr.....	6,944	3,011	1,960	822	1,119	14.5
May.....	6,896	2,727	2,170	860	1,059	15.0
June.....	7,008	3,115	2,045	850	978	14.3
July.....	6,706	2,774	2,059	891	965	14.1
Aug.....	6,795	2,839	2,152	931	899	13.8
Sept.....	6,624	2,776	2,091	882	924	13.9
Oct.....	6,654	2,822	2,081	832	900	13.7
Nov.....	6,635	2,851	1,978	890	871	13.5
Dec.....	6,187	2,645	1,913	813	835	13.7
1978: Jan.....	6,292	2,742	1,903	838	803	13.0
Feb.....	6,092	2,649	1,880	894	665	12.6
Mar.....	6,153	2,789	1,909	787	701	12.4
Apr.....	6,063	2,747	1,856	809	677	12.4
May.....	6,156	2,862	1,842	723	681	12.2
June.....	5,864	2,772	1,908	674	592	12.0
July.....	6,176	2,967	1,873	668	646	11.8
Aug.....	5,940	2,795	1,895	625	609	11.4
Sept.....	5,964	2,783	1,861	663	605	11.5
Oct.....	5,836	2,719	1,789	732	585	11.8
Nov.....	5,877	2,833	1,774	685	511	11.0
Dec.....	6,012	2,876	1,979	726	482	10.7

<sup>1</sup> Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—See footnote 3 and Note, Table B-27.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-32.—Unemployment by reason, 1967-78

[Monthly data seasonally adjusted <sup>1</sup>]

Year or month	Total unemployment	Job losers	Job leavers	Reentrants	New entrants
Thousands of persons 16 years of age and over					
1967.....	2,975	1,229	438	945	396
1968.....	2,817	1,070	431	909	407
1969.....	2,832	1,017	436	965	413
1970.....	4,088	1,809	549	1,227	503
1971.....	4,993	2,313	587	1,466	627
1972.....	4,840	2,089	635	1,444	672
1973.....	4,304	1,666	674	1,323	642
1974.....	5,076	2,205	756	1,441	672
1975.....	7,830	4,341	812	1,865	812
1976.....	7,288	3,625	886	1,895	882
1977.....	6,855	3,103	889	1,926	938
1978.....	6,047	2,514	851	1,814	867
1978: Jan.....	6,292	2,711	861	1,812	915
Feb.....	6,092	2,589	896	1,802	880
Mar.....	6,153	2,562	858	1,878	912
Apr.....	6,063	2,556	877	1,750	905
May.....	6,156	2,614	828	1,793	892
June.....	5,864	2,379	853	1,785	816
July.....	6,176	2,536	855	1,870	871
Aug.....	5,940	2,459	840	1,743	875
Sept.....	5,964	2,362	849	1,930	816
Oct.....	5,836	2,456	812	1,721	825
Nov.....	5,877	2,372	825	1,754	872
Dec.....	6,012	2,442	871	1,937	826
Percent of civilian labor force					
1967.....	3.8	1.6	0.6	1.2	0.5
1968.....	3.6	1.3	.5	1.2	.5
1969.....	3.5	1.2	.5	1.2	.5
1970.....	4.9	2.2	.7	1.5	.6
1971.....	5.9	2.8	.7	1.7	.7
1972.....	5.6	2.4	.7	1.7	.8
1973.....	4.9	1.9	.8	1.5	.7
1974.....	5.6	2.4	.8	1.6	.7
1975.....	8.5	4.7	.9	2.0	.9
1976.....	7.7	3.8	.9	2.0	.9
1977.....	7.0	3.2	.9	2.0	1.0
1978.....	6.0	2.5	.8	1.8	.9
1978: Jan.....	6.3	2.7	.9	1.8	.9
Feb.....	6.1	2.6	.9	1.8	.9
Mar.....	6.2	2.6	.9	1.9	.9
Apr.....	6.1	2.6	.9	1.8	.9
May.....	6.1	2.6	.8	1.8	.9
June.....	5.8	2.4	.8	1.8	.8
July.....	6.1	2.5	.8	1.9	.9
Aug.....	5.9	2.4	.8	1.7	.9
Sept.....	5.9	2.3	.8	1.9	.8
Oct.....	5.8	2.4	.8	1.7	.8
Nov.....	5.8	2.3	.8	1.7	.9
Dec.....	5.9	2.4	.9	1.9	.8

<sup>1</sup> Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—See footnote 3 and Note, Table B-27.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-33.—Unemployment insurance programs, selected data, 1946-78

Year or month	All programs			State programs					
	Covered employment <sup>1</sup>	Insured unemployment (weekly average) <sup>2,3</sup>	Total benefits paid (millions of dollars) <sup>2,4</sup>	Insured unemployment	Initial claims	Exhaustions <sup>5</sup>	Insured unemployment as percent of covered employment	Benefits paid	
								Total (millions of dollars) <sup>4</sup>	Average weekly check (dollars) <sup>6</sup>
	Thousands			Weekly average, thousands					
1946.....	31,856	2,804	2,878.5	1,295	189	38	4.3	1,094.9	18.50
1947.....	33,876	1,793	1,785.5	997	187	24	3.1	775.1	17.83
1948.....	34,646	1,446	1,328.7	980	200	20	3.0	789.9	19.03
1949.....	33,098	2,474	2,269.8	1,973	340	37	6.2	1,736.0	20.48
1950.....	34,308	1,605	1,467.6	1,513	236	36	4.6	1,373.1	20.76
1951.....	36,334	1,000	862.9	969	208	16	2.8	840.4	21.09
1952.....	37,006	1,069	1,043.5	1,044	215	18	2.9	998.2	22.79
1953.....	38,072	1,067	1,050.6	990	218	15	2.8	962.2	23.58
1954.....	36,622	2,051	2,291.6	1,870	304	34	5.2	2,026.9	24.93
1955.....	40,018	1,399	1,560.2	1,265	226	25	3.5	1,350.3	25.04
1956.....	42,751	1,323	1,540.6	1,215	227	20	3.2	1,380.7	27.02
1957.....	43,436	1,571	1,913.0	1,446	270	23	3.6	1,733.9	28.17
1958.....	44,411	3,269	4,290.6	2,526	369	50	6.4	3,512.7	30.58
1959.....	45,728	2,099	2,854.3	1,684	277	33	4.4	2,279.0	30.41
1960.....	46,334	2,071	3,022.8	1,908	331	31	4.8	2,726.7	32.37
1961.....	46,266	2,994	4,358.1	2,290	350	46	5.6	3,422.7	33.80
1962.....	47,776	1,946	3,145.1	1,783	302	32	4.4	2,675.4	34.56
1963.....	48,434	1,973	3,025.9	1,806	298	30	4.3	2,774.7	35.27
1964.....	49,637	1,753	2,749.2	1,605	268	26	3.8	2,522.1	35.92
1965.....	51,580	1,450	2,360.4	1,328	232	21	3.0	2,166.0	37.10
1966.....	54,739	1,129	1,890.9	1,061	203	15	2.3	1,771.3	39.75
1967.....	56,342	1,270	2,221.5	1,205	226	17	2.5	2,092.3	41.25
1968.....	57,977	1,187	2,191.0	1,111	201	16	2.2	2,031.6	43.43
1969.....	59,999	1,177	2,298.6	1,101	200	16	2.1	2,127.9	46.17
1970.....	59,526	2,070	4,209.3	1,805	296	25	3.4	3,848.5	50.34
1971.....	59,375	2,608	6,154.0	2,150	295	39	4.1	4,957.0	53.23
1972.....	66,458	2,192	5,491.1	1,848	261	35	3.5	4,471.0	56.76
1973.....	69,897	1,793	4,517.3	1,632	247	29	2.7	4,007.6	59.00
1974.....	72,451	2,558	6,933.9	2,262	363	37	3.5	5,974.9	64.25
1975.....	71,037	4,937	16,802.4	3,986	478	81	6.0	11,754.7	70.23
1976.....	73,459	3,846	12,344.8	2,991	386	63	4.6	8,974.5	75.16
1977.....	76,419	3,111	10,998.9	2,655	375	55	3.9	8,357.2	78.77
1978.....		2,640		2,356	342		3.3		
1977: Jan.....		4,442	1,212.0	2,835	410	63	4.3	955.3	78.61
Feb.....		4,448	1,214.5	2,811	427	64	4.2	975.6	80.48
Mar.....		3,972	1,317.2	2,678	354	64	4.2	1,034.1	79.60
Apr.....		3,506	998.5	2,665	381	64	4.0	763.7	78.63
May.....		3,105	886.4	2,627	384	56	3.9	666.0	77.69
June.....		2,939	883.4	2,623	370	59	3.9	658.3	76.90
July.....		3,065	784.5	2,610	374	53	3.8	592.4	75.91
Aug.....		2,751	824.8	2,651	371	52	3.9	671.3	77.16
Sept.....		2,643	712.2	2,605	364	47	3.8	565.2	77.74
Oct.....		2,649	712.9	2,570	360	46	3.8	525.8	79.60
Nov.....		2,853	795.8	2,551	353	45	3.7	599.5	80.23
Dec.....		3,226	896.2	2,487	351	46	3.6	703.0	81.54
1978: Jan.....		3,781	1,091.0	2,482	346	48	3.6	909.4	84.10
Feb.....		3,638	1,053.6	2,518	368	46	3.6	918.8	85.80
Mar.....		3,212	1,128.9	2,452	339	46	3.5	1,001.5	85.48
Apr.....		2,659	805.4	2,307	338	48	3.3	708.0	84.33
May.....		2,369	753.9	2,223	331	42	3.2	639.8	82.70
June.....		2,297	706.7	2,247	347	40	3.2	580.0	81.69
July.....		2,581	663.8	2,374	364	36	3.4	557.0	80.77
Aug.....		2,394	771.5	2,448	345	35	3.5	677.8	81.53
Sept.....		2,064	595.6	2,292	326	33	3.2	521.0	81.90
Oct.....		1,999	597.4	2,234	325	33	3.0	515.2	83.43
Nov.....		2,148		2,230	338		3.0		
Dec.....		2,545		2,252	339		3.1		

\* Monthly data are seasonally adjusted.

<sup>1</sup> Includes persons under the State, UCFE (Federal employee, effective January 1955), and RRB (Railroad Retirement Board) programs. Beginning October 1958, also includes the UCX program (unemployment compensation for ex-servicemen).<sup>2</sup> Includes State, UCFE, RR, UCX, UCV (unemployment compensation for veterans, October 1952-January 1960), and SRA (Servicemen's Readjustment Act, September 1944-September 1951) programs. Also includes Federal and State extended benefit programs. Does not include FSB (Federal supplemental benefits) and SUA (special unemployment assistance) programs.<sup>3</sup> Covered workers who have completed at least 1 week of unemployment.<sup>4</sup> Annual data are net amounts and monthly data are gross amounts.<sup>5</sup> Individuals receiving final payments in benefit year.<sup>6</sup> For total unemployment only.<sup>7</sup> Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning July 1963.<sup>8</sup> Latest data available for all programs combined. Workers covered by State programs account for about 97 percent of the total.

Source: Department of Labor, Employment and Training Administration.

TABLE B-34.—*Wage and salary workers in nonagricultural establishments, 1929-78*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total wage and salary workers	Manufacturing			Min- ing	Con- struc- tion	Trans- porta- tion and pub- lic utili- ties	Whole- sale and retail trade	Fin- ance, insur- ance, and real estate	Ser- vices	Government	
		Total	Dura- ble goods	Non- dura- ble goods							Fed- eral	State and local
1929.....	31,324	10,702	-----	-----	1,087	1,512	3,916	6,123	1,494	3,425	533	2,532
1933.....	23,699	7,397	-----	-----	744	824	2,672	4,755	1,280	2,861	565	2,601
1939.....	30,603	10,278	4,715	5,564	854	1,165	2,936	6,426	1,447	3,502	905	3,090
1940.....	32,361	10,985	5,363	5,622	925	1,311	3,038	6,750	1,485	3,665	996	3,206
1941.....	36,539	13,192	6,968	6,225	957	1,814	3,274	7,210	1,525	3,905	1,340	3,320
1942.....	40,106	15,280	8,823	6,458	992	2,198	3,460	7,118	1,509	4,066	2,213	3,270
1943.....	42,434	17,602	11,084	6,518	925	1,587	3,647	6,982	1,481	4,130	2,905	3,174
1944.....	41,864	17,328	10,856	6,472	892	1,108	3,829	7,058	1,461	4,145	2,928	3,116
1945.....	40,374	15,524	9,074	6,450	836	1,147	3,906	7,314	1,481	4,222	2,808	3,137
1946.....	41,652	14,703	7,742	6,962	862	1,683	4,061	8,376	1,675	4,697	2,254	3,341
1947.....	43,857	15,545	8,385	7,159	955	2,009	4,166	8,955	1,728	5,025	1,892	3,582
1948.....	44,866	15,582	8,326	7,256	994	2,198	4,189	9,272	1,800	5,181	1,863	3,787
1949.....	43,754	14,441	7,489	6,953	930	2,194	4,001	9,264	1,828	5,240	1,908	3,948
1950.....	45,197	15,241	8,094	7,147	901	2,364	4,034	9,386	1,888	5,357	1,928	4,098
1951.....	47,819	16,393	9,089	7,304	929	2,637	4,226	9,742	1,956	5,547	2,302	4,087
1952.....	48,793	16,633	9,349	7,284	898	2,668	4,248	10,004	2,035	5,699	2,420	4,188
1953.....	50,202	17,549	10,110	7,438	866	2,659	4,290	10,247	2,111	5,835	2,305	4,340
1954.....	48,990	16,314	9,129	7,185	791	2,646	4,084	10,235	2,200	5,969	2,188	4,563
1955.....	50,641	16,882	9,541	7,341	792	2,839	4,141	10,535	2,298	6,240	2,187	4,727
1956.....	52,369	17,244	9,833	7,411	822	3,039	4,244	10,858	2,389	6,497	2,209	5,069
1957.....	52,853	17,176	9,855	7,321	828	2,962	4,241	10,886	2,438	6,708	2,217	5,399
1958.....	51,324	15,945	8,829	7,116	751	2,817	3,976	10,750	2,481	6,765	2,191	5,648
1959.....	53,268	16,675	9,373	7,303	732	3,004	4,011	11,127	2,549	7,087	2,233	5,850
1960.....	54,189	16,796	9,459	7,337	712	2,926	4,004	11,391	2,629	7,378	2,270	6,083
1961.....	53,999	16,326	9,070	7,256	672	2,859	3,903	11,337	2,688	7,620	2,279	6,315
1962.....	55,549	16,853	9,480	7,373	650	2,948	3,906	11,566	2,754	7,982	2,340	6,550
1963.....	56,653	16,995	9,616	7,380	635	3,010	3,903	11,778	2,830	8,277	2,358	6,868
1964.....	58,283	17,274	9,816	7,458	634	3,097	3,951	12,160	2,911	8,660	2,348	7,248
1965.....	60,765	18,061	10,405	7,656	632	3,232	4,036	12,716	2,977	9,036	2,378	7,696
1966.....	63,901	19,213	11,282	7,930	627	3,317	4,158	13,245	3,058	9,498	2,564	8,220
1967.....	65,803	19,447	11,439	8,007	613	3,248	4,268	13,606	3,185	10,045	2,719	8,672
1968.....	67,892	19,781	11,626	8,155	606	3,350	4,318	14,099	3,337	10,567	2,737	9,102
1969.....	70,384	20,167	11,895	8,272	619	3,575	4,442	14,705	3,512	11,169	2,758	9,437
1970.....	70,880	19,366	11,208	8,158	623	3,588	4,515	15,040	3,645	11,548	2,731	9,823
1971.....	71,214	18,623	10,636	7,987	609	3,704	4,476	15,352	3,772	11,797	2,696	10,185
1972.....	73,675	19,151	11,049	8,102	628	3,889	4,541	15,949	3,908	12,276	2,684	10,649
1973.....	76,790	20,154	11,891	8,262	642	4,097	4,656	16,607	4,046	12,857	2,663	11,068
1974.....	78,265	20,077	11,925	8,152	697	4,020	4,725	16,987	4,148	13,441	2,724	11,446
1975.....	76,945	18,323	10,688	7,635	752	3,525	4,542	17,060	4,165	13,892	2,748	11,937
1976.....	79,382	18,997	11,077	7,920	779	3,576	4,582	17,755	4,271	14,551	2,733	12,138
1977.....	82,256	19,647	11,573	8,074	809	3,833	4,696	18,492	4,452	15,249	2,727	12,352
1978.....	85,760	20,331	12,159	8,172	837	4,213	4,858	19,392	4,676	15,976	2,754	12,723

See next page for continuation of table.

TABLE B-34.—*Wage and salary workers in nonagricultural establishments, 1929-78—Continued*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total wage and salary workers	Manufacturing			Mining	Construction	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government	
		Total	Durable goods	Non-durable goods							Federal	State and local
1976: Jan...	78,305	18,701	10,817	7,884	771	3,597	4,536	17,415	4,214	14,253	2,749	12,069
Feb...	78,530	18,799	10,890	7,909	771	3,576	4,546	17,515	4,216	14,290	2,743	12,074
Mar...	78,831	18,900	10,971	7,929	774	3,561	4,561	17,591	4,229	14,370	2,735	12,110
Apr...	79,169	19,015	11,045	7,970	774	3,586	4,568	17,676	4,242	14,452	2,736	12,120
May...	79,236	19,005	11,087	7,918	773	3,565	4,566	17,740	4,248	14,483	2,732	12,124
June...	79,332	18,996	11,092	7,904	777	3,557	4,578	17,763	4,264	14,544	2,728	12,125
July...	79,478	19,013	11,109	7,904	785	3,572	4,590	17,797	4,269	14,589	2,726	12,137
Aug...	79,596	19,028	11,140	7,888	757	3,568	4,591	17,848	4,274	14,634	2,729	12,167
Sept...	79,836	19,136	11,193	7,943	790	3,563	4,602	17,903	4,299	14,677	2,728	12,138
Oct...	79,804	19,022	11,102	7,920	791	3,573	4,597	17,905	4,315	14,714	2,727	12,160
Nov...	80,133	19,160	11,222	7,938	793	3,601	4,609	17,930	4,331	14,776	2,731	12,202
Dec...	80,306	19,190	11,246	7,944	797	3,592	4,636	17,966	4,347	14,840	2,723	12,215
1977: Jan...	80,483	19,285	11,308	7,977	799	3,551	4,640	18,030	4,364	14,903	2,722	12,189
Feb...	80,796	19,343	11,336	8,007	807	3,654	4,652	18,122	4,378	14,949	2,721	12,170
Mar...	81,264	19,481	11,445	8,036	819	3,732	4,659	18,225	4,403	15,025	2,728	12,192
Apr...	81,654	19,575	11,487	8,088	825	3,805	4,673	18,325	4,417	15,098	2,721	12,215
May...	81,934	19,643	11,541	8,102	824	3,837	4,692	18,397	4,426	15,123	2,725	12,267
June...	82,277	19,697	11,577	8,120	835	3,871	4,695	18,466	4,443	15,187	2,735	12,348
July...	82,455	19,722	11,623	8,099	810	3,902	4,698	18,531	4,452	15,226	2,724	12,390
Aug...	82,603	19,697	11,621	8,076	795	3,884	4,698	18,607	4,468	15,315	2,730	12,409
Sept...	82,973	19,715	11,637	8,078	830	3,896	4,727	18,672	4,487	15,442	2,725	12,479
Oct...	83,199	19,769	11,693	8,076	833	3,905	4,721	18,733	4,508	15,510	2,728	12,492
Nov...	83,549	19,849	11,746	8,103	840	3,928	4,736	18,830	4,535	15,568	2,727	12,536
Dec...	83,719	19,984	11,851	8,133	687	3,955	4,749	18,911	4,547	15,618	2,723	12,545
1978: Jan...	83,871	20,065	11,917	8,148	678	3,905	4,758	18,991	4,563	15,597	2,736	12,578
Feb...	84,188	20,139	11,986	8,153	684	3,901	4,782	19,071	4,591	15,670	2,736	12,614
Mar...	84,726	20,230	12,041	8,189	698	3,999	4,817	19,169	4,605	15,773	2,739	12,696
Apr...	85,418	20,282	12,076	8,206	867	4,164	4,847	19,252	4,623	15,866	2,745	12,772
May...	85,618	20,297	12,093	8,204	869	4,175	4,847	19,335	4,637	15,896	2,753	12,809
June...	85,996	20,316	12,109	8,207	879	4,278	4,881	19,412	4,670	15,963	2,772	12,825
July...	86,033	20,302	12,138	8,164	882	4,317	4,827	19,469	4,690	15,989	2,765	12,792
Aug...	86,149	20,278	12,146	8,132	887	4,298	4,846	19,523	4,707	16,074	2,765	12,771
Sept...	86,163	20,286	12,166	8,120	887	4,298	4,855	19,546	4,719	16,127	2,752	12,693
Oct...	86,573	20,436	12,305	8,131	893	4,341	4,922	19,632	4,737	16,169	2,760	12,683
Nov...	87,020	20,600	12,409	8,191	902	4,368	4,945	19,697	4,775	16,261	2,757	12,715
Dec...	87,270	20,724	12,490	8,234	902	4,413	4,965	19,687	4,788	16,296	2,757	12,738

Note.—Data in Tables B-34 through B-36 are based on reports from employing establishments and relate to full- and part-time wage and salary workers in nonagricultural establishments who worked during or received pay for any part of the pay period which includes the 12th of the month.

Not comparable with labor force data (Tables B-27 through B-32), which include proprietors, self-employed persons domestic servants, and unpaid family workers; which count persons as employed when they are not at work because of industrial disputes, bad weather, etc., even if they are not paid for the time off; and which are based on a sample of the working-age population, whereas the estimates in this table are based on reports from employing establishments.

For description and details of the various establishment data, see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-35.—Average weekly hours and hourly earnings in selected private nonagricultural industries, 1947-78

[For production or nonsupervisory workers; monthly data seasonally adjusted]

Year or month	Average weekly hours				Average gross hourly earnings current dollars				Adjusted hourly earnings, total private nonagricultural <sup>2</sup>			
	Total private nonagricultural <sup>1</sup>	Manufacturing	Construction	Wholesale and retail trade	Total private nonagricultural <sup>1</sup>	Manufacturing	Construction	Wholesale and retail trade	Index, 1967=100		Percent change from a year earlier <sup>4</sup>	
									Current dollars	1967 dollars <sup>3</sup>	Current dollars	1967 dollars
1947	40.3	40.4	38.2	40.5	\$1.131	\$1.216	\$1.540	\$0.940	42.6	63.7		
1948	40.0	40.0	38.1	40.4	1.225	1.327	1.712	1.010	46.0	63.8	8.0	0.2
1949	39.4	39.1	37.7	40.5	1.275	1.376	1.792	1.060	48.2	67.5	4.8	5.8
1950	39.8	40.5	37.4	40.5	1.335	1.440	1.863	1.100	50.0	69.3	3.7	2.7
1951	39.9	40.6	38.1	40.5	1.45	1.56	2.02	1.18	53.7	69.0	7.4	-4
1952	39.9	40.7	38.9	40.0	1.52	1.64	2.13	1.23	56.4	70.9	5.0	2.8
1953	39.6	40.5	37.9	39.5	1.61	1.74	2.28	1.30	59.6	74.4	5.7	4.9
1954	39.1	39.6	37.2	39.5	1.65	1.78	2.39	1.35	61.7	76.6	3.5	3.0
1955	39.6	40.7	37.1	39.4	1.71	1.85	2.45	1.40	63.7	79.4	3.2	3.7
1956	39.3	40.4	37.5	39.1	1.80	1.95	2.57	1.47	67.0	82.3	5.2	3.7
1957	38.8	39.8	37.0	38.7	1.89	2.05	2.71	1.54	70.3	83.4	4.9	1.3
1958	38.5	39.2	36.8	38.6	1.95	2.11	2.82	1.60	73.2	84.5	4.1	1.3
1959	39.0	40.3	37.0	38.8	2.02	2.19	2.93	1.66	75.8	86.8	3.6	2.7
1960	38.6	39.7	36.7	38.6	2.09	2.26	3.08	1.71	78.4	88.4	3.4	1.8
1961	38.6	39.8	36.9	38.3	2.14	2.32	3.20	1.76	80.8	90.2	3.1	2.0
1962	38.7	40.4	37.0	38.2	2.22	2.39	3.31	1.83	83.5	92.2	3.3	2.2
1963	38.8	40.5	37.3	38.1	2.28	2.46	3.41	1.89	85.9	93.7	2.9	1.6
1964	38.7	40.7	37.2	38.0	2.36	2.53	3.55	1.97	88.2	95.0	2.7	1.4
1965	38.8	41.2	37.4	37.7	2.46	2.61	3.70	2.04	91.2	96.6	3.4	1.7
1966	38.6	41.4	37.7	37.1	2.56	2.71	3.89	2.14	95.3	98.0	4.5	1.4
1967	38.0	40.6	37.7	36.6	2.68	2.82	4.11	2.25	100.0	100.0	4.9	2.0
1968	37.8	40.7	37.3	36.1	2.85	3.01	4.41	2.41	106.2	101.9	6.2	1.9
1969	37.7	40.6	37.9	35.7	3.04	3.19	4.79	2.56	113.2	103.1	6.6	1.2
1970	37.1	39.8	37.3	35.3	3.23	3.35	5.24	2.72	120.7	103.8	6.6	.7
1971	36.9	39.9	37.2	35.1	3.45	3.57	5.69	2.88	129.2	106.5	7.0	2.6
1972	37.0	40.5	36.5	34.9	3.70	3.82	6.06	3.05	137.5	109.7	6.4	3.0
1973	36.9	40.7	36.8	34.6	3.94	4.09	6.41	3.23	146.0	109.7	6.2	0
1974	36.5	40.0	36.6	34.2	4.24	4.43	6.81	3.48	157.5	106.6	7.9	-2.8
1975	36.1	39.5	36.4	33.9	4.53	4.83	7.31	3.73	170.7	105.9	8.4	-.7
1976	36.1	40.1	36.8	33.7	4.86	5.22	7.70	3.97	183.0	107.3	7.2	1.3
1977	36.0	40.3	36.5	33.3	5.24	5.67	8.09	4.27	196.8	108.4	7.5	1.0
1978 <sup>p</sup>	35.8	40.4	36.7	32.8	5.68	6.16	8.62	4.66	212.6		8.1	
1977: Jan	35.8	39.7	35.4	33.3	5.07	5.47	7.99	4.14	191.1	108.8	7.7	2.4
Feb	36.1	40.3	37.3	33.4	5.10	5.49	7.97	4.16	191.9	108.2	7.6	1.5
Mar	36.1	40.4	37.0	33.4	5.14	5.53	8.01	4.19	193.0	108.2	7.7	1.2
Apr	36.1	40.4	37.0	33.3	5.18	5.58	8.03	4.22	194.4	108.1	7.7	.9
May	36.1	40.4	36.8	33.4	5.20	5.61	8.03	4.24	195.5	108.1	7.6	.8
June	36.0	40.5	36.4	33.2	5.23	5.66	8.09	4.26	196.4	108.0	7.8	.9
July	36.0	40.3	36.5	33.3	5.27	5.70	8.08	4.29	197.8	108.4	7.8	1.0
Aug	35.9	40.3	36.1	33.2	5.27	5.72	8.11	4.30	198.3	108.3	7.1	.4
Sept	35.9	40.3	36.2	33.2	5.31	5.77	8.15	4.33	199.6	108.6	7.3	.6
Oct	36.1	40.5	36.3	33.4	5.36	5.82	8.19	4.36	201.5	109.2	7.6	1.0
Nov	36.0	40.5	36.4	33.1	5.39	5.85	8.20	4.39	202.4	109.3	7.4	.6
Dec	35.9	40.5	36.2	33.1	5.41	5.88	8.24	4.42	203.5	109.4	7.4	.6
1978: Jan	35.5	39.8	34.3	32.7	5.46	5.93	8.30	4.51	206.0	109.9	7.8	1.0
Feb	35.7	40.1	35.6	32.7	5.49	5.98	8.35	4.50	206.6	109.5	7.6	1.1
Mar	36.0	40.6	36.9	33.0	5.54	6.01	8.47	4.55	208.3	109.5	7.9	1.2
Apr	36.1	40.8	37.3	33.0	5.61	6.05	8.47	4.60	210.3	109.6	8.2	1.4
May	35.9	40.4	36.6	32.9	5.62	6.08	8.59	4.60	211.0	109.0	8.0	.9
June	35.9	40.5	37.3	32.8	5.66	6.12	8.65	4.63	212.3	108.7	8.1	.6
July	35.9	40.5	37.3	32.9	5.71	6.18	8.66	4.67	214.1	109.0	8.2	.6
Aug	35.8	40.3	37.1	32.8	5.73	6.20	8.72	4.70	214.6	108.7	8.2	.4
Sept	35.8	40.4	37.0	32.8	5.77	6.25	8.75	4.73	216.2	108.7	8.3	.1
Oct	35.9	40.5	36.9	32.9	5.82	6.32	8.77	4.77	218.0	108.8	8.2	-.4
Nov <sup>p</sup>	35.8	40.7	36.7	32.8	5.86	6.37	8.83	4.81	219.0	108.7	8.2	-.6
Dec <sup>p</sup>	35.8	40.6	36.9	32.7	5.90	6.41	8.89	4.83	220.2		8.2	

<sup>1</sup> Also includes other private industry groups shown in Table B-34.

<sup>2</sup> Adjusted for overtime (in manufacturing only) and for interindustry employment shifts.

<sup>3</sup> Current dollar earnings index divided by the consumer price index (revised index for urban wage earners and clerical workers used beginning 1978).

<sup>4</sup> Monthly data are computed from indexes to two decimal places.

Note.—See Note, Table B-34.

Source: Department of Labor, Bureau of Labor Statistics.



TABLE B-36.—Average weekly earnings in selected private nonagricultural industries, 1947-78

[For production or nonsupervisory workers; monthly data seasonally adjusted]

Year or month	Average gross weekly earnings					Percent change from a year earlier, total private nonagricultural <sup>3</sup>	
	Total private nonagricultural <sup>1</sup>		Manu- facturing	Con- struc- tion	Wholesale and retail trade	Current dollars	1967 dollars
	Current dollars	1967 dollars <sup>2</sup>	Current dollars				
1947.....	\$45.58	\$68.13	\$49.13	\$58.83	\$38.07	-----	-----
1948.....	49.00	67.96	53.08	65.23	40.80	7.5	-0.2
1949.....	50.24	70.36	53.80	67.56	42.93	2.5	3.5
1950.....	53.13	73.69	58.28	69.68	44.55	5.8	4.7
1951.....	57.86	74.37	63.34	76.96	47.79	8.9	.9
1952.....	60.65	76.29	66.75	82.86	49.20	4.8	2.6
1953.....	63.76	79.60	70.47	86.41	51.35	5.1	4.3
1954.....	64.52	80.15	70.49	88.54	53.33	1.2	.7
1955.....	67.72	84.44	75.30	90.90	55.16	5.0	5.4
1956.....	70.74	86.90	78.78	96.38	57.48	4.5	2.9
1957.....	73.33	86.99	81.59	100.27	59.60	3.7	.1
1958.....	75.08	86.70	82.71	103.78	61.76	2.4	-3
1959.....	78.78	90.24	88.26	108.41	64.41	4.9	4.1
1960.....	80.67	90.95	89.72	113.04	66.01	2.4	.8
1961.....	82.60	92.19	92.34	118.08	67.41	2.4	1.4
1962.....	85.91	94.82	96.56	122.47	69.91	4.0	2.9
1963.....	88.46	96.47	99.63	127.19	72.01	3.0	1.7
1964.....	91.33	98.31	102.97	132.06	74.86	3.2	1.9
1965.....	95.45	101.01	107.53	138.38	76.91	4.5	2.7
1966.....	98.82	101.67	112.19	146.65	79.39	3.5	.7
1967.....	101.84	101.84	114.49	154.95	82.35	3.1	.2
1968.....	107.73	103.39	122.51	164.49	87.00	5.8	1.5
1969.....	114.61	104.38	129.51	181.54	91.39	6.4	1.0
1970.....	119.83	103.04	133.33	195.45	96.02	4.6	-1.3
1971.....	127.31	104.95	142.44	211.67	101.09	6.2	1.9
1972.....	136.90	109.26	154.71	221.19	106.45	7.5	4.1
1973.....	145.39	109.23	166.46	235.89	111.76	6.2	-0
1974.....	154.76	104.78	177.20	249.25	119.02	6.4	-4.1
1975.....	163.53	101.45	190.79	266.08	126.45	5.7	-3.2
1976.....	175.45	102.90	209.32	283.36	133.79	7.3	1.4
1977.....	188.64	103.93	228.50	295.29	142.19	7.5	1.0
1978 <sup>p</sup> .....	203.34	-----	248.86	316.35	152.85	7.8	-----
1977: Jan.....	181.51	103.37	217.16	282.85	137.86	5.5	.4
Feb.....	184.11	103.84	221.25	297.28	138.94	7.2	1.2
Mar.....	185.55	104.01	223.41	296.37	139.95	7.7	1.3
Apr.....	187.00	103.95	225.43	297.11	140.53	8.4	1.5
May.....	187.72	103.77	226.64	295.50	141.62	7.5	.7
June.....	188.28	103.56	229.23	294.48	141.43	8.0	1.0
July.....	189.72	104.01	229.71	294.92	142.86	7.9	1.1
Aug.....	189.19	103.33	230.52	292.77	142.76	7.1	.4
Sept.....	190.63	103.72	232.53	295.03	143.76	7.7	1.1
Oct.....	193.50	104.93	235.71	297.30	145.62	8.3	1.7
Nov.....	194.04	104.77	236.93	298.48	145.31	7.6	.8
Dec.....	194.22	104.42	238.14	298.29	146.30	7.4	.5
1978: Jan.....	193.83	103.38	236.01	284.69	147.48	7.3	.5
Feb.....	195.99	103.86	239.80	297.26	147.15	6.1	-2
Mar.....	199.44	104.86	244.01	312.54	150.15	7.8	1.3
Apr.....	202.52	105.59	246.84	315.93	151.80	8.3	1.7
May.....	201.76	104.21	245.63	314.39	151.34	7.5	.4
June.....	203.19	104.04	247.86	322.65	151.86	7.9	.5
July.....	204.99	104.43	250.29	323.02	153.64	8.1	.3
Aug.....	205.13	103.92	249.86	323.51	154.16	8.5	.6
Sept.....	206.57	103.91	252.50	323.75	155.14	8.0	.2
Oct.....	208.94	104.26	255.96	323.61	156.93	8.1	-6
Nov <sup>p</sup> .....	209.79	104.11	259.26	324.06	157.77	8.4	-4
Dec <sup>p</sup> .....	211.22	-----	260.25	328.04	157.94	8.7	-----

<sup>1</sup> Also includes other private industry groups shown in Table B-34.

<sup>2</sup> Earnings in current dollars divided by the consumer price index (revised index for urban wage earners and clerical workers used beginning 1978).

<sup>3</sup> Based on unadjusted data.

Note.—See Note, Table B-34.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-37.—Productivity and related data, private business economy, 1947-78

[1967=100; quarterly data seasonally adjusted]

Year or quarter	Output <sup>1</sup>		Hours of all persons <sup>2</sup>		Output per hour of all persons		Compensation per hour <sup>3</sup>		Unit labor cost		Implicit price deflator	
	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector
1947.....	48.6	47.5	90.9	79.1	53.5	60.0	36.0	38.4	67.2	63.9	65.2	62.4
1948.....	50.9	49.6	91.5	80.4	55.6	61.6	39.0	41.6	70.2	67.6	70.7	67.6
1949.....	49.9	48.7	88.5	77.3	56.5	63.0	39.6	42.9	70.2	68.1	69.9	68.1
1950.....	54.5	53.3	89.5	79.8	60.9	66.8	42.4	45.4	69.6	67.9	70.9	69.2
1951.....	57.7	56.7	92.1	83.5	62.7	68.0	46.6	49.3	74.3	72.6	76.0	73.7
1952.....	59.2	58.5	92.2	84.3	64.2	69.3	49.5	52.1	77.2	75.1	77.5	75.2
1953.....	61.9	60.8	93.2	86.4	66.4	70.4	52.8	55.0	79.4	78.1	77.9	76.8
1954.....	60.8	59.6	90.1	83.5	67.5	71.4	54.4	56.7	80.6	79.4	78.6	77.8
1955.....	65.7	64.6	93.5	87.0	70.3	74.2	55.8	58.7	79.4	79.1	79.8	79.5
1956.....	67.5	66.5	94.9	89.1	71.1	74.6	59.4	62.3	83.6	83.4	82.2	82.0
1957.....	68.4	67.5	93.5	88.7	73.1	76.1	63.3	65.8	86.6	86.5	84.9	84.7
1958.....	66.9	65.9	89.3	85.0	74.9	77.5	66.1	68.3	88.2	88.2	86.4	86.0
1959.....	71.8	71.1	92.8	88.8	77.4	80.0	68.9	71.0	89.1	88.7	88.2	88.0
1960.....	73.1	72.2	93.0	89.3	78.6	80.8	71.9	74.1	91.4	91.7	89.4	89.3
1961.....	74.2	73.3	91.5	88.3	81.1	83.0	74.6	76.6	92.1	92.3	89.9	89.8
1962.....	78.8	78.1	93.0	90.2	84.7	86.6	78.1	79.7	92.1	92.0	90.7	90.6
1963.....	82.2	81.6	93.5	91.2	88.0	89.5	81.0	82.5	92.0	92.1	91.5	91.5
1964.....	86.8	86.4	94.9	93.2	91.5	92.7	85.2	86.3	93.2	93.1	92.7	92.9
1965.....	92.9	92.6	97.8	96.6	95.0	95.9	88.6	89.3	93.3	93.2	94.2	94.1
1966.....	98.0	98.1	100.1	99.8	98.0	98.3	94.9	94.8	96.8	96.4	97.2	96.8
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	105.1	105.4	101.8	102.1	103.3	103.2	107.6	107.3	104.1	104.0	103.9	104.0
1969.....	108.3	108.6	104.6	105.5	103.5	102.9	114.9	114.1	111.0	110.9	108.8	108.6
1970.....	107.3	107.4	103.0	104.2	104.2	103.1	123.1	121.7	118.1	118.1	113.9	114.0
1971.....	110.3	110.2	102.4	103.8	107.8	106.3	131.4	129.9	122.0	122.3	118.9	119.1
1972.....	117.6	117.8	105.5	107.0	111.4	110.1	139.7	138.3	125.3	125.6	123.1	122.8
1973.....	124.5	125.0	109.6	111.6	113.6	112.0	151.1	149.1	133.1	133.1	130.2	127.9
1974.....	121.5	121.9	110.3	112.4	110.1	108.5	164.8	162.7	149.7	150.0	143.0	141.3
1975.....	118.8	118.8	105.6	107.5	112.4	110.5	181.2	178.8	161.2	161.8	157.4	156.3
1976.....	126.5	127.0	108.7	111.0	116.4	114.4	197.0	193.7	169.3	169.4	165.4	164.8
1977.....	133.2	133.6	112.6	115.4	118.2	115.8	213.0	209.3	180.2	180.8	174.9	174.6
1978 p.....	139.0	139.9	117.1	120.1	118.7	116.5	232.9	228.9	196.3	196.6	187.9	186.8
1976: I.....	125.0	125.2	108.3	110.8	115.4	113.0	190.9	187.6	165.4	166.0	162.4	161.8
II.....	126.2	126.9	108.7	110.9	116.1	114.4	194.8	191.7	167.7	167.5	164.5	163.4
III.....	127.1	127.7	108.5	110.9	117.1	115.2	199.3	195.8	170.1	170.1	166.3	165.7
IV.....	127.6	128.1	108.9	111.5	117.2	114.9	203.6	199.9	173.8	173.9	168.5	168.2
1977: I.....	130.5	131.0	110.7	113.3	117.9	115.6	207.5	203.9	176.0	176.4	170.6	170.0
II.....	132.5	133.0	112.9	115.5	117.4	115.2	210.5	207.1	179.3	179.8	174.0	173.6
III.....	134.2	134.6	112.9	115.8	118.9	116.2	215.3	211.2	181.1	181.7	176.3	176.4
IV.....	135.5	135.8	113.9	116.7	119.0	116.4	218.8	215.1	183.9	184.8	178.4	178.1
1978: I.....	135.3	136.1	115.0	117.8	117.6	115.5	225.2	221.4	191.4	191.7	181.3	180.6
II.....	138.7	139.8	117.6	120.6	118.0	116.0	229.6	225.8	194.6	194.7	186.6	185.3
III.....	139.7	140.6	117.4	120.5	119.0	116.6	235.4	231.0	197.8	198.1	189.9	188.9
IV p.....	142.2	143.0	118.9	121.9	119.6	117.3	240.3	236.1	200.9	201.3	193.4	192.2

<sup>1</sup> Output refers to gross domestic product originating in the sector in 1972 dollars.<sup>2</sup> Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.<sup>3</sup> Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.<sup>4</sup> Current dollar gross domestic product divided by constant dollar gross domestic product.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-36.—Changes in productivity and related data, private business economy, 1948-78

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Output <sup>1</sup>		Hours of all persons <sup>2</sup>		Output per hour of all persons		Compensation per hour <sup>3</sup>		Unit labor cost		Implicit price deflator <sup>4</sup>	
	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector	Private business sector	Non-farm business sector
1948.....	4.6	4.4	0.7	1.7	3.8	2.7	8.4	8.5	4.5	5.7	8.4	8.3
1949.....	-1.8	-1.8	-3.3	-3.9	1.6	2.2	1.7	3.1	.1	.8	-1.1	.8
1950.....	9.2	9.4	1.2	3.2	7.9	6.0	7.0	5.7	-9	-3	1.5	1.6
1951.....	5.9	6.5	2.9	4.6	2.8	1.8	9.8	8.7	6.8	6.8	7.3	6.5
1952.....	2.5	3.0	.1	1.0	2.4	1.9	6.4	5.5	3.9	3.5	1.9	2.1
1953.....	4.6	4.1	1.0	2.5	3.6	1.5	6.5	5.7	2.8	4.0	.6	2.1
1954.....	-1.7	-2.0	-3.3	-3.4	1.6	1.4	3.2	3.1	1.5	1.6	.9	1.3
1955.....	8.0	8.2	3.8	4.1	4.1	4.0	2.5	3.6	-1.5	-.4	1.5	2.1
1956.....	2.8	3.0	1.5	2.5	1.3	.5	6.5	6.0	5.2	5.5	3.0	3.2
1957.....	1.3	1.5	-1.5	-.5	2.8	2.0	6.5	5.7	3.6	3.6	3.2	3.3
1958.....	-2.2	-2.5	-4.5	-4.1	2.5	1.8	4.4	3.8	1.9	2.0	1.9	1.5
1959.....	7.3	7.9	3.9	4.4	3.2	3.3	4.3	4.0	1.0	.7	2.0	2.4
1960.....	1.8	1.6	.2	.6	1.6	1.0	4.2	4.4	2.6	3.4	1.4	1.4
1961.....	1.5	1.5	-1.6	-1.2	3.1	2.7	3.9	3.3	.7	.6	.6	.6
1962.....	6.2	6.5	1.6	2.1	4.5	4.3	4.6	4.0	0	-.3	.9	.8
1963.....	4.4	4.5	0.6	1.1	3.8	3.4	3.7	3.5	-1	.1	.9	1.0
1964.....	5.6	5.9	1.5	2.3	4.0	3.6	5.3	4.6	1.2	1.0	1.4	1.5
1965.....	7.0	7.1	3.1	3.6	3.8	3.4	4.0	3.5	.2	.1	1.6	1.3
1966.....	5.5	6.0	2.3	3.3	3.2	2.6	7.1	6.1	3.8	3.5	3.2	2.9
1967.....	2.0	1.9	-.1	.2	2.0	1.7	5.4	5.5	3.3	3.8	2.9	3.3
1968.....	5.1	5.4	1.8	2.1	3.3	3.2	7.6	7.3	4.1	4.0	3.9	4.0
1969.....	3.0	3.0	2.8	3.3	.2	-.3	6.8	6.4	6.6	6.6	4.7	4.5
1970.....	-9	-1.1	-1.5	-1.2	.7	.1	7.1	6.6	6.4	6.5	4.7	4.9
1971.....	2.8	2.6	-.6	-.4	3.4	3.1	6.7	6.7	3.3	3.5	4.4	4.5
1972.....	6.6	6.9	3.1	3.2	3.4	3.6	6.3	6.5	2.8	2.7	3.6	3.1
1973.....	5.9	6.0	3.9	4.2	1.9	1.7	8.2	7.8	6.2	6.0	5.8	4.1
1974.....	-2.4	-2.5	.7	.7	-3.0	-3.1	9.1	9.1	12.5	12.6	9.8	10.5
1975.....	-2.3	-2.5	-4.3	-4.3	2.1	1.9	9.9	9.9	7.7	7.8	10.1	10.6
1976.....	6.5	6.9	2.9	3.3	3.5	3.5	8.7	8.4	5.0	4.7	5.1	5.4
1977.....	5.3	5.2	3.7	3.9	1.6	1.3	8.1	8.1	6.4	6.7	5.7	5.9
1978 <sup>p</sup> .....	4.4	4.7	4.0	4.1	.4	.6	9.3	9.4	8.9	8.8	7.5	7.0
1976: I.....	11.2	11.5	6.2	7.5	4.7	3.7	9.0	7.5	4.1	3.7	3.2	4.9
II.....	4.0	5.7	1.4	.7	2.6	5.0	8.4	9.0	5.7	3.8	5.2	4.1
III.....	2.8	2.5	-.8	-.2	3.6	2.7	9.6	9.0	5.8	6.2	4.4	5.8
IV.....	1.6	1.2	1.6	2.1	.1	-.9	8.9	8.5	8.8	9.5	5.4	6.1
1977: I.....	9.3	9.4	6.6	6.8	2.5	2.4	7.9	8.3	5.3	5.8	5.2	4.4
II.....	6.5	6.2	8.3	7.7	-1.7	-1.4	5.8	6.5	7.6	8.0	8.2	8.7
III.....	5.0	5.0	-.1	1.3	5.1	3.7	9.5	8.1	4.2	4.2	5.2	6.5
IV.....	4.0	3.5	3.7	3.0	.4	.5	6.7	7.6	6.3	7.1	4.9	4.0
1978: I.....	-.6	.7	4.0	3.9	-4.5	-3.1	12.1	12.2	17.4	15.7	6.7	5.8
II.....	10.5	11.6	9.2	9.8	1.2	1.7	8.1	8.2	6.8	6.4	12.1	10.8
III.....	3.0	2.1	-.4	-.2	3.5	2.3	10.4	9.6	6.7	7.1	7.3	8.1
IV <sup>p</sup> .....	7.1	7.1	5.0	4.7	2.1	2.3	8.7	9.1	6.5	6.7	7.7	7.1

<sup>1</sup> Output refers to gross domestic product originating in the sector in 1972 dollars.<sup>2</sup> Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.<sup>3</sup> Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.<sup>4</sup> Current dollar gross domestic product divided by constant dollar gross domestic product.

Note.—Percent changes are based on original data and therefore may differ slightly from percent changes based on indexes in Table B-37.

Source: Department of Labor, Bureau of Labor Statistics.

PRODUCTION AND BUSINESS ACTIVITY

TABLE B-39.—Industrial production indexes, major industry divisions, 1929-78

[1967=100; monthly data seasonally adjusted]

Year or month	Total industrial production	Manufacturing			Mining	Utilities
		Total	Durable	Nondurable		
1967 proportion.....	100.00	87.95	51.98	35.97	6.36	5.69
1929.....	21.6	22.8	22.5	23.2	43.1	7.4
1933.....	13.7	14.0	9.1	19.9	30.6	6.7
1939.....	21.7	21.5	17.7	26.1	42.1	10.7
1940.....	25.0	25.4	23.5	27.5	46.8	11.8
1941.....	31.6	32.4	31.4	33.3	49.7	13.3
1942.....	36.3	37.8	39.9	34.6	51.3	14.9
1943.....	44.0	47.0	54.2	37.1	52.5	16.5
1944.....	47.4	50.9	59.9	38.6	56.2	17.5
1945.....	40.7	42.6	45.2	38.5	55.1	17.8
1946.....	35.0	35.3	31.6	39.7	54.2	18.6
1947.....	39.4	39.4	37.7	41.3	61.3	20.1
1948.....	41.1	40.9	39.3	42.7	64.4	22.4
1949.....	38.8	38.7	35.7	42.0	57.1	23.9
1950.....	44.9	45.0	43.5	46.7	63.8	27.2
1951.....	48.7	48.6	48.9	48.3	70.0	31.0
1952.....	50.6	50.6	51.9	49.2	69.4	33.7
1953.....	54.8	55.2	58.7	51.2	71.2	36.5
1954.....	51.9	51.5	51.8	51.6	69.9	39.3
1955.....	58.5	58.2	59.2	57.2	77.9	43.9
1956.....	61.1	60.5	61.1	60.1	82.0	48.2
1957.....	61.9	61.2	61.6	61.1	82.1	51.5
1958.....	57.9	57.0	53.9	61.6	75.3	53.9
1959.....	64.8	64.2	61.9	67.7	78.7	59.3
1960.....	66.2	65.4	62.9	69.3	80.3	63.4
1961.....	66.7	65.6	61.8	71.5	80.8	67.0
1962.....	72.2	71.5	68.6	75.8	83.1	72.0
1963.....	76.5	75.8	73.1	80.0	86.4	77.0
1964.....	81.7	81.0	78.3	85.2	89.9	83.6
1965.....	89.8	89.7	89.7	90.9	93.2	88.7
1966.....	97.8	97.9	98.9	96.7	98.2	95.5
1967.....	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	106.3	106.4	106.5	106.2	104.2	108.4
1969.....	111.1	111.0	110.6	111.5	108.3	117.3
1970.....	107.8	106.4	102.3	112.3	112.2	124.5
1971.....	109.6	108.2	102.4	116.6	109.8	130.5
1972.....	119.7	118.9	113.7	126.5	113.1	139.4
1973.....	129.8	129.8	127.1	133.8	114.7	145.4
1974.....	129.3	129.4	125.7	134.6	115.3	143.7
1975.....	117.8	116.3	109.3	126.4	112.8	146.0
1976.....	129.8	129.5	121.7	140.9	114.2	151.0
1977.....	137.1	137.1	129.5	148.1	117.8	156.5
1978 <sup>1</sup> .....	145.1	145.5	139.2	154.7	124.2	161.0
1977: Jan.....	132.3	131.6	123.4	143.4	112.8	163.8
Feb.....	133.2	132.6	124.0	145.3	116.3	160.3
Mar.....	135.3	135.1	126.8	147.0	120.6	154.8
Apr.....	136.1	135.8	128.0	147.0	119.2	154.0
May.....	137.0	137.1	129.3	148.5	119.5	156.7
June.....	137.8	137.8	130.5	148.4	122.8	156.8
July.....	138.7	138.5	131.6	148.6	119.8	161.4
Aug.....	138.1	138.6	131.3	149.4	115.4	155.7
Sept.....	138.5	139.0	131.7	149.5	118.0	154.1
Oct.....	138.9	139.4	132.4	149.6	119.6	154.0
Nov.....	139.3	139.9	132.7	150.1	118.8	154.2
Dec.....	139.7	140.5	133.4	150.9	113.4	156.7
1978: Jan.....	138.8	138.7	131.1	149.8	115.0	162.3
Feb.....	139.2	139.4	131.5	150.6	114.4	163.5
Mar.....	140.9	141.4	134.4	151.4	119.3	159.5
Apr.....	143.2	143.5	136.9	153.2	127.2	156.0
May.....	143.9	144.3	137.6	154.0	126.7	157.0
June.....	144.9	145.5	139.0	154.9	128.0	158.6
July.....	146.1	146.7	141.1	155.0	127.1	159.9
Aug.....	147.1	147.6	142.2	155.6	126.0	160.8
Sept.....	147.8	148.7	142.8	157.1	124.1	162.3
Oct.....	148.6	149.4	143.9	157.5	127.7	162.4
Nov.....	149.5	150.3	145.0	158.1	127.9	162.6
Dec.....	150.4	151.2	145.9	158.9	128.0	163.3

<sup>1</sup> Preliminary estimates by Council of Economic Advisers.

Source: Board of Governors of the Federal Reserve System, except as noted.

TABLE B-40.—Industrial production indexes, market groupings, 1947-78

[1967=100; monthly data seasonally adjusted]

Year or month	Total industrial production	Final products						Intermediate products	Materials <sup>a</sup>		
		Total	Consumer goods <sup>b</sup>			Equipment <sup>c</sup>			Total	Durable goods	Non-durable goods
			Total	Auto-motive products	Home goods	Total	Business				
1967 proportion	100.00	47.82	27.68	2.83	5.06	20.14	12.63	12.89	39.29	20.35	10.47
1947	39.4	38.6	42.4	45.3	37.5	30.6	38.0	41.9	39.5	38.3	-----
1948	41.1	40.0	43.7	47.4	39.1	32.2	39.5	44.3	41.2	39.4	-----
1949	38.8	38.8	43.4	47.0	36.2	28.7	34.5	42.0	37.6	35.3	-----
1950	44.9	43.7	49.6	59.1	49.9	31.1	37.0	48.8	45.0	44.4	-----
1951	48.7	47.2	49.1	52.3	43.0	43.3	45.2	51.3	49.8	50.5	-----
1952	50.6	50.7	50.2	47.1	43.0	51.9	51.2	50.9	50.5	51.6	-----
1953	54.8	54.1	53.2	59.5	48.6	56.3	53.3	54.5	56.1	60.3	-----
1954	51.9	51.3	52.9	55.4	44.9	49.3	46.8	54.3	51.8	52.0	45.9
1955	58.5	55.4	59.0	73.6	53.0	50.4	50.8	61.7	61.3	63.7	52.5
1956	61.1	58.6	61.2	60.6	55.7	55.3	58.8	64.4	62.8	63.9	54.9
1957	61.9	60.3	62.6	63.5	54.5	57.5	61.1	64.4	62.8	63.8	54.7
1958	57.9	57.6	62.1	50.5	51.4	51.5	51.5	63.0	56.5	53.7	54.4
1959	64.8	63.2	68.1	63.3	59.0	56.5	57.9	69.5	65.2	64.0	62.1
1960	66.2	65.3	70.7	72.5	59.4	58.1	59.4	70.0	66.1	64.8	63.2
1961	66.7	65.8	72.2	66.1	61.3	57.3	57.7	71.4	66.2	63.3	65.8
1962	72.2	71.4	77.1	80.1	66.5	63.7	62.7	75.7	72.1	70.4	71.3
1963	76.5	75.5	81.3	87.7	71.8	67.5	65.8	79.9	76.7	75.1	75.6
1964	81.7	79.7	85.9	91.9	78.4	71.4	73.7	85.2	82.9	81.9	82.2
1965	89.8	87.6	92.6	113.3	88.9	80.7	84.4	90.6	92.4	93.8	90.3
1966	97.8	95.9	97.3	112.8	97.9	94.0	97.7	96.2	100.7	103.3	97.5
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	106.3	106.2	105.9	119.4	106.4	106.5	105.5	106.3	106.5	106.2	108.8
1969	111.1	109.6	109.8	118.1	113.2	109.3	112.5	112.9	112.5	112.1	115.7
1970	107.8	105.3	109.0	98.8	110.2	100.1	107.0	112.9	109.2	103.8	115.4
1971	109.6	106.3	114.7	124.4	115.6	94.7	104.1	116.7	111.3	104.9	120.2
1972	119.7	115.7	124.4	141.4	129.5	103.8	118.0	126.5	122.3	117.7	132.9
1973	129.8	124.4	131.5	153.0	142.5	114.5	134.2	137.2	133.9	134.6	142.2
1974	129.3	125.1	128.9	132.8	136.8	120.0	142.4	135.3	132.4	132.7	142.6
1975	117.8	118.2	124.0	125.8	118.8	110.2	128.2	123.1	115.5	109.1	126.6
1976	129.8	127.2	136.2	154.8	133.9	114.6	136.3	137.2	130.6	126.8	146.3
1977	137.1	134.9	143.4	174.2	141.3	123.2	149.2	145.1	136.9	134.5	153.5
1977: Jan.	132.3	130.8	139.9	164.2	134.8	118.4	142.3	142.2	131.1	127.4	144.8
Feb.	133.2	131.6	140.5	161.7	137.3	119.2	143.5	141.6	132.7	128.4	150.4
Mar.	135.3	133.3	142.9	178.3	137.9	120.0	144.8	141.8	135.5	131.9	153.3
Apr.	136.1	134.1	142.9	173.9	138.8	127.1	147.1	142.3	136.5	133.8	153.7
May	137.0	134.7	143.1	172.8	140.6	123.2	148.9	143.5	137.8	135.2	155.4
June	137.8	135.4	143.8	179.8	142.3	124.1	150.1	144.7	138.7	136.4	154.7
July	138.7	136.8	145.4	184.8	142.9	124.8	151.2	146.3	138.9	136.8	154.1
Aug.	138.1	136.3	144.7	177.2	142.1	124.9	151.1	146.1	137.6	135.4	155.1
Sept.	138.5	136.8	144.9	177.0	143.6	125.6	152.1	146.5	137.9	135.7	153.9
Oct.	138.9	136.5	144.9	179.4	144.2	125.0	152.6	147.8	138.9	137.1	154.4
Nov.	139.3	137.0	145.2	173.6	145.0	125.8	153.5	148.4	139.0	137.2	155.4
Dec.	139.7	137.6	145.8	172.4	146.6	126.2	154.0	150.4	138.8	138.7	155.3
1978: Jan.	138.8	134.9	141.8	157.5	140.3	125.4	152.6	151.6	139.2	138.2	155.0
Feb.	139.2	136.4	143.8	162.8	144.6	126.2	154.2	151.4	138.6	137.0	158.5
Mar.	140.9	138.9	145.9	175.8	147.2	128.1	157.4	151.4	139.9	138.6	160.5
Apr.	143.2	140.5	147.5	184.3	149.2	130.8	159.3	152.1	143.7	142.7	162.0
May	143.9	140.5	147.0	180.0	148.9	131.6	160.2	152.6	145.1	143.9	163.5
June	144.9	141.1	147.0	179.9	149.7	133.0	161.8	154.7	146.4	145.4	164.1
July	146.1	142.2	147.7	182.2	148.9	134.7	163.8	155.6	147.9	148.7	162.5
Aug.	147.1	143.3	148.4	182.1	150.0	136.3	165.4	156.4	148.6	150.4	162.7
Sept.	147.8	143.7	149.0	178.3	150.2	136.4	165.8	157.0	149.7	152.1	164.4
Oct.	148.6	143.9	149.1	186.2	148.5	136.9	166.9	158.1	151.3	153.7	165.4
Nov.	149.5	144.8	149.8	189.6	147.6	137.7	167.9	159.2	152.2	154.6	166.5
Dec.	150.4	145.6	150.5	186.3	149.6	138.8	169.3	160.5	152.9	155.8	166.8

<sup>a</sup> Also includes clothing and consumer staples, not shown separately.<sup>b</sup> Also includes defense and space equipment, not shown separately.<sup>c</sup> Also includes energy materials, not shown separately.

Source: Board of Governors of the Federal Reserve System.

TABLE B-41.—Industrial production indexes, selected manufactures, 1947-78

[1967=100; monthly data seasonally adjusted]

Year or month	Durable manufactures							Nondurable manufactures				
	Primary metals		Fabricated metal products	Non-electrical machinery	Electrical machinery	Transportation equipment		Lumber and products	Apparel products	Printing and publishing	Chemicals and products	Foods
	Total	Iron and steel				Total	Motor vehicles and parts					
1967 proportion..	6.57	4.21	5.93	9.15	8.05	9.27	4.50	1.64	3.31	4.72	7.74	8.75
1947.....	63.3	-----	49.9	39.0	22.2	31.8	-----	58.9	57.8	43.3	19.7	55.8
1948.....	65.8	-----	50.8	39.2	23.0	34.8	-----	61.3	60.3	45.4	21.3	55.2
1949.....	55.4	-----	45.8	33.4	21.6	34.9	-----	54.1	59.7	46.6	21.0	55.9
1950.....	69.7	-----	56.1	37.5	29.6	41.8	-----	65.7	64.3	48.9	26.2	57.9
1951.....	75.8	-----	59.9	47.7	29.8	46.6	-----	65.5	63.1	49.7	29.7	59.0
1952.....	69.2	-----	58.5	51.9	34.0	54.2	-----	64.7	66.3	49.7	31.1	60.2
1953.....	78.5	-----	66.0	54.0	39.0	68.0	-----	68.4	67.2	52.0	33.6	61.4
1954.....	63.5	70.1	59.4	46.1	34.7	59.2	60.5	68.0	66.4	54.1	34.1	62.7
1955.....	82.5	93.2	67.8	50.6	39.9	68.0	81.2	75.9	73.3	59.5	39.8	66.3
1956.....	82.0	91.5	68.8	58.0	43.1	66.0	65.8	75.0	75.0	63.2	42.7	70.1
1957.....	78.5	88.2	70.6	57.9	42.8	70.7	69.0	68.8	74.9	65.4	45.2	71.1
1958.....	62.3	66.5	63.3	48.6	39.2	55.8	51.0	69.9	72.8	63.9	46.6	72.9
1959.....	72.7	76.5	71.0	56.7	47.6	63.2	66.2	79.3	80.1	68.2	54.3	76.5
1960.....	72.4	77.7	71.1	56.9	51.6	65.4	74.7	74.7	81.7	71.0	56.4	78.6
1961.....	71.1	74.2	69.4	55.4	54.8	61.5	65.5	78.2	82.2	71.3	59.2	80.9
1962.....	76.3	77.3	75.4	62.1	62.9	71.1	79.8	82.5	85.5	73.9	65.7	83.4
1963.....	82.3	84.3	77.8	66.3	64.7	78.0	88.3	86.3	89.1	77.8	71.8	86.4
1964.....	92.8	95.9	82.6	75.6	68.4	80.0	90.7	92.7	92.2	82.6	78.8	90.4
1965.....	102.1	105.2	90.8	85.0	81.7	95.1	115.9	96.3	97.4	87.9	87.8	92.4
1966.....	108.4	108.4	97.2	98.8	97.9	102.0	113.9	100.0	99.9	94.6	95.7	96.0
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.3	103.2	105.6	101.8	105.5	111.1	120.3	105.5	102.9	103.2	109.5	102.6
1969.....	113.8	112.6	107.9	109.3	111.9	108.4	116.5	107.9	106.7	107.4	118.4	106.1
1970.....	106.6	104.7	102.4	104.4	108.1	89.5	92.3	105.6	101.4	107.0	120.4	108.9
1971.....	100.2	96.1	103.5	100.2	107.7	97.9	118.6	113.8	104.7	107.1	125.9	112.8
1972.....	112.1	107.1	112.1	116.0	122.2	108.2	135.8	120.8	109.4	112.7	143.6	116.8
1973.....	126.7	122.3	124.7	133.7	143.1	118.3	148.8	126.0	117.3	118.2	154.5	120.9
1974.....	123.1	119.8	124.2	140.1	143.8	108.7	128.2	116.2	114.3	118.2	159.4	124.0
1975.....	96.4	95.8	109.9	125.1	116.5	97.4	111.1	107.6	107.6	113.3	147.2	123.4
1976.....	108.9	104.9	123.3	135.0	131.6	110.6	140.7	125.1	122.2	120.6	169.3	132.3
1977.....	110.2	103.4	130.9	144.8	141.9	121.1	159.7	133.4	124.2	124.7	180.7	137.9
1977: Jan.....	100.8	89.7	125.7	139.9	134.0	113.5	145.5	132.7	123.0	124.7	172.2	134.2
Feb.....	100.2	91.3	125.8	139.8	137.6	113.4	145.4	132.2	124.4	122.4	174.9	136.4
Mar.....	108.3	97.9	127.5	139.8	137.6	120.5	161.2	132.1	122.2	124.8	180.0	138.7
Apr.....	112.2	103.9	127.6	142.9	139.6	119.8	158.1	130.6	121.4	123.4	180.6	138.0
May.....	117.1	111.0	128.2	142.6	141.8	120.3	157.7	133.0	123.5	124.4	182.8	138.3
June.....	114.7	109.2	130.8	144.0	142.6	123.7	163.2	132.4	122.1	124.1	183.5	136.9
July.....	114.4	110.9	132.0	145.7	143.6	125.6	166.2	132.9	121.1	124.9	182.6	138.3
Aug.....	112.5	110.6	134.0	145.2	143.9	124.3	164.4	131.8	124.1	125.0	182.6	139.3
Sept.....	109.0	104.6	133.6	147.4	144.6	125.5	165.6	137.1	127.7	124.2	181.3	138.3
Oct.....	113.5	107.7	133.8	148.9	144.2	124.3	168.4	135.7	129.0	125.7	182.3	137.3
Nov.....	111.2	104.3	135.8	149.7	146.0	122.0	163.0	137.5	125.1	126.2	183.1	139.4
Dec.....	111.0	103.8	136.4	151.7	147.3	122.2	161.8	138.1	125.8	127.5	183.0	140.4
1978: Jan.....	107.4	99.5	136.9	150.1	144.0	116.2	146.6	138.5	118.6	129.9	184.4	139.3
Feb.....	106.2	96.3	136.9	150.1	146.4	118.4	153.1	135.5	121.1	128.3	183.7	140.8
Mar.....	106.1	96.4	138.1	151.5	149.5	126.5	165.1	136.5	122.8	129.1	185.2	141.1
Apr.....	114.3	109.0	139.5	152.2	152.3	130.5	171.7	136.9	126.1	128.6	185.5	143.1
May.....	115.5	110.5	140.4	152.9	152.9	130.1	168.3	136.5	125.8	128.2	188.1	142.8
June.....	117.5	114.5	142.3	154.6	154.1	130.4	167.7	138.7	126.8	128.7	191.1	141.8
July.....	123.0	119.0	144.0	156.1	157.9	132.1	169.7	138.1	124.5	130.3	192.3	142.9
Aug.....	126.0	120.9	145.8	157.3	156.9	133.4	171.0	136.9	127.2	129.5	192.2	144.0
Sept.....	127.9	123.2	146.3	158.7	158.3	132.8	168.9	139.2	130.9	131.0	194.2	144.4
Oct.....	128.4	123.8	146.3	159.8	157.9	136.9	177.1	140.2	130.6	130.3	195.8	143.5
Nov.....	128.9	123.9	146.8	160.7	159.2	139.3	181.3	141.6	-----	131.9	196.8	144.1
Dec.....	129.3	-----	147.9	162.2	160.9	138.6	178.5	-----	-----	132.9	-----	-----

Source: Board of Governors of the Federal Reserve System.

TABLE B-42.—Capacity utilization rate in manufacturing, 1948-78  
[Percent; quarterly data seasonally adjusted]

Year or quarter	FRB series <sup>1</sup>			Commerce series <sup>2</sup>					Wharton series <sup>3</sup>		
	Total manufacturing	Primary processing	Advanced processing	Total manufacturing	Durable goods	Non-durable goods	Primary-processed goods	Advanced processed goods	Total manufacturing	Durable goods	Non-durable goods
1948.....	82.5	87.3	80.0								
1949.....	74.2	76.2	73.2								
1950.....	82.8	88.5	79.8						88.9	83.8	96.1
1951.....	85.8	90.2	83.4						90.3	87.2	94.8
1952.....	85.4	84.9	85.9						88.4	86.0	91.8
1953.....	89.2	89.4	89.3						92.4	93.3	91.2
1954.....	80.1	80.6	80.0						82.9	79.5	87.7
1955.....	87.0	92.0	84.2						91.4	90.2	93.1
1956.....	86.1	89.4	84.4						90.8	89.0	93.4
1957.....	83.6	84.7	83.1						87.9	86.0	90.8
1958.....	75.0	75.4	74.9						77.5	70.8	87.4
1959.....	81.6	83.0	81.1						84.0	78.6	92.0
1960.....	80.1	79.8	80.5						82.1	77.0	89.8
1961.....	77.3	77.9	77.2						79.1	72.9	88.5
1962.....	81.4	81.5	81.6						82.5	77.7	89.8
1963.....	83.5	83.8	83.4						84.0	79.6	90.7
1964.....	85.7	87.8	84.6						86.8	82.8	92.8
1965.....	89.5	91.0	88.9	86	88	85	89	85	92.4	90.6	95.3
1966.....	91.1	91.4	91.1	86	87	86	88	85	96.6	96.0	97.5
1967.....	86.9	85.7	87.6	84	83	85	87	83	93.5	91.8	96.0
1968.....	87.0	87.6	86.8	85	84	86	86	84	95.0	93.7	97.0
1969.....	86.2	88.6	85.0	85	84	86	87	84	95.2	94.0	97.1
1970.....	79.2	82.8	77.3	81	78	83	83	79	87.8	84.2	93.4
1971.....	78.0	82.0	75.9	80	78	83	82	80	86.4	82.3	92.8
1972.....	83.1	88.0	80.5	83	82	85	85	82	91.8	88.9	96.2
1973.....	87.5	92.4	84.9	86	85	86	89	84	97.1	96.6	97.9
1974.....	84.2	87.7	82.2	83	82	84	85	82	92.9	91.9	94.5
1975.....	73.6	73.8	73.5	77	76	79	76	77	80.4	77.1	85.7
1976.....	80.2	82.2	79.1	81	81	82	82	81	87.4	84.7	92.0
1977.....	82.4	84.3	81.5	83	84	82	83	83	90.1	88.2	93.3
1978 P.....	84.2	86.6	82.9						92.8	92.0	94.2
1973: I.....	87.1	91.8	84.5	86	86	86	88	85	96.4	95.4	98.0
II.....	87.6	92.1	85.2	86	86	86	89	85	97.1	96.4	98.3
III.....	87.8	92.7	85.0	85	85	86	89	83	97.4	97.1	97.7
IV.....	87.7	93.0	85.0	85	84	86	89	82	97.4	97.4	97.5
1974: I.....	85.7	90.6	83.0	84	83	85	87	83	94.6	93.3	96.7
II.....	85.8	90.1	83.3	84	84	85	87	83	94.7	93.5	96.7
III.....	85.5	89.3	83.5	84	84	84	86	83	94.5	93.8	95.6
IV.....	79.7	80.7	79.1	78	76	80	79	77	87.8	86.9	89.1
1975: I.....	70.9	69.9	71.3	75	74	76	75	75	77.3	74.8	81.3
II.....	71.3	70.4	71.9	75	73	78	73	76	77.9	74.7	83.1
III.....	75.3	76.3	74.8	79	78	80	78	79	82.3	78.8	88.1
IV.....	76.9	78.6	75.9	79	77	81	78	79	83.9	80.0	90.4
1976: I.....	79.1	81.0	78.0	82	81	82	83	81	86.3	82.7	92.1
II.....	80.3	82.5	79.1	82	83	81	83	82	87.8	85.1	92.3
III.....	80.8	83.1	79.5	80	79	82	82	79	88.1	86.0	91.6
IV.....	80.6	82.2	79.7	81	81	82	80	82	87.6	85.0	91.9
1977: I.....	81.2	82.3	80.5	83	84	82	83	84	88.3	85.6	92.9
II.....	82.7	85.1	81.4	84	86	82	84	84	90.2	88.3	93.6
III.....	83.0	84.9	81.9	82	82	82	82	82	90.8	89.2	93.5
IV.....	82.9	84.6	82.0	82	82	82	82	83	91.0	89.6	93.4
1978: I.....	82.1	83.8	81.1	84	84	83	83	84	90.0	88.4	92.9
II.....	84.0	86.3	82.7	84	85	82	84	84	92.5	91.5	94.2
III.....	85.0	87.8	83.5	83	83	82	84	82	93.8	93.4	94.4
IV P.....	85.7	88.8	84.2						94.8	94.6	95.1

<sup>1</sup> For description of the series, see "Federal Reserve Measures of Capacity and Capacity Utilization," February 1978.  
<sup>2</sup> Quarterly data are for last month in quarter. Annual data are averages of the four indexes, except for 1965 (December index) and 1966-67 (averages of June and December indexes). For description of the series, see "Survey of Current Business," July 1974.  
<sup>3</sup> Annual data are averages of quarterly indexes. For description of the series, see F. Gerard Adams and Robert Summers, "The Wharton Index of Capacity Utilization: A Ten Year Perspective," 1973 Proceedings of the Business and Economic Statistics Section, American Statistical Association.

Sources: Board of Governors of the Federal Reserve System, Department of Commerce (Bureau of Economic Analysis), and Wharton School of Finance.

TABLE B-43.—New construction activity, 1929-78

(Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates)

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings <sup>1</sup>		Nonresidential buildings and other construction <sup>1</sup>				Total	Federal	State and local <sup>2</sup>
			Total <sup>2</sup>	New housing units	Total	Commercial <sup>3</sup>	Industrial	Other <sup>4</sup>			
1929	10.8	8.3	3.6	3.0	4.7	1.1	0.9	2.6	2.5	0.2	2.3
1933	2.9	1.2	.5	.3	.8	.1	.2	.5	1.6	.5	1.1
1939	8.2	4.4	2.7	2.3	1.7	.3	.3	1.2	3.8	.8	3.1
1940	8.7	5.1	3.0	2.6	2.1	.3	.4	1.3	3.6	1.2	2.4
1941	12.0	6.2	3.5	3.0	2.7	.4	.8	1.5	5.8	3.8	2.0
1942	14.1	3.4	1.7	1.4	1.7	.2	.3	1.2	10.7	9.3	1.3
1943	8.3	2.0	.9	.7	1.1	.0	.2	.9	6.3	5.6	.7
1944	5.3	2.2	.8	.6	1.4	.1	.2	1.1	3.1	2.5	.6
1945	5.8	3.4	1.3	.7	2.1	.2	.6	1.3	2.4	1.7	.7
1946	14.3	12.1	6.2	4.8	5.8	1.2	1.7	3.0	2.2	.9	1.4
New series											
1947	20.0	16.7	9.9	7.8	6.9	1.0	1.7	4.2	3.3	.8	2.5
1948	26.1	21.4	13.1	10.5	8.2	1.4	1.4	5.5	4.7	1.2	3.5
1949	26.7	20.5	12.4	10.0	8.0	1.2	1.0	5.9	6.3	1.5	4.8
1950	33.6	26.7	18.1	15.6	8.6	1.4	1.1	6.1	6.9	1.6	5.2
1951	35.4	26.2	15.9	13.2	10.3	1.5	2.1	6.7	9.3	3.0	6.3
1952	36.8	26.0	15.8	12.9	10.2	1.1	2.3	6.8	10.8	4.2	6.6
1953	39.1	27.9	16.6	13.4	11.3	1.8	2.2	7.3	11.2	4.1	7.1
1954	41.4	29.7	18.2	14.9	11.5	2.2	2.0	7.2	11.7	3.4	8.3
1955	46.5	34.8	21.9	18.2	12.9	3.2	2.4	7.3	11.7	2.8	8.9
1956	47.6	34.9	20.2	16.1	14.7	3.6	3.1	8.0	12.7	2.7	10.0
1957	49.1	35.1	19.0	14.7	16.1	3.6	3.6	9.0	14.1	3.0	11.1
1958	50.0	34.6	19.8	15.4	14.8	3.6	2.4	8.8	15.5	3.4	12.1
1959	55.4	39.3	24.3	19.2	15.1	3.9	2.1	9.0	16.1	3.7	12.3
1960	54.7	38.9	23.0	17.3	15.9	4.2	2.9	8.9	15.9	3.6	12.2
1961	56.4	39.3	23.1	17.1	16.2	4.7	2.8	8.7	17.1	3.9	13.3
1962	60.2	42.3	25.2	19.4	17.2	5.1	2.8	9.2	17.9	3.9	14.0
1963	64.8	45.5	27.9	21.7	17.6	5.0	2.9	9.7	19.4	4.0	15.4
1964	67.7	47.3	28.0	21.8	19.3	5.4	3.6	10.3	20.4	3.9	16.5
1965	73.7	51.7	27.9	21.7	23.8	-----	-----	-----	22.1	4.0	18.0
1966	76.4	52.4	25.7	19.4	26.7	-----	-----	-----	24.0	4.0	20.0
1967	78.1	52.5	25.6	19.0	27.0	-----	-----	-----	25.5	3.5	22.1
1968	87.1	59.5	30.6	24.0	28.9	7.8	6.0	15.1	27.6	3.4	24.2
1969	93.9	66.0	33.2	25.9	32.8	9.4	6.8	16.6	28.0	3.3	24.7
1970	94.9	66.8	31.9	24.3	34.9	9.8	6.5	18.6	28.1	3.3	24.8
1971	110.0	80.1	43.3	35.1	36.8	11.6	5.4	19.8	29.9	4.0	25.9
1972	124.1	93.9	54.3	44.9	39.6	13.5	4.7	21.5	30.2	4.4	25.8
1973	137.9	105.4	59.7	50.1	45.7	15.5	6.2	24.0	32.5	4.9	27.7
1974	138.5	100.2	50.4	40.6	49.8	15.9	7.9	25.9	38.3	5.3	33.0
1975	134.5	93.7	46.5	34.4	47.2	12.8	8.0	26.4	40.9	6.3	34.6
1976	148.8	110.5	60.5	47.3	49.9	12.8	7.2	30.0	38.3	6.8	31.6
1977	172.6	134.7	81.0	65.7	53.8	14.8	7.7	31.3	37.8	7.4	30.4

See next page for continuation of table.



TABLE B-43.—New construction activity, 1929-78—Continued

(Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates)

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings <sup>1</sup>		Nonresidential buildings and other construction <sup>2</sup>				Total	Federal	State and local <sup>3</sup>
			Total <sup>4</sup>	New housing units	Total	Commercial <sup>5</sup>	Industrial	Other <sup>4</sup>			
1977: Jan.....	152.5	118.6	67.0	52.5	51.7	12.8	7.1	31.8	33.8	7.3	26.5
Feb.....	160.1	123.6	71.9	58.1	51.7	12.8	6.8	32.0	36.4	7.6	28.8
Mar.....	165.3	128.1	75.8	61.5	52.2	13.4	7.3	31.5	37.3	7.4	29.9
Apr.....	169.3	131.8	79.0	63.5	52.8	13.8	7.6	31.4	37.5	7.5	30.0
May.....	173.4	134.6	81.9	65.9	52.7	14.0	7.5	31.2	38.8	7.4	31.4
June.....	175.8	136.6	82.6	66.6	53.9	15.2	7.6	31.2	39.2	6.7	32.5
July.....	176.4	137.3	82.9	67.1	54.4	15.7	7.7	31.0	39.1	8.0	31.1
Aug.....	176.4	137.6	82.9	67.1	54.7	15.7	8.1	30.9	38.8	7.9	30.9
Sept.....	177.8	138.3	83.0	67.6	55.4	16.2	8.1	31.2	39.4	8.6	30.8
Oct.....	176.7	139.2	84.2	69.3	55.0	15.9	8.2	30.9	37.4	6.6	30.8
Nov.....	178.1	140.6	85.2	70.7	55.4	15.9	8.4	31.1	37.4	7.3	30.1
Dec.....	179.0	142.3	87.4	72.8	54.9	14.9	7.9	32.1	36.8	7.3	29.4
1978: Jan.....	171.4	134.9	79.4	65.0	55.6	15.0	7.4	33.2	36.4	8.1	28.3
Feb.....	177.6	141.9	85.3	70.9	56.6	15.2	7.7	33.8	35.7	8.1	27.6
Mar.....	185.4	147.7	88.1	72.5	59.6	16.2	9.2	34.1	37.7	8.0	29.6
Apr.....	195.0	153.5	92.2	74.4	61.3	17.2	9.2	34.9	41.5	8.5	33.1
May.....	201.3	156.2	94.3	75.1	61.9	18.5	8.7	34.6	45.1	7.8	37.3
June.....	206.3	161.1	95.4	76.6	65.7	19.2	11.3	35.1	45.2	7.4	37.8
July.....	210.2	161.8	95.9	77.7	65.9	19.5	11.2	35.3	48.4	9.4	39.0
Aug.....	208.7	160.6	95.0	77.1	65.6	18.8	12.0	34.7	48.2	9.6	38.5
Sept.....	209.2	161.3	94.2	76.8	67.0	18.9	12.6	35.4	48.0	9.8	38.2
Oct.....	209.9	161.9	93.6	76.9	68.3	19.4	12.6	36.3	47.9	7.7	40.2
Nov.....	212.8	165.5	95.8	79.3	69.7	20.4	12.7	36.6	47.3	8.5	38.8

<sup>1</sup> Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.

<sup>2</sup> Total includes additions and alterations and nonhousekeeping units, not shown separately.

<sup>3</sup> Office buildings, warehouses, stores, restaurants, garages, etc.

<sup>4</sup> Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities, and all other private.

<sup>5</sup> Includes Federal grants-in-aid for State and local projects.

Source: Department of Commerce (Bureau of the Census).

TABLE B-44.—New housing units started and authorized, 1959-78

(Thousands of units)

Year or month	New housing units started						New private housing units authorized <sup>2</sup>			
	Private and public <sup>1</sup>		Private <sup>1</sup>			Total	Type of structure			
	Total (farm and non-farm)	Non-farm	Total (farm and nonfarm)				Total	Type of structure		
			Total	One unit	2 to 4 units			5 units or more	Total	One unit
1959	1,553.7	1,531.3	1,517.0	1,234.0	283.0	1,208.3	938.3	77.1	192.9	
1960	1,296.1	1,274.0	1,252.2	994.7	257.4	998.0	746.1	64.6	187.4	
1961	1,365.0	1,336.8	1,313.0	974.3	338.7	1,064.2	722.8	67.6	273.8	
1962	1,492.5	1,468.7	1,462.9	991.4	471.5	1,186.6	716.2	87.1	383.3	
1963	1,634.9	1,614.8	1,603.2	1,012.4	590.8	1,334.7	750.2	118.9	465.6	
1964	1,561.0	1,534.0	1,528.8	970.5	108.4	1,285.8	720.1	100.8	464.9	
1965	1,509.7	1,487.5	1,472.8	963.7	86.6	1,239.8	709.9	84.8	445.1	
1966	1,195.8	1,172.8	1,164.9	778.6	61.1	971.9	563.2	61.0	347.7	
1967	1,321.9	1,298.8	1,291.6	843.9	71.6	1,141.0	650.6	73.0	417.5	
1968	1,545.4	1,521.4	1,507.6	899.4	80.9	1,353.4	694.7	84.3	574.4	
1969	1,499.5	1,482.3	1,466.8	810.6	85.0	1,323.7	625.9	85.2	612.7	
1970	1,469.0	(3)	1,433.6	812.9	84.8	1,351.5	646.8	88.1	616.7	
1971	2,084.5	(3)	2,052.2	1,151.0	120.3	1,924.6	906.1	132.9	885.7	
1972	2,378.5	(3)	2,356.6	1,309.2	141.3	2,218.9	1,033.1	148.6	1,037.2	
1973	2,057.5	(3)	2,045.3	1,132.0	118.3	1,927.0	882.1	117.0	820.5	
1974	1,352.5	(3)	1,337.7	888.1	68.1	1,269.6	643.8	64.3	366.2	
1975	1,171.4	(3)	1,160.4	892.2	64.0	1,096.4	675.5	63.9	199.8	
1976	1,547.6	(3)	1,537.5	1,162.4	85.9	1,451.6	893.6	93.1	309.5	
1977	1,989.8	(3)	1,987.1	1,450.9	121.7	1,865.4	1,126.1	121.3	442.7	
1978 <sup>a</sup>	2,021.5	(3)	2,018.5	1,432.7	125.7	1,892.8	1,077.6	124.0	456.8	
Seasonally adjusted annual rates										
1977: Jan	81.5	(3)	1,393	1,011	104	278	1,454	991	116	347
Feb	112.7	(3)	1,751	1,362	116	273	1,538	1,059	113	366
Mar	173.6	(3)	2,090	1,489	114	487	1,663	1,138	113	412
Apr	182.4	(3)	1,899	1,433	118	348	1,655	1,088	113	454
May	201.3	(3)	1,982	1,469	120	393	1,656	1,099	112	445
June	197.8	(3)	1,931	1,406	113	412	1,739	1,114	119	506
July	189.8	(3)	2,072	1,453	124	495	1,678	1,114	120	444
Aug	194.2	(3)	2,038	1,454	119	465	1,770	1,148	136	486
Sept	177.8	(3)	2,012	1,508	124	380	1,695	1,139	123	433
Oct	193.2	(3)	2,139	1,532	127	480	1,781	1,186	129	466
Nov	155.9	(3)	2,096	1,544	134	418	1,822	1,218	144	460
Dec	129.4	(3)	2,203	1,574	153	476	1,778	1,188	122	468
1978: Jan	88.6	(3)	1,548	1,156	101	291	1,526	1,032	101	393
Feb	101.3	(3)	1,569	1,103	79	387	1,534	957	107	470
Mar	172.3	(3)	2,047	1,429	126	492	1,647	1,037	127	483
Apr	197.5	(3)	2,165	1,492	142	531	1,740	1,157	117	466
May	211.1	(3)	2,054	1,478	89	487	1,597	1,058	112	427
June	216.1	(3)	2,124	1,441	148	535	1,821	1,123	156	542
July	192.3	(3)	2,119	1,453	135	531	1,632	1,035	107	490
Aug	190.9	(3)	2,025	1,440	139	446	1,563	1,020	125	418
Sept	181.1	(3)	2,075	1,463	111	501	1,731	1,092	125	514
Oct	192.1	(3)	2,106	1,455	139	512	1,719	1,127	133	459
Nov <sup>b</sup>	157.7	(3)	2,155	1,558	156	441	1,724	1,114	131	479
Dec <sup>c</sup>	120.5	(3)	2,125	1,533	133	459	1,680	1,158	148	374

<sup>1</sup> Units in structures built by private developers for sale upon completion to local public housing authorities under the Department of Housing and Urban Development "Turnkey" program are classified as private housing. Military housing starts, including those financed with mortgages insured by FHA under Section 803 of the National Housing Act, are included in publicly owned starts and excluded from total private starts.

<sup>2</sup> Authorized by issuance of local building permit: in 14,000 permit-issuing places beginning 1972; 13,000 for 1967-71; 12,000 for 1963-66; and 10,000 prior to 1963.

<sup>3</sup> Not available separately beginning January 1970.

Note.—Only the series on private and public nonfarm housing units started is available prior to 1959. See 1976 "Economic Report" for this earlier series.

Source: Department of Commerce, Bureau of the Census.

TABLE B-45.—Business expenditures for new plant and equipment, 1947-79<sup>1</sup>

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total	Manufacturing					Nonmanufacturing					
		Total	Durable goods	Non-durable goods	Total	Mining	Transportation			Public utilities	Communication	Commercial and other <sup>2</sup>
							Railroad	Air	Other			
1947	19.33	8.44	3.25	5.19	10.89	0.69	0.91	0.17	1.13	1.54	1.40	5.05
1948	21.30	9.01	3.30	5.71	12.29	.93	1.37	.10	1.17	2.54	1.74	4.42
1949	18.98	7.12	2.45	4.68	11.86	.88	1.42	.12	.76	3.10	1.34	4.24
1950	20.21	7.39	2.94	4.45	12.82	.84	1.18	.10	1.09	3.24	1.14	5.22
1951	25.46	10.71	4.82	5.89	14.75	1.11	1.58	.14	1.33	3.56	1.37	5.67
1952	26.43	11.45	5.21	6.24	14.98	1.21	1.50	.24	1.23	3.74	1.61	5.45
1953	28.20	11.86	5.31	6.56	16.34	1.25	1.42	.24	1.29	4.34	1.78	6.02
1954	27.19	11.24	4.91	6.33	15.95	1.28	.93	.24	1.22	3.99	1.82	6.45
1955	29.53	11.89	5.41	6.48	17.64	1.31	1.02	.26	1.30	4.03	2.11	7.63
1956	35.73	15.40	7.45	7.95	20.34	1.64	1.37	.35	1.31	4.52	2.82	8.32
1957	37.94	16.51	7.84	8.68	21.43	1.69	1.58	.41	1.30	5.67	3.19	7.60
1958	31.89	12.38	5.61	6.77	19.51	1.43	.86	.37	1.06	5.52	2.79	7.48
1959	33.55	12.77	5.81	6.95	20.78	1.36	1.02	.78	1.33	5.14	2.72	8.44
1960	36.75	15.09	7.23	7.85	21.66	1.30	1.16	.66	1.30	5.24	3.24	8.75
1961	35.91	14.33	6.31	8.02	21.58	1.29	1.29	.73	1.23	5.00	3.39	9.13
1962	38.39	15.06	6.79	8.26	23.33	1.40	1.02	.52	1.65	4.90	3.85	9.99
1963	40.77	16.22	7.53	8.70	24.55	1.27	1.26	.40	1.58	4.98	4.06	10.99
1964	46.97	19.34	9.28	10.07	27.62	1.34	1.66	1.02	1.50	5.49	4.61	12.02
1965	54.42	23.44	11.50	11.94	30.98	1.45	1.99	1.22	1.68	6.13	5.30	13.19
1966	63.51	28.20	14.06	14.14	35.32	1.62	2.37	1.74	1.64	7.43	6.02	14.48
1967	65.47	28.51	14.06	14.45	36.96	1.65	1.86	2.29	1.48	8.74	6.34	14.59
1968	67.76	28.37	14.12	15.25	39.40	1.63	1.45	2.56	1.59	10.20	6.83	15.14
1969	75.56	31.68	15.96	15.72	43.88	1.86	1.86	2.51	1.68	11.61	8.30	16.05
1970	79.71	31.95	15.80	16.15	47.76	1.89	1.78	3.03	1.23	13.14	10.10	16.59
1971	81.21	29.99	14.15	15.84	51.22	2.16	1.67	1.88	1.38	15.30	10.77	18.05
1972	88.44	31.35	15.64	15.72	57.09	2.42	1.80	2.46	1.46	17.00	11.89	20.07
1973	99.74	38.01	19.25	18.76	61.73	2.74	1.96	2.41	1.66	18.71	12.85	21.40
1974	112.40	46.01	22.62	23.39	66.39	3.18	2.54	2.00	2.12	20.55	13.96	22.05
1975	112.78	47.95	21.84	26.11	64.82	3.79	2.55	1.84	3.18	20.14	12.74	20.60
1976	120.49	52.48	23.68	28.81	68.01	4.00	2.52	1.30	3.63	22.28	13.30	20.99
1977	135.80	60.16	27.77	32.39	75.64	4.50	2.80	1.62	2.51	25.80	15.45	22.97
1978 <sup>3</sup>	153.09	67.65	31.75	35.90	85.44	4.84	3.22	2.36	2.39	29.16	18.04	25.42
1979 <sup>3</sup>	170.20	76.99	36.89	40.11	93.20	5.31	3.83	2.66	2.67	32.56	46.17	
1976: I	114.72	49.21	21.63	27.58	65.51	3.83	2.08	1.18	3.29	21.91	12.54	20.68
II	118.12	50.64	22.54	28.09	67.48	3.83	2.64	1.44	4.16	21.85	12.62	20.94
III	122.55	54.78	24.59	30.20	67.76	4.21	2.69	1.12	3.44	21.67	13.64	20.99
IV	125.22	54.44	25.50	28.93	70.78	4.13	2.63	1.41	3.49	23.46	14.30	21.36
1977: I	130.16	56.43	26.30	30.13	73.74	4.24	2.71	1.62	2.96	25.35	14.19	22.67
II	134.24	59.46	27.26	32.19	74.78	4.49	2.57	1.43	2.96	25.29	15.32	22.73
III	140.38	63.02	29.23	33.79	77.36	4.74	3.20	1.69	1.96	26.22	16.40	23.14
IV	138.11	61.41	28.19	33.22	76.70	4.50	2.80	1.76	2.32	26.23	15.82	23.27
1978: I	144.25	61.57	28.72	32.86	82.68	4.45	3.35	2.67	2.44	27.92	17.07	24.76
II	150.76	67.20	31.40	35.80	83.56	4.81	3.09	2.08	2.23	28.46	18.18	24.71
III	155.41	67.75	32.25	35.50	87.66	4.99	3.38	2.20	2.47	29.62	18.90	26.09
IV <sup>3</sup>	161.24	73.20	34.19	39.02	88.04	5.23	3.14	2.61	2.40	30.59	44.07	
1979: I <sup>3</sup>	163.34	73.02	34.13	38.89	90.31	4.94	4.05	3.05	2.99	30.70	44.59	
II <sup>3</sup>	167.82	76.28	35.89	40.40	91.53							

<sup>1</sup> Excludes agricultural business; real estate operators; medical, legal, educational, and cultural services; and nonprofit organizations. These figures do not agree precisely with the nonresidential fixed investment data in the gross national product estimates, mainly because those data include investment by farmers, professionals, nonprofit institutions, and real estate firms, and certain outlays charged to current account.

<sup>2</sup> Commercial and other includes trade, service, construction, finance, and insurance.

<sup>3</sup> Planned capital expenditures as reported by business in late October-December 1978. Plans are adjusted when necessary for systematic bias.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-46.—Sales and inventories in manufacturing and trade, 1947-78

[Amounts in millions of dollars; monthly data seasonally adjusted<sup>2</sup>]

Year or month	Total manufacturing and trade			Manufacturing			Merchant wholesalers			Retail trade		
	Sales <sup>1</sup>	Inventories <sup>2</sup>	Ratio <sup>3</sup>	Sales <sup>1</sup>	Inventories <sup>2</sup>	Ratio <sup>3</sup>	Sales <sup>1</sup>	Inventories <sup>2</sup>	Ratio <sup>3</sup>	Sales <sup>1</sup>	Inventories <sup>2</sup>	Ratio <sup>3</sup>
1947				15,513	25,897	1.58				10,200	14,241	1.26
1948	35,260	52,507	1.42	17,316	28,543	1.57	6,808	7,957	1.13	11,135	16,007	1.39
1949	33,788	49,497	1.53	16,126	26,321	1.75	6,514	7,706	1.19	11,149	15,470	1.41
1950	38,596	59,822	1.36	18,634	31,078	1.48	7,695	9,284	1.07	12,268	19,460	1.38
1951	43,356	70,242	1.55	21,714	39,306	1.66	8,597	9,886	1.16	13,046	21,050	1.64
1952	44,840	72,377	1.58	22,529	41,136	1.78	8,782	10,210	1.12	13,529	21,031	1.52
1953	47,987	76,122	1.58	24,843	43,948	1.76	9,052	10,686	1.17	14,091	21,488	1.53
1954	46,443	73,175	1.60	23,355	41,612	1.81	8,993	10,637	1.18	14,095	20,926	1.51
1955	51,694	79,516	1.47	26,480	45,069	1.62	9,893	11,678	1.13	15,321	22,769	1.43
1956	54,063	87,304	1.55	27,740	50,642	1.73	10,513	13,260	1.19	15,811	23,402	1.47
1957	55,879	89,052	1.59	28,736	51,871	1.80	10,475	12,730	1.23	16,667	24,451	1.44
1958	54,201	87,093	1.60	27,247	50,241	1.84	10,257	12,739	1.24	16,696	24,113	1.43
1959	59,729	92,129	1.50	30,286	52,945	1.70	11,491	13,879	1.15	17,951	25,305	1.40
1960	60,827	94,713	1.56	30,879	53,780	1.75	11,656	14,120	1.22	18,294	26,813	1.45
1961	61,159	95,594	1.54	30,923	54,885	1.74	11,988	14,488	1.20	18,249	26,221	1.43
1962	65,662	101,063	1.50	33,357	58,186	1.70	12,674	14,936	1.16	19,630	27,941	1.38
1963	68,995	105,480	1.49	35,058	60,046	1.69	13,382	16,048	1.15	20,556	29,386	1.39
1964	73,682	111,503	1.47	37,331	63,409	1.64	14,529	17,000	1.14	21,823	31,094	1.40
1965	80,283	120,907	1.45	40,995	68,185	1.60	15,611	18,317	1.15	23,677	34,405	1.39
1966	87,187	136,790	1.47	44,870	77,952	1.62	16,987	20,765	1.15	25,330	38,073	1.44
1967	90,348	145,300	1.56	46,487	84,624	1.76	19,448	25,377	1.25	24,413	35,299	1.43
1968	98,206	156,099	1.54	50,268	90,550	1.74	20,846	26,604	1.25	27,092	38,945	1.38
1969	105,190	169,792	1.55	53,540	98,161	1.77	22,609	29,114	1.23	29,041	42,517	1.40
1970	107,698	178,279	1.62	52,832	101,609	1.90	23,943	32,803	1.29	30,924	43,867	1.40
1971	116,351	188,508	1.58	55,925	102,622	1.83	26,257	35,823	1.30	34,169	50,063	1.39
1972	130,049	203,088	1.50	63,043	108,223	1.67	29,584	39,786	1.27	37,422	55,079	1.40
1973	151,647	233,749	1.44	72,954	124,545	1.58	36,822	46,254	1.17	41,871	62,950	1.41
1974	175,200	285,064	1.47	84,821	157,811	1.65	45,836	56,537	1.12	44,543	70,716	1.48
1975	179,621	283,614	1.58	86,616	157,878	1.83	44,633	55,113	1.24	48,370	70,623	1.43
1976	200,760	309,238	1.48	98,809	169,886	1.66	48,408	61,307	1.21	53,542	78,045	1.39
1977	223,793	334,785	1.44	111,256	179,714	1.58	53,509	67,998	1.21	59,029	87,073	1.40
1977: Jan	211,652	311,237	1.47	105,303	170,554	1.62	50,678	62,123	1.23	55,671	78,560	1.41
Feb	216,210	313,488	1.45	107,184	171,575	1.60	51,857	63,062	1.22	57,169	78,851	1.38
Mar	221,612	316,976	1.43	111,090	172,536	1.55	52,672	64,300	1.22	57,850	80,140	1.39
Apr	220,835	320,273	1.45	109,521	174,015	1.59	53,385	65,301	1.22	57,929	80,957	1.40
May	221,559	322,250	1.45	109,641	175,716	1.60	53,866	64,838	1.20	58,052	81,696	1.41
June	222,589	324,051	1.46	111,003	176,468	1.59	53,765	64,947	1.21	57,851	82,636	1.43
July	221,991	324,990	1.46	109,827	177,297	1.61	53,495	64,210	1.20	58,669	83,483	1.42
Aug	224,404	327,639	1.46	112,019	178,082	1.59	53,208	65,095	1.22	59,177	84,462	1.43
Sept	225,305	330,345	1.47	112,586	179,011	1.59	53,307	66,119	1.24	59,412	85,215	1.43
Oct	228,450	330,832	1.45	114,091	179,301	1.57	53,639	66,209	1.23	60,720	85,322	1.41
Nov	231,550	333,186	1.44	114,342	179,840	1.57	55,558	67,047	1.21	61,650	86,299	1.40
Dec	237,017	334,785	1.41	117,938	179,714	1.52	57,266	67,998	1.19	61,813	87,073	1.41
1978: Jan	230,294	337,676	1.47	114,322	180,977	1.58	55,985	68,991	1.23	59,987	87,708	1.46
Feb	238,165	340,396	1.43	118,982	182,393	1.53	57,635	70,361	1.22	61,548	87,642	1.42
Mar	242,627	345,839	1.43	121,101	183,860	1.52	58,877	72,882	1.24	62,649	89,097	1.42
Apr	250,606	350,545	1.40	124,537	185,715	1.49	62,152	74,867	1.20	63,917	89,963	1.41
May	251,869	354,226	1.41	123,566	187,689	1.52	64,011	75,474	1.18	64,292	91,063	1.42
June	252,639	356,920	1.41	124,839	189,557	1.52	63,235	75,820	1.20	64,565	91,543	1.42
July	250,853	359,301	1.43	123,106	191,167	1.55	63,404	75,664	1.19	64,343	92,470	1.44
Aug	258,306	362,815	1.40	127,871	192,882	1.51	64,573	76,253	1.18	65,862	93,680	1.42
Sept	258,311	364,747	1.41	127,919	194,063	1.52	64,045	77,020	1.20	66,347	93,664	1.41
Oct	265,295	367,382	1.38	130,614	194,735	1.49	67,292	78,346	1.16	67,389	94,301	1.40
Nov <sup>p</sup>	268,123	371,479	1.39	132,459	196,525	1.48	67,483	79,024	1.17	68,181	95,930	1.41
Dec <sup>p</sup>										68,889		

<sup>1</sup> Monthly average for year and total for month.<sup>2</sup> Seasonally adjusted, end of period.<sup>3</sup> Inventory/sales ratio. For annual periods, ratio of weighted average inventories to average monthly sales; for monthly data, ratio of inventories at end of month to sales for month.

Note.—Earlier data are not strictly comparable with data beginning 1958 for manufacturing and beginning 1967 for wholesale and retail trade.

The inventory figures in this table do not agree with the estimates of change in business inventories included in the gross national product since these figures cover only manufacturing and trade rather than all business, and show inventories in terms of current book value without adjustment for revaluation.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

TABLE B-47.—Manufacturers' shipments and inventories, 1947-78

(Millions of dollars; monthly data seasonally adjusted)

Year or month	Shipments <sup>1</sup>			Inventories <sup>2</sup>										
	Total	Durable goods industries	Non-durable goods industries	Total	Durable goods industries				Non-durable goods industries					
					Total	Materials and supplies	Work in process	Finished goods	Total	Materials and supplies	Work in process	Finished goods		
1947	15,513	6,694	8,819	25,897	13,061					12,836				
1948	17,316	7,579	9,738	28,543	14,662					13,881				
1949	16,126	7,191	8,935	26,321	13,060					13,261				
1950	18,634	8,845	9,789	31,078	15,539					15,539				
1951	21,714	10,493	11,221	39,306	20,991					18,315				
1952	22,529	11,313	11,216	41,136	23,731					17,405				
1953	24,843	13,349	11,494	43,948	25,878	8,966	10,720	6,206	18,070	8,317	2,472	7,409		
1954	23,355	11,828	11,527	41,612	23,710	7,894	9,721	6,040	17,902	8,167	2,440	7,415		
1955	26,480	14,071	12,409	45,069	26,405	9,194	10,756	6,348	18,664	8,556	2,571	7,666		
1956	27,740	14,715	13,025	50,642	30,447	10,417	12,317	7,565	20,195	8,971	2,721	8,622		
1957	28,736	15,237	13,499	51,871	31,728	10,608	12,837	8,125	20,143	8,775	2,864	8,624		
1958	27,247	13,563	13,684	50,241	30,258	10,032	12,387	7,839	19,983	8,662	2,828	8,491		
1959	30,286	15,609	14,677	52,945	32,077	10,776	13,063	8,239	20,868	9,080	2,944	8,845		
1960	30,879	15,883	14,996	53,780	32,371	10,353	12,772	9,245	21,409	9,082	2,946	9,380		
1961	30,923	15,616	15,307	54,885	32,544	10,279	13,203	9,063	22,341	9,493	3,110	9,738		
1962	33,357	17,262	16,095	58,186	34,632	10,810	14,159	9,662	23,554	9,813	3,296	10,444		
1963	35,058	18,280	16,778	60,046	35,866	11,068	14,871	9,925	24,180	9,978	3,406	10,796		
1964	37,331	19,637	17,694	63,409	38,506	11,970	16,191	10,344	24,903	10,131	3,511	11,261		
1965	40,995	22,221	18,774	68,185	42,257	13,325	18,075	10,854	25,928	10,448	3,806	11,674		
1966	44,870	24,649	20,220	77,952	49,920	15,489	21,939	12,491	28,032	11,155	4,204	12,673		
1967	46,487	25,267	21,220	84,624	54,978	16,441	25,005	13,534	29,646	11,709	4,420	13,518		
1968	50,268	27,698	22,570	90,550	58,825	17,365	27,302	14,157	31,725	12,283	4,845	14,599		
1969	53,540	29,477	24,064	98,161	64,705	18,692	30,373	15,639	33,456	12,721	5,119	15,612		
1970	52,832	28,215	24,617	101,609	66,752	19,184	29,824	17,745	34,857	13,147	5,271	16,441		
1971	55,925	29,973	25,952	102,622	66,271	19,763	28,639	17,871	36,351	13,678	5,666	17,004		
1972	63,043	34,043	28,999	108,223	70,244	20,877	30,786	18,577	37,979	14,672	5,982	17,321		
1973	72,954	39,704	33,250	124,545	81,333	26,039	35,504	19,788	43,212	18,114	6,708	18,389		
1974	84,821	44,253	40,568	157,811	101,790	35,221	42,634	23,934	56,021	23,661	8,175	24,185		
1975	86,616	43,678	42,939	157,878	101,580	33,599	42,804	25,177	56,298	23,123	8,675	24,499		
1976	98,809	50,697	48,112	169,886	108,968	36,540	44,735	27,693	60,918	24,945	9,557	26,416		
1977	111,256	58,266	52,990	179,714	115,424	38,719	46,864	29,843	64,290	25,102	10,116	29,071		
1977: Jan	105,303	54,532	50,771	170,554	109,609	36,624	45,138	27,847	60,945	24,857	9,552	26,535		
Feb	107,184	55,620	51,564	171,575	110,242	36,710	45,489	28,043	61,333	25,200	9,587	26,548		
Mar	111,090	58,428	52,662	172,536	110,579	37,104	45,296	28,178	61,957	25,564	9,784	26,608		
Apr	109,521	56,999	52,522	174,015	111,133	37,304	45,670	28,160	62,882	25,999	9,824	27,054		
May	109,641	57,273	52,368	175,716	112,071	38,214	45,216	28,543	63,645	26,063	9,918	27,663		
June	111,003	58,049	52,954	176,468	112,536	38,675	44,884	28,980	63,932	26,162	9,862	27,909		
July	109,827	57,463	52,364	177,297	113,160	38,540	45,452	29,166	64,137	25,851	9,960	28,324		
Aug	112,019	58,649	53,370	178,082	113,917	38,901	45,911	29,107	64,165	25,787	9,919	28,460		
Sept	112,586	59,285	53,301	179,011	114,467	39,072	46,227	29,169	64,544	25,727	10,118	28,805		
Oct	114,091	60,316	53,775	179,301	114,448	39,011	45,996	29,441	64,853	25,623	10,077	29,054		
Nov	114,342	60,228	54,114	179,840	115,212	38,793	46,515	29,906	64,628	25,297	10,165	29,166		
Dec	117,938	62,130	55,808	179,714	115,424	38,719	46,864	29,843	64,290	25,102	10,116	29,071		
1978: Jan	114,322	59,973	54,349	180,977	116,278	38,177	47,785	30,316	64,699	25,190	10,145	29,364		
Feb	118,982	63,077	55,905	182,393	117,511	38,535	48,696	30,280	64,882	25,332	10,258	29,292		
Mar	121,101	64,457	56,644	183,860	118,725	38,547	49,491	30,687	65,135	25,730	10,208	29,197		
Apr	124,537	66,493	58,044	185,715	119,848	38,794	50,330	30,724	65,867	25,742	10,352	29,773		
May	123,566	65,417	58,149	187,689	121,471	39,484	50,966	31,021	66,218	25,825	10,354	30,039		
June	124,839	66,293	58,546	189,557	122,688	39,667	51,864	31,327	66,869	26,314	10,277	30,278		
July	123,106	65,222	57,884	191,167	123,830	39,727	52,763	31,340	67,337	26,145	10,348	30,844		
Aug	127,871	68,684	59,187	192,862	125,206	40,343	53,296	31,567	67,676	26,024	10,352	31,300		
Sept	127,919	68,916	59,003	194,063	126,176	41,133	53,375	31,668	67,887	26,108	10,484	31,295		
Oct	130,614	70,292	60,322	194,735	126,784	40,916	54,210	31,658	67,951	26,171	10,754	31,026		
Nov	132,459	71,567	60,892	196,525	128,293	41,125	54,849	32,319	68,232	26,393	10,644	31,195		

<sup>1</sup> Monthly average for year and total for month.<sup>2</sup> Book value, seasonally adjusted, end of period, except as noted.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B-48.—Manufacturers' new and unfilled orders, 1947-78

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	New orders <sup>1</sup>				Unfilled orders <sup>2</sup>			Unfilled orders— shipments ratio <sup>3</sup>		
	Total	Durable goods industries		Non-durable goods industries	Total	Durable goods industries	Non-durable goods industries	Total	Durable goods industries	Non-durable goods industries
		Total	Capital goods industries, non-durable							
1947	15,256	6,388		8,868	34,473	28,579	5,894			
1948	17,693	8,126		9,566	30,736	26,619	4,117			
1949	15,614	6,633		8,981	24,045	19,622	4,423			
1950	20,110	10,165		9,945	41,456	35,435	6,021			
1951	23,907	12,841		11,066	67,266	63,394	3,872			
1952	23,204	12,061		11,143	75,857	72,680	3,177			
1953	23,586	12,147		11,439	61,178	58,637	2,541			
1954	22,335	10,768		11,566	48,266	45,250	3,016	3.42	4.12	0.96
1955	27,465	14,996		12,469	60,004	56,241	3,763	3.63	4.27	1.12
1956	28,368	15,365		13,003	67,375	63,880	3,495	3.87	4.55	1.04
1957	27,559	14,111		13,448	53,183	50,352	2,831	3.35	4.00	.85
1958	27,002	13,290		13,712	47,370	44,559	2,811	3.09	3.69	.86
1959	30,724	16,003		14,720	52,732	49,373	3,359	3.01	3.54	.94
1960	30,235	15,303		14,932	45,080	42,514	2,566	2.78	3.37	.72
1961	31,104	15,759		15,345	47,407	44,375	3,032	2.63	3.13	.79
1962	33,436	17,374		16,061	48,577	45,965	2,612	2.69	3.24	.68
1963	35,524	18,709		16,815	54,327	51,270	3,057	2.80	3.37	.73
1964	38,357	20,652		17,705	66,882	63,691	3,191	3.10	3.72	.72
1965	42,100	23,278		18,823	80,071	76,298	3,773	3.33	3.95	.80
1966	46,402	26,177		20,225	98,401	94,575	3,826	3.81	4.55	.76
1967	47,062	25,831		21,232	104,989	101,024	3,965	3.71	4.42	.73
1968	50,684	28,113	7,070	22,571	109,330	105,359	3,971	3.82	4.61	.69
1969	54,004	29,925	7,779	24,079	115,654	111,487	4,167	3.76	4.50	.69
1970	52,078	27,429	6,807	24,649	106,519	101,931	4,588	3.66	4.41	.77
1971	56,016	30,030	7,535	25,986	107,657	102,633	5,024	3.40	4.08	.77
1972	64,201	35,098	8,832	29,104	121,709	115,377	6,332	3.33	3.93	.88
1973	76,224	42,894	11,114	33,329	161,194	153,824	7,370	3.92	4.64	.92
1974	87,200	46,783	12,691	40,417	189,678	184,155	5,523	4.16	5.00	.63
1975	85,058	41,933	10,781	43,125	170,686	162,872	7,814	3.72	4.47	.83
1976	99,134	50,997	12,501	48,137	174,553	166,440	8,113	3.22	3.85	.74
1977	112,842	59,795	15,201	53,047	193,659	184,834	8,825	3.15	3.75	.73
1977: Jan	107,256	56,358	14,674	50,898	176,506	168,266	8,240	3.26	3.90	.75
Feb	108,047	56,426	14,315	51,621	177,369	169,072	8,297	3.23	3.85	.75
Mar	112,190	59,294	14,611	52,896	178,469	169,938	8,531	3.11	3.69	.75
Apr	111,269	58,800	14,687	52,469	180,217	171,739	8,478	3.17	3.79	.73
May	111,102	58,835	14,893	52,267	181,678	173,301	8,377	3.19	3.80	.73
June	112,141	59,111	15,490	53,030	182,816	174,363	8,453	3.17	3.78	.73
July	108,868	56,367	13,936	52,501	181,857	173,267	8,590	3.17	3.78	.75
Aug	112,615	59,269	14,527	53,346	182,453	173,887	8,566	3.12	3.73	.73
Sept	113,680	60,364	16,124	53,316	183,547	174,966	8,581	3.11	3.70	.73
Oct	117,331	63,556	16,097	53,775	186,787	178,206	8,581	3.14	3.73	.73
Nov	117,024	62,821	16,090	54,203	189,469	180,799	8,670	3.17	3.77	.73
Dec	122,128	66,165	16,988	55,963	193,659	184,834	8,825	3.15	3.75	.73
1978: Jan	117,899	63,335	16,511	54,564	197,235	188,194	9,041	3.33	3.96	.77
Feb	122,544	66,681	17,882	55,863	200,798	191,798	9,000	3.22	3.82	.74
Mar	125,801	69,016	17,507	56,785	205,500	196,359	9,141	3.23	3.83	.74
Apr	128,175	70,033	17,409	58,142	209,133	199,895	9,238	3.18	3.77	.72
May	128,450	70,045	18,124	58,405	214,010	204,516	9,494	3.28	3.94	.72
June	127,580	68,840	18,155	58,740	216,754	207,067	9,687	3.29	3.90	.76
July	123,279	65,187	17,074	58,092	216,922	207,026	9,896	3.33	3.96	.77
Aug	130,952	71,582	19,344	59,370	219,999	209,922	10,077	3.22	3.79	.77
Sept	131,840	72,645	20,149	55,195	223,921	213,650	10,271	3.28	3.84	.81
Oct	137,162	76,984	22,219	60,178	230,464	220,341	10,123	3.33	3.92	.77
Nov	137,520	76,437	20,256	61,083	235,528	225,213	10,315	3.35	3.94	.78

<sup>1</sup> Monthly average for year and total for month.<sup>2</sup> Seasonally adjusted, end of period.<sup>3</sup> Ratio of unfilled orders at end of period to shipments for period; excludes industries with no unfilled orders. Annual figures relate to seasonally adjusted data for December.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census

PRICES

TABLE B-49.—Consumer price indexes by expenditure classes, 1929-78

[1967=100]

Year or month	All items	Food and beverages		Housing				Ap- parel and up-keep	Trans- portation	Medical care	Entertain- ment	Other goods and services
		Total <sup>1</sup>	Food	Total <sup>2</sup>	Rent, resi- dential	Home owner- ship	Fuel and other utilities <sup>3</sup>					
1929	51.3		48.3		76.0			48.5				
1933	38.8		30.6		54.1			36.9				
1939	41.6		34.6	52.2	56.0			42.4	43.0	36.7		
1940	42.0		35.2	52.4	56.2			42.8	42.7	36.8		
1941	44.1		38.4	53.7	57.2			44.8	44.2	37.0		
1942	48.8		45.1	56.2	58.5			52.3	48.1	38.0		
1943	51.8		50.3	56.8	58.5			54.6	47.9	39.9		
1944	52.7		49.6	58.1	58.6			58.5	47.9	41.1		
1945	53.9		50.7	59.1	58.8			61.5	47.8	42.1		
1946	58.5		58.1	60.6	59.2			67.5	50.3	44.4		
1947	66.9		70.6	65.2	61.1			78.2	55.5	48.1		
1948	72.1		76.6	69.8	65.1			83.3	61.8	51.1		
1949	71.4		73.5	70.9	68.0			80.1	66.4	52.7		
1950	72.1		74.5	72.8	70.4			79.0	68.2	53.7		
1951	77.8		82.8	77.2	73.2			86.1	72.5	56.3		
1952	79.5		84.3	78.7	76.2			85.3	77.3	59.3		
1953	80.1		83.0	80.8	80.3	75.0	83.0	84.6	79.5	61.4		
1954	80.5		82.8	81.7	83.2	76.3	83.5	84.5	78.3	63.4		
1955	80.2		81.6	82.3	84.3	77.0	85.1	84.1	77.4	64.8		
1956	81.4		82.2	83.6	85.9	78.3	87.3	85.8	78.8	67.2		
1957	84.3		84.9	86.2	87.5	81.7	89.9	87.3	83.3	69.9		
1958	86.6		88.5	87.7	89.1	83.5	91.7	87.5	86.0	73.2		
1959	87.3		87.1	88.6	90.4	84.4	93.8	88.2	89.6	76.4		
1960	88.7		88.0	90.2	91.7	86.3	95.9	89.6	89.6	79.1		
1961	89.6		89.1	90.9	92.9	86.9	97.1	90.4	90.6	81.4		
1962	90.6		89.9	91.7	94.0	87.9	97.3	90.9	92.5	83.5		
1963	91.7		91.2	92.7	95.0	89.0	98.2	91.9	93.0	85.6		
1964	92.9		92.4	93.8	95.9	90.8	98.4	92.7	94.3	87.3		
1965	94.5		94.4	94.9	96.9	92.7	98.3	93.7	95.9	89.5		
1966	97.2		99.1	97.2	98.2	96.3	98.8	96.1	97.2	93.4		
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	103.6	104.0	102.4	105.7	101.3	105.4	103.2	106.1	105.7	105.2
1969	109.8	108.8	108.9	110.4	105.7	116.0	103.6	111.5	107.2	113.4	111.0	110.4
1970	116.3	114.8	114.9	118.2	110.1	128.5	107.6	116.1	112.7	120.6	116.7	116.8
1971	121.3	118.3	118.4	123.4	115.2	133.7	115.0	119.8	118.6	128.4	122.9	122.4
1972	125.3	123.2	123.5	128.1	119.2	140.1	120.1	122.3	119.9	132.5	126.5	127.5
1973	133.1	139.5	141.4	133.7	124.3	146.7	126.9	126.8	123.8	137.7	130.0	132.5
1974	147.7	158.8	161.7	148.8	130.6	163.2	150.2	136.2	137.7	150.5	139.8	142.0
1975	161.2	172.1	175.4	164.5	137.3	181.7	167.8	142.3	150.6	168.6	152.2	153.9
1976	170.5	177.4	180.8	174.6	144.7	191.7	182.7	147.6	165.5	184.7	159.8	162.7
1977	181.5	188.0	192.2	186.5	153.5	204.9	202.2	154.2	177.2	202.4	167.7	172.2
1977: Jan	175.3	179.9	183.4	180.3	149.5	196.7	194.8	150.0	172.2	194.1	164.0	168.3
Feb	177.1	183.8	187.7	181.4	150.2	198.1	196.4	150.8	173.2	195.8	164.8	168.8
Mar	178.2	184.6	188.6	182.6	150.8	199.3	198.5	151.7	174.7	197.6	165.3	169.2
Apr	179.6	186.8	190.9	183.7	151.6	201.0	199.4	152.3	176.7	199.1	165.5	169.8
May	180.6	187.5	191.7	184.6	152.2	202.3	200.2	153.4	178.1	200.5	166.6	170.4
June	181.8	189.3	193.6	186.0	152.9	203.9	201.8	153.9	179.1	201.8	167.7	171.1
July	182.6	190.2	194.6	187.4	153.6	206.2	203.5	153.4	179.2	203.5	168.0	171.7
Aug	183.3	190.8	195.2	188.3	154.4	207.4	204.5	154.8	178.8	204.9	168.6	172.2
Sept	184.0	190.2	194.5	189.5	155.3	209.1	205.5	156.2	178.4	206.3	167.7	174.4
Oct	184.5	190.1	194.4	190.4	156.1	210.0	206.8	157.2	178.6	207.2	169.3	176.0
Nov	185.4	191.2	195.6	191.4	157.0	211.5	207.4	158.5	178.7	208.1	170.4	177.2
Dec	186.1	191.9	196.3	192.4	157.9	213.0	207.6	158.2	178.8	209.3	171.0	177.8
1978: Jan	187.2	194.6	199.2	193.8	158.8	215.0	208.5	155.7	179.0	211.2	171.9	178.5
Feb	188.4	197.3	202.0	195.0	159.7	216.4	210.6	154.5	179.4	213.3	172.1	179.0
Mar	189.8	199.5	204.2	196.7	160.5	218.3	212.6	156.5	179.9	214.5	174.1	179.3
Apr	191.5	202.6	207.5	198.3	161.5	220.4	213.9	158.4	181.1	215.7	175.6	179.8
May	193.3	205.2	210.3	199.9	162.7	222.5	215.5	159.8	183.2	216.9	176.2	180.4
June	195.3	208.5	213.8	202.0	163.6	225.3	217.5	159.9	185.5	217.9	176.2	181.0
July	196.7	209.7	215.0	203.8	164.2	228.3	218.0	158.0	187.2	219.4	177.0	183.1
Aug	197.8	210.1	215.4	205.2	165.1	230.6	218.1	159.6	188.1	221.4	177.4	184.0
Sept	199.3	210.3	215.6	207.5	166.4	234.2	218.8	161.9	188.7	222.6	178.3	187.8
Oct	200.9	211.6	216.8	209.5	167.4	237.0	220.1	163.3	189.7	224.7	179.3	188.3
Nov	202.0	212.5	217.8	210.6	168.5	238.8	218.5	164.1	191.4	227.0	179.5	188.8

<sup>1</sup> Includes alcoholic beverages, not shown separately.

<sup>2</sup> Includes other items, not shown separately. Series beginning 1967 not comparable with series for earlier years.

<sup>3</sup> Gas (piped) and electricity; fuel oil, coal, and bottled gas; and other utilities and public services.

Note.—Beginning January 1978 data are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-50.—Consumer price indexes by commodity and service groups, 1939–78

[1967=100]

Year or month	All items	Commodities					Services			Special indexes		
		All commodities	Food	Commodities less food			All services	Rent	Services less rent	All items less food	All items less shelter	Non-durable commodities
				All	Durable	Non-durable						
1939.....	41.6	40.2	34.6	47.7	48.5	44.3	43.5	56.0	38.1	47.2	39.7	38.4
1940.....	42.0	40.6	35.2	48.0	48.1	44.7	43.6	56.2	38.1	47.3	39.9	38.9
1941.....	44.1	43.3	38.4	50.4	51.4	46.7	44.2	57.2	38.6	48.7	42.4	41.6
1942.....	48.8	49.6	45.1	56.0	58.4	51.6	45.6	58.5	40.3	52.1	47.7	47.6
1943.....	51.8	54.0	50.3	58.4	60.3	53.8	46.4	58.5	42.1	53.6	51.3	51.8
1944.....	52.7	54.7	49.6	61.6	65.9	56.6	47.5	58.6	44.2	55.7	52.2	52.2
1945.....	53.9	56.3	50.7	64.1	70.9	58.6	48.2	58.8	45.1	56.9	53.6	53.7
1946.....	58.5	62.4	58.1	68.1	74.1	62.9	49.1	59.2	46.7	59.4	59.0	59.6
1947.....	66.9	75.0	70.6	76.8	80.3	72.2	51.1	61.1	49.0	64.9	68.5	71.9
1948.....	72.1	80.4	76.6	82.7	86.2	77.8	54.3	65.1	51.9	69.6	73.9	77.2
1949.....	71.4	78.3	73.5	81.5	87.4	76.3	56.9	68.0	54.5	70.3	72.6	74.9
1950.....	72.1	78.8	74.5	81.4	88.4	76.2	58.7	70.4	56.0	71.1	73.1	75.4
1951.....	77.8	85.9	82.8	87.5	95.1	82.0	61.8	73.2	59.3	75.7	79.2	82.5
1952.....	79.5	87.0	84.3	88.3	96.4	82.4	64.5	76.2	62.2	77.5	80.8	83.4
1953.....	80.1	86.7	83.0	88.5	95.7	83.1	67.3	80.3	64.8	79.0	81.0	83.2
1954.....	80.5	85.9	82.8	87.5	93.3	83.5	69.5	83.2	66.7	79.5	81.0	83.2
1955.....	80.2	85.1	81.6	86.9	91.5	83.5	70.9	84.3	68.2	79.7	80.6	82.5
1956.....	81.4	85.9	82.2	87.8	91.5	85.3	72.7	85.9	70.1	81.1	81.7	83.7
1957.....	84.3	88.6	84.9	90.5	94.4	87.6	75.6	87.5	73.3	83.8	84.4	86.3
1958.....	86.6	90.6	88.5	91.5	95.9	88.2	78.5	89.1	76.4	85.7	86.9	88.6
1959.....	87.3	90.7	87.1	92.7	97.3	89.3	80.8	90.4	79.0	87.3	87.6	88.2
1960.....	88.7	91.5	88.0	93.1	96.7	90.7	83.5	91.7	81.9	88.8	88.9	89.4
1961.....	89.6	92.0	89.1	93.4	96.6	91.2	85.2	92.9	83.9	89.7	89.9	90.2
1962.....	90.6	92.8	89.9	94.1	97.6	91.8	86.8	94.0	85.5	90.8	90.9	90.9
1963.....	91.7	93.6	91.2	94.8	97.9	92.7	88.5	95.0	87.3	92.0	92.1	92.0
1964.....	92.9	94.6	92.4	95.6	98.8	93.5	90.2	95.9	89.2	93.2	93.2	93.0
1965.....	94.5	95.7	94.4	96.2	98.4	94.8	92.2	96.9	91.5	94.5	94.6	94.6
1966.....	97.2	98.2	99.1	97.5	98.5	97.0	95.8	98.2	95.3	96.7	97.4	98.1
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.2	103.7	103.6	103.7	103.1	104.1	105.2	102.4	105.7	104.4	104.1	103.9
1969.....	109.8	108.4	108.9	108.1	107.0	108.8	112.5	105.7	113.8	110.1	109.0	108.9
1970.....	116.3	113.5	114.9	112.5	111.8	113.1	121.6	110.1	123.7	116.7	114.4	114.0
1971.....	121.3	117.4	118.4	116.8	116.5	117.0	128.4	115.2	130.8	122.1	119.3	117.7
1972.....	125.3	120.9	123.5	119.4	118.9	119.8	133.3	119.2	135.9	125.8	122.9	121.7
1973.....	133.1	129.9	141.4	123.5	121.9	124.8	139.1	124.3	141.8	130.7	131.1	132.8
1974.....	147.7	145.5	161.7	136.6	130.6	140.9	152.1	130.6	156.0	143.7	146.1	151.0
1975.....	161.2	158.4	175.4	149.1	145.5	151.7	166.6	137.3	171.9	157.1	159.1	163.2
1976.....	170.5	165.2	180.8	156.6	154.3	158.3	180.4	144.7	186.8	167.5	168.3	169.2
1977.....	181.5	174.7	192.2	165.1	163.2	166.5	194.3	153.5	201.6	178.4	179.1	178.9
1977: Jan.....	175.3	168.7	183.4	160.6	158.9	161.9	187.4	149.5	194.3	172.9	173.0	172.4
Feb.....	177.1	170.9	187.7	161.6	159.7	163.1	188.7	150.2	195.6	174.0	175.0	175.0
Mar.....	178.2	171.8	188.6	162.6	160.8	163.9	190.0	150.8	197.0	175.1	176.1	175.9
Apr.....	179.6	173.3	190.9	163.6	162.8	164.7	191.2	151.6	198.4	176.2	177.5	177.4
May.....	180.6	174.3	191.7	164.7	163.4	165.7	192.2	152.2	199.4	177.3	178.4	178.3
June.....	181.8	175.4	193.6	165.4	163.9	166.6	193.7	152.9	201.1	178.4	179.6	179.7
July.....	182.6	175.8	194.6	165.6	164.3	166.6	195.3	153.6	202.8	179.1	180.2	180.1
Aug.....	183.3	176.3	195.2	166.0	164.3	167.3	196.3	154.4	203.8	179.8	180.8	180.8
Sept.....	184.0	176.6	194.5	166.7	164.5	168.4	197.7	155.3	205.3	180.9	181.2	181.0
Oct.....	184.5	177.0	194.4	167.4	165.0	169.2	198.5	156.1	206.2	181.6	181.7	181.4
Nov.....	185.4	177.9	195.6	168.1	165.5	170.1	199.5	157.0	207.2	182.5	182.5	182.4
Dec.....	186.1	178.3	196.3	168.4	165.9	170.3	200.5	157.9	208.2	183.1	183.0	182.9
1978: Jan.....	187.2	179.2	199.2	168.6	166.6	169.7	202.0	158.8	209.8	183.8	183.8	183.9
Feb.....	188.4	180.2	202.0	168.8	167.2	169.6	203.5	159.7	211.4	184.7	185.0	185.1
Mar.....	189.8	181.6	204.2	170.0	168.3	170.7	204.9	160.5	213.0	185.9	186.3	186.8
Apr.....	191.5	183.5	207.5	171.3	169.9	171.8	206.5	161.5	214.6	187.4	188.1	188.8
May.....	193.3	185.5	210.3	173.0	172.0	172.8	208.0	162.7	216.2	189.0	189.9	190.7
June.....	195.3	187.5	213.8	174.4	173.9	173.7	209.9	163.6	218.3	190.6	191.8	192.7
July.....	196.7	188.6	215.0	175.4	175.3	174.1	211.7	164.2	220.4	192.0	192.7	193.6
Aug.....	197.8	189.3	215.4	176.3	175.9	175.4	213.4	165.1	222.2	193.3	193.5	194.4
Sept.....	199.3	190.5	215.6	177.8	177.2	177.1	215.6	166.4	224.6	195.1	194.5	195.4
Oct.....	200.9	191.8	216.3	179.1	178.8	178.1	217.6	167.4	226.7	196.7	195.8	196.6
Nov.....	202.0	192.9	217.8	180.3	180.0	179.1	218.6	167.5	227.8	197.8	196.7	197.5

Note.—Beginning January 1978 data are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.



TABLE B-51.—Consumer price indexes, selected commodities and services, 1939-78

[1967=100]

Year or month	Durable commodities			Nondurable commodities less food					Services less rent				Energy <sup>2</sup>	
	Total <sup>1</sup>	New cars	Used cars	Total	Apparel commodities	Other			Total <sup>1</sup>	Gas (piped) and electricity	Transportation services	Medi-cal-care services		
						Total <sup>1</sup>	Gasoline, motor oil, coolant, etc.	Fuel oil, coal, and bottled gas						
1939	48.5	43.2	-----	44.3	43.0	46.3	-----	37.1	-----	38.1	82.9	36.1	32.5	-----
1940	48.1	43.3	-----	44.7	43.5	46.8	-----	38.2	38.1	82.1	36.1	32.5	-----	
1941	51.4	46.6	-----	46.7	45.8	48.4	-----	40.5	38.6	81.4	36.3	32.7	-----	
1942	58.4	-----	-----	51.6	53.5	51.1	-----	43.1	40.3	81.0	38.2	33.7	-----	
1943	60.3	-----	-----	53.8	55.9	53.2	-----	45.2	42.1	80.6	38.2	35.4	-----	
1944	65.9	-----	-----	56.6	59.8	54.7	-----	47.1	44.2	80.3	38.2	36.9	-----	
1945	70.9	-----	-----	58.6	63.0	55.8	-----	48.0	45.1	79.6	38.2	37.9	-----	
1946	74.1	-----	-----	62.9	69.5	58.2	-----	51.3	46.7	77.4	39.0	40.1	-----	
1947	80.3	69.2	-----	72.2	80.4	66.2	-----	58.4	49.0	77.1	40.3	43.5	-----	
1948	86.2	75.6	-----	77.8	85.4	72.3	-----	68.6	51.9	79.1	44.9	46.4	-----	
1949	87.4	82.8	-----	76.3	82.0	72.4	-----	70.3	54.5	81.0	50.0	48.1	-----	
1950	88.4	83.4	-----	76.2	81.1	72.9	-----	72.7	56.0	81.2	53.3	49.2	-----	
1951	95.1	87.4	-----	82.0	88.7	77.5	-----	76.5	59.3	81.5	58.3	51.7	-----	
1952	96.4	94.9	-----	82.4	87.7	79.0	-----	78.0	62.2	82.6	62.4	55.0	-----	
1953	95.7	95.8	89.2	83.1	86.7	81.0	-----	81.5	64.8	84.2	66.4	57.0	-----	
1954	93.3	94.3	75.9	83.5	86.3	81.8	-----	81.2	66.7	85.3	69.2	58.7	-----	
1955	91.5	90.9	71.8	83.5	85.8	82.1	-----	82.3	68.2	87.5	69.4	60.4	-----	
1956	91.5	93.5	69.1	85.3	87.3	84.1	-----	85.9	70.1	88.4	70.5	62.8	-----	
1957	94.4	98.4	77.4	87.6	88.2	87.4	90.6	90.3	73.3	89.3	73.8	65.5	90.1	
1958	95.9	101.5	80.2	88.2	88.2	88.3	89.4	88.7	76.4	92.4	78.5	68.7	90.3	
1959	97.3	105.9	89.5	89.3	89.0	89.6	90.5	89.8	79.0	94.7	81.2	72.0	91.8	
1960	96.7	104.5	83.6	90.7	90.3	90.9	93.0	89.2	81.9	98.6	83.3	74.9	94.2	
1961	96.6	104.5	86.9	91.2	90.8	91.3	92.0	91.0	83.9	99.4	85.3	77.7	94.4	
1962	97.6	104.1	94.8	91.8	91.2	92.1	92.6	91.5	85.5	99.4	86.6	80.2	94.7	
1963	97.9	103.5	96.0	92.7	92.0	93.1	92.4	93.2	87.3	99.4	87.5	82.6	95.0	
1964	98.8	103.2	100.1	93.5	92.8	93.9	91.3	92.7	89.2	99.4	89.6	84.6	94.6	
1965	98.4	100.9	99.4	94.8	93.6	95.5	94.4	94.6	91.5	99.4	92.9	87.3	96.3	
1966	98.5	99.1	97.0	97.0	96.0	97.5	96.8	97.0	95.3	99.6	96.8	92.0	97.8	
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1968	103.1	102.8	( <sup>2</sup> )	104.1	105.6	103.3	101.7	103.1	105.7	100.9	104.0	107.3	101.5	
1969	107.0	104.4	103.1	108.8	111.9	107.0	105.1	105.6	113.8	102.8	111.3	116.0	104.2	
1970	111.8	107.6	104.3	113.1	116.5	111.2	106.2	110.1	123.7	107.3	123.1	124.2	107.0	
1971	116.5	112.0	110.2	117.0	120.1	115.2	107.3	117.5	130.8	114.7	133.0	133.3	111.2	
1972	118.9	111.0	110.5	119.8	122.7	110.2	108.8	118.5	135.9	120.5	136.0	138.2	114.3	
1973	121.9	111.1	117.6	124.8	127.1	123.4	118.8	136.0	141.8	126.5	136.9	144.3	123.5	
1974	130.6	117.5	122.6	140.9	136.1	143.8	158.9	214.6	156.0	145.8	141.9	159.1	159.7	
1975	145.5	127.6	146.4	151.7	141.2	157.9	169.7	235.3	171.9	169.6	152.7	179.1	176.6	
1976	154.3	135.7	167.9	158.3	145.8	165.7	176.6	250.8	186.8	189.0	174.3	197.1	189.3	
1977	163.2	142.9	182.8	166.5	151.6	175.3	186.7	283.4	201.6	213.4	188.4	216.7	207.3	
1977:														
Jan	158.9	141.1	177.7	161.9	147.6	170.5	180.0	271.7	194.3	204.2	182.9	207.6	199.1	
Feb	159.7	140.7	179.1	163.1	148.5	171.8	182.0	278.3	195.6	205.4	183.3	209.4	201.3	
Mar	160.8	140.9	182.7	163.9	149.3	172.6	183.4	281.4	197.0	208.5	184.8	211.5	203.5	
Apr	162.2	140.6	187.8	164.7	149.8	173.5	185.4	282.0	198.4	209.8	186.7	213.1	205.1	
May	163.4	141.4	191.4	165.7	150.9	174.5	187.5	282.6	199.4	210.9	187.4	216.6	206.6	
June	163.9	141.7	192.2	166.6	151.3	175.6	188.8	283.1	201.1	213.0	188.7	216.0	208.1	
July	164.3	141.6	190.6	166.6	150.6	176.1	189.2	283.7	202.8	216.0	189.4	217.9	209.6	
Aug	164.3	141.6	186.4	167.3	152.1	176.3	189.1	284.1	203.8	217.4	190.0	219.6	210.1	
Sept	164.5	141.1	182.5	168.4	153.5	177.2	188.9	285.1	205.3	218.0	191.0	221.1	210.3	
Oct	165.0	145.7	178.0	169.2	154.6	177.9	188.5	287.2	206.2	219.3	191.3	222.0	210.9	
Nov	165.5	148.2	175.0	170.1	155.9	178.6	188.4	289.9	207.2	219.5	192.0	223.0	211.2	
Dec	165.9	150.5	170.7	170.3	155.3	179.3	188.7	291.9	208.2	218.9	192.9	224.2	211.3	
1978:														
Jan	166.6	150.9	169.8	169.7	152.3	179.7	188.6	295.2	209.8	219.7	193.7	226.5	211.8	
Feb	167.2	151.2	170.0	169.6	150.7	180.3	188.2	296.9	211.4	223.3	194.7	228.7	213.0	
Mar	168.3	151.1	172.3	170.7	152.8	181.0	188.1	297.2	213.0	226.6	194.9	229.9	214.3	
Apr	169.9	151.2	177.3	171.8	154.8	181.7	188.9	296.6	214.6	229.2	195.3	231.3	215.7	
May	172.0	152.5	184.6	172.8	156.1	182.6	190.5	295.6	216.2	232.5	195.5	232.5	217.7	
June	173.9	153.5	191.5	173.7	156.1	183.8	193.0	295.1	218.3	236.5	196.2	233.5	220.7	
July	175.3	153.9	195.9	174.1	153.9	185.5	195.7	294.5	220.4	237.2	196.9	235.4	222.4	
Aug	175.9	153.8	196.7	175.4	155.5	186.6	198.3	294.2	222.2	236.9	197.3	237.7	223.7	
Sept	177.2	153.5	195.9	177.1	157.9	188.0	200.0	295.7	224.6	237.9	198.7	239.1	225.1	
Oct	178.8	155.5	195.4	178.1	159.3	188.8	200.4	300.1	226.7	240.0	200.4	241.5	226.5	
Nov	180.0	158.5	194.7	179.1	160.0	190.0	201.9	306.1	227.8	234.9	202.2	244.1	225.9	

<sup>1</sup> Includes other items not shown separately.<sup>2</sup> Gas (piped) and electricity; fuel oil, coal, and bottled gas; and gasoline, motor oil, coolant, etc.<sup>3</sup> Not available.

Note.—Beginning January 1978 data are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-52.—Consumer price indexes for commodity groups, seasonally adjusted, 1975-78

[1967=100, seasonally adjusted]

Year and month	All commodities	Food	Commodities less food							
			Total	Durable commodities			Nondurables less food			
				Total <sup>1</sup>	New cars	Used cars	Total <sup>1</sup>	Apparel commodities	Gasoline, motor oil, coolant, etc.	Fuel oil, coal, and bottled gas
1975: Jan.....	153.8	170.9	144.5	140.0	122.0	140.7	147.9	140.1	161.0	225.0
Feb.....	154.5	171.2	145.6	141.4	123.6	142.3	148.6	140.4	161.3	224.5
Mar.....	155.1	170.9	146.6	143.0	126.8	142.6	149.1	140.5	161.9	225.0
Apr.....	155.8	171.3	147.4	144.0	127.3	142.1	149.9	140.6	163.2	227.5
May.....	156.6	172.6	147.9	144.7	127.0	141.8	150.4	140.6	164.8	230.2
June.....	157.8	174.8	148.6	145.3	127.4	143.9	151.0	140.6	167.8	232.2
July.....	159.5	177.6	149.8	146.2	127.6	147.2	152.5	141.2	173.5	236.6
Aug.....	159.9	177.3	150.4	146.8	128.3	149.7	153.0	141.9	174.7	239.6
Sept.....	160.3	177.7	151.0	147.7	129.2	150.5	153.3	141.5	175.8	243.1
Oct.....	161.4	179.4	151.6	148.3	129.3	151.5	154.1	141.8	177.1	246.1
Nov.....	161.9	180.2	152.0	148.7	130.1	151.6	154.4	142.2	177.2	246.4
Dec.....	162.6	181.1	152.6	149.3	132.5	151.5	155.0	142.5	177.1	246.6
1976: Jan.....	162.9	180.8	153.2	149.9	132.8	151.4	155.5	143.1	176.7	245.0
Feb.....	162.7	179.6	153.6	150.6	133.5	154.8	155.7	143.5	174.8	244.4
Mar.....	162.7	178.6	154.1	151.4	134.0	159.1	156.0	143.9	172.9	244.5
Apr.....	163.4	179.7	154.6	152.3	134.3	164.0	156.3	144.4	171.9	245.6
May.....	164.4	181.0	155.4	153.4	134.8	167.1	157.0	144.9	172.9	246.7
June.....	165.0	181.2	156.2	154.1	135.0	169.0	157.7	145.4	175.3	249.3
July.....	165.4	181.1	156.9	155.0	135.6	170.2	158.4	145.9	176.1	250.7
Aug.....	166.0	181.6	157.6	155.7	136.1	171.9	159.0	146.8	177.1	253.0
Sept.....	166.5	181.7	158.3	156.3	137.0	173.0	159.8	147.6	178.2	254.9
Oct.....	167.1	182.1	159.0	157.2	138.4	174.4	160.4	147.5	180.1	255.4
Nov.....	167.3	181.5	159.7	157.6	138.4	177.0	161.1	147.8	181.3	257.6
Dec.....	168.0	182.0	160.5	158.4	138.5	180.8	161.8	148.4	181.8	262.2
1977: Jan.....	169.3	183.5	161.7	159.9	139.6	186.3	162.8	149.3	182.1	267.7
Feb.....	171.3	187.4	162.7	161.1	139.9	191.3	163.7	149.9	184.0	272.9
Mar.....	172.3	188.6	163.4	161.9	140.4	192.5	164.5	150.2	185.8	278.2
Apr.....	173.7	191.5	164.1	162.6	140.5	193.1	165.0	150.4	187.3	281.1
May.....	174.4	192.6	164.6	163.3	141.7	190.3	165.8	150.8	188.0	283.4
June.....	175.1	193.8	165.1	163.3	142.3	187.2	166.4	151.8	186.8	285.7
July.....	175.2	193.5	165.4	163.4	142.9	182.7	166.9	152.2	186.0	286.6
Aug.....	175.7	194.3	165.7	163.6	143.5	178.3	167.2	152.7	185.5	288.1
Sept.....	176.2	194.7	166.2	163.9	144.1	175.3	167.8	152.6	186.3	289.5
Oct.....	176.7	195.0	166.8	164.4	145.0	172.8	168.6	152.9	187.9	289.5
Nov.....	177.5	196.0	167.6	165.1	146.9	173.3	169.4	153.5	189.4	289.5
Dec.....	178.3	196.7	168.4	166.0	148.4	173.7	169.9	153.8	190.7	289.6
1978: Jan.....	179.9	199.2	169.5	167.6	149.3	178.0	170.6	154.0	190.9	290.8
Feb.....	180.8	201.6	169.9	168.7	150.3	181.6	170.1	152.1	190.3	291.1
Mar.....	182.3	204.3	170.9	169.5	150.5	181.6	171.2	153.6	190.6	294.0
Apr.....	184.0	208.1	171.8	170.4	151.0	182.2	172.1	155.3	190.8	295.7
May.....	185.6	211.2	172.8	171.8	152.8	183.5	172.8	156.0	191.1	296.5
June.....	187.2	214.0	173.9	173.2	154.1	186.5	173.5	156.5	190.9	297.8
July.....	187.9	213.9	174.9	174.4	155.3	187.8	174.4	155.4	192.4	297.5
Aug.....	188.7	214.5	175.7	175.2	155.8	188.2	175.2	156.1	194.6	298.4
Sept.....	190.1	215.6	177.2	176.7	156.8	188.2	176.6	157.0	197.2	300.2
Oct.....	191.5	217.3	178.5	178.1	154.7	189.7	177.4	157.6	199.8	302.5
Nov.....	192.7	218.0	179.9	179.6	157.1	192.8	178.4	157.6	202.9	305.8

<sup>1</sup> Includes other items not shown separately.

Note.—Beginning January 1978, data are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-53.—Consumer price indexes for service groups and selected expenditure classes, seasonally adjusted, 1975-78

[1967=100, seasonally adjusted, except as noted]

Year and month	Services						Selected expenditure classes			
	All services	Rent, residential	Services less rent				Home ownership	Fuel and other utilities <sup>2</sup>	Household turnings and operation	Energy <sup>3</sup>
			Total <sup>1</sup>	Gas (piped) and electricity	Transportation services	Medical care services				
1975: Jan...	161.0	134.3	165.8	159.4	146.1	170.7	174.8	159.5	146.9	167.2
Feb...	162.3	134.8	167.2	161.6	146.8	172.6	176.8	160.9	147.9	168.5
Mar...	163.1	135.3	168.1	162.8	147.7	174.3	178.2	161.9	148.6	169.0
Apr...	164.2	135.8	169.3	165.3	148.9	175.8	179.9	163.8	149.5	170.9
May...	165.0	136.4	170.2	166.8	149.6	177.1	180.8	165.3	150.1	172.7
June...	166.2	136.9	171.4	169.4	150.6	178.5	182.0	167.2	150.7	175.9
July...	167.0	137.5	172.3	170.8	151.5	180.2	182.5	168.7	151.1	180.1
Aug...	167.8	138.1	173.1	172.2	152.5	181.3	182.9	170.0	151.7	181.2
Sept...	169.1	138.5	174.7	175.0	156.5	182.9	183.5	172.1	152.5	182.9
Oct...	170.1	139.3	175.6	175.8	157.4	184.7	184.1	173.3	153.3	183.0
Nov...	171.8	140.0	177.5	177.4	161.7	184.3	186.1	174.6	153.8	183.7
Dec...	172.8	140.5	178.7	178.8	163.1	186.0	187.0	175.6	154.3	184.4
1976: Jan...	174.6	141.1	180.7	178.8	166.5	188.1	188.2	175.5	156.4	184.5
Feb...	175.8	141.9	182.0	180.8	168.4	190.1	188.3	176.7	157.3	184.6
Mar...	177.2	142.6	183.4	182.4	170.6	192.1	188.9	177.8	158.3	184.0
Apr...	177.9	143.1	184.2	183.4	171.1	193.4	189.3	178.6	158.9	183.9
May...	179.0	143.8	185.4	185.8	172.3	194.8	190.4	180.2	159.3	185.7
June...	180.0	144.5	186.4	187.9	173.5	196.0	191.2	181.8	159.8	188.7
July...	181.1	145.2	187.6	189.9	175.3	197.6	192.3	183.2	160.4	190.5
Aug...	182.3	145.7	188.9	191.4	176.4	199.0	193.5	184.8	160.8	191.5
Sept...	183.3	146.3	190.0	193.2	178.0	200.3	194.0	186.2	161.4	192.5
Oct...	184.2	147.0	190.9	196.1	179.3	201.9	194.2	188.0	161.9	193.6
Nov...	185.0	147.5	191.7	196.7	180.2	204.7	194.2	188.6	162.6	194.6
Dec...	185.6	148.2	192.4	201.1	180.4	206.0	194.2	191.7	163.3	197.2
1977: Jan...	187.3	149.4	194.1	203.4	181.3	207.7	196.2	193.9	164.0	199.1
Feb...	188.4	149.9	195.4	204.2	182.7	209.1	197.8	195.0	164.7	201.3
Mar...	190.0	150.7	197.0	207.1	184.2	211.1	199.5	197.4	165.2	203.5
Apr...	191.4	151.5	198.6	208.8	185.9	213.0	201.5	198.7	165.7	205.1
May...	192.9	152.2	200.2	210.7	187.4	214.8	203.1	200.4	166.4	206.6
June...	194.3	153.0	201.7	213.0	189.1	216.3	204.5	202.3	167.3	208.1
July...	195.7	153.8	203.3	216.4	190.2	217.5	206.4	204.4	167.9	209.6
Aug...	196.8	154.6	204.4	218.7	191.0	219.1	207.4	205.8	168.6	210.1
Sept...	197.9	155.5	205.6	219.1	191.9	220.8	208.7	206.7	169.1	210.3
Oct...	198.7	156.2	206.3	221.2	191.8	222.2	209.4	208.1	169.5	210.9
Nov...	199.5	157.1	207.1	220.2	192.0	223.2	210.9	207.6	170.0	211.2
Dec...	200.3	157.9	208.0	218.6	192.5	224.7	212.3	207.1	171.0	211.3
1978: Jan...	201.5	158.8	209.2	218.8	193.2	226.6	214.5	207.7	171.8	211.8
Feb...	203.0	159.4	210.9	222.0	194.0	228.4	216.0	209.4	172.2	213.0
Mar...	204.7	160.3	212.8	225.0	194.2	229.6	218.5	211.5	173.5	214.3
Apr...	206.6	161.5	214.8	228.1	194.2	231.3	220.9	213.2	174.6	215.7
May...	208.7	162.7	217.0	232.3	195.5	232.7	223.4	215.5	175.8	217.7
June...	210.5	163.6	219.0	236.5	196.5	233.9	226.0	217.8	177.5	220.7
July...	212.2	164.4	220.9	237.7	197.6	235.0	228.6	218.8	178.3	222.4
Aug...	214.0	165.3	222.8	238.3	198.4	237.3	230.9	219.4	179.3	223.7
Sept...	215.7	166.6	224.7	239.1	199.7	238.9	233.9	219.9	180.4	225.1
Oct...	217.5	167.6	226.6	242.2	201.0	241.8	236.6	221.5	181.9	226.5
Nov...	218.3	168.7	227.3	235.6	202.2	244.5	238.3	218.6	182.8	225.9

<sup>1</sup> Includes other items not shown separately.

<sup>2</sup> Gas (piped) and electricity; fuel oil, coal, and bottled gas; and other utilities and public services.

<sup>3</sup> Gas (piped) and electricity; fuel oil, coal, and bottled gas; and gasoline, motor oil, coolant, etc. Index is not seasonally adjusted.

Note.—Beginning January 1978 data are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-54.—Changes in consumer price indexes, major groups, 1948-78

(Percent change)

Year or month	All items		Food		Commodities less food		Services		All items less food	
	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year
1948	2.7	7.8	-0.8	8.5	5.3	7.7	6.1	6.3	5.5	7.2
1949	-1.8	-1.0	-3.7	-4.0	-4.8	-1.5	3.6	4.8	-8	1.0
1950	5.8	1.0	9.6	1.4	5.7	-1	3.6	3.2	4.1	1.1
1951	5.9	7.9	7.4	11.1	4.6	7.5	5.2	5.3	5.0	6.5
1952	.9	2.2	-1.1	1.8	-5	.9	4.6	4.4	1.7	2.4
1953	.6	.8	-1.3	-1.5	.2	.2	4.2	4.3	1.7	1.9
1954	-.5	.5	-1.6	-.2	-1.4	-1.1	1.9	3.3	0	.6
1955	.4	-.4	-9	-1.4	0	-.7	2.3	2.0	.9	.3
1956	2.9	1.5	3.1	.7	2.5	1.0	3.1	2.5	2.6	1.8
1957	3.0	3.6	2.8	3.3	2.2	3.1	4.5	4.0	3.2	3.3
1958	1.8	2.7	2.2	4.2	.8	1.1	2.7	3.8	1.6	2.3
1959	1.5	.8	-.8	-1.6	1.5	1.3	3.7	2.9	2.3	1.9
1960	1.5	1.6	3.1	1.0	-.3	.4	2.7	3.3	1.0	1.7
1961	.7	1.0	-9	1.3	.6	.3	1.9	2.0	1.1	1.0
1962	1.2	1.1	1.5	.9	.7	.7	1.7	1.9	1.2	1.2
1963	1.6	1.2	1.9	1.4	1.2	.7	2.3	2.0	1.6	1.3
1964	1.2	1.3	1.4	1.3	.4	.8	1.8	1.9	1.0	1.3
1965	1.9	1.7	3.4	2.2	.7	.6	2.6	2.2	1.6	1.4
1966	3.4	2.9	3.9	5.0	1.9	1.4	4.9	3.9	3.3	2.3
1967	3.0	2.9	1.2	.9	3.1	2.6	4.0	4.4	3.5	3.4
1968	4.7	4.2	4.3	3.6	3.7	3.7	6.1	5.2	4.9	4.4
1969	6.1	5.4	7.2	5.1	4.5	4.2	7.4	6.9	5.7	5.5
1970	5.5	5.9	2.2	5.5	4.8	4.1	8.2	8.1	6.5	6.0
1971	3.4	4.3	4.3	3.0	2.3	3.8	4.1	5.6	3.1	4.6
1972	3.4	3.3	4.7	4.3	2.5	2.2	3.6	3.8	3.0	3.0
1973	8.8	6.2	20.1	14.5	5.0	3.4	6.2	4.4	5.6	3.9
1974	12.2	11.0	12.2	14.4	13.2	10.6	11.3	9.3	12.2	9.9
1975	7.0	9.1	6.5	8.5	6.2	9.2	8.1	9.5	7.1	9.3
1976	4.8	5.8	.6	3.1	5.1	5.0	7.3	8.3	6.2	6.6
1977	6.8	6.5	8.0	6.3	4.9	5.4	7.9	7.7	6.3	6.5
Change from preceding month										
	Un-adjusted	Seasonally adjusted	Un-adjusted	Seasonally adjusted	Un-adjusted	Seasonally adjusted	Un-adjusted	Seasonally adjusted	Un-adjusted	Seasonally adjusted
1977: Jan.	0.6	0.8	0.9	0.8	0.0	0.7	0.9	0.9	0.4	0.8
Feb.	1.0	1.0	2.3	2.1	.6	.6	.7	.6	.6	.6
Mar.	.6	.6	.5	.6	.6	.4	.7	.8	.6	.6
Apr.	.8	.8	1.2	1.5	.6	.4	.6	.7	.6	.6
May	.6	.6	.4	.6	.7	.3	.5	.8	.6	.5
June	.7	.5	1.0	.6	.4	.3	.8	.7	.6	.5
July	.4	.3	.5	-.2	.1	.2	.8	.7	.4	.4
Aug.	.4	.4	.3	.4	.2	.2	.5	.6	.4	.4
Sept.	.4	.4	-.4	.2	.4	.3	.7	.6	.6	.4
Oct.	.3	.3	-.1	.2	.4	.4	.4	.4	.4	.3
Nov.	.5	.4	.6	.5	.4	.5	.5	.4	.5	.4
Dec.	.4	.4	.4	.4	.2	.5	.5	.4	.3	.4
1978: Jan.	.6	.8	1.5	1.3	.1	.7	.7	.6	.4	.8
Feb.	.6	.6	1.4	1.2	.1	.2	.7	.7	.5	.5
Mar.	.7	.8	1.1	1.3	.7	.6	.7	.8	.6	.7
Apr.	.9	.9	1.6	1.9	.8	.5	.8	.9	.8	.7
May	.9	.9	1.3	1.5	1.0	.6	.7	1.0	.9	.8
June	1.0	.9	1.7	1.3	.8	.6	.9	.9	.8	.7
July	.7	.5	.6	.0	.6	.6	.9	.8	.7	.7
Aug.	.6	.6	.2	.3	.5	.5	.8	.8	.7	.7
Sept.	.8	.8	.1	.5	.9	.9	1.0	.8	.9	.8
Oct.	.8	.8	.6	.8	.7	.7	.9	.8	.8	.8
Nov.	.5	.5	.5	.3	.7	.8	.5	.4	.6	.6

<sup>1</sup> Changes from December to December are based on unadjusted indexes.

Note.—Beginning January 1978 data are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-55.—*Producer price indexes by stage of processing, 1947-78*

[1967=100]

Year or month	Finished goods									
	Total finished goods	Consumer foods			Finished goods excluding consumer foods				Total consumer finished goods	
		Total	Crude	Pro-processed	Total	Consumer goods				Capital equip-ment <sup>1</sup>
						Total	Durable	Nondurable		
1947	74.0	82.8	99.4	80.2	79.0	74.6	80.7	55.4	80.5	
1948	79.9	90.4	107.1	87.6	84.0	79.7	85.8	60.4	86.5	
1949	77.6	83.1	101.3	80.1	82.2	81.8	82.3	63.4	82.5	
1950	79.0	84.7	92.2	83.4	83.5	82.7	83.6	64.9	83.9	
1951	86.5	95.2	105.9	93.2	89.5	88.2	90.0	71.2	91.8	
1952	86.0	94.3	112.8	91.3	88.3	88.9	87.8	72.4	90.7	
1953	85.1	89.4	105.2	86.7	89.1	89.6	88.6	73.6	89.2	
1954	85.3	88.7	94.7	87.6	89.4	90.3	88.9	74.5	89.1	
1955	85.5	86.5	98.8	84.4	90.1	91.2	89.4	76.7	88.5	
1956	87.9	86.3	98.7	84.3	92.3	94.3	91.1	82.4	89.8	
1957	91.1	89.3	97.4	87.9	94.6	97.1	93.2	87.5	92.4	
1958	93.2	94.5	103.5	93.1	94.7	98.4	92.6	89.8	94.4	
1959	93.0	90.1	94.3	89.5	95.9	99.6	94.0	91.5	93.6	
1960	93.7	92.1	100.6	90.7	96.3	99.2	94.7	91.7	94.5	
1961	93.7	91.7	96.1	90.9	96.2	98.8	94.7	91.8	94.3	
1962	94.0	92.5	97.0	91.7	96.0	98.3	94.8	92.2	94.6	
1963	93.7	91.4	95.5	90.7	96.0	97.8	95.1	92.4	94.1	
1964	94.1	91.9	98.2	90.8	95.9	98.2	94.8	93.3	94.3	
1965	95.7	95.4	98.6	94.9	96.6	97.9	95.9	94.4	96.1	
1966	98.8	101.6	104.8	101.0	98.1	98.5	97.8	96.8	99.4	
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1968	102.9	103.7	107.5	103.0	102.6	102.1	102.2	103.5	102.7	
1969	106.6	110.0	116.0	108.9	105.4	104.6	104.0	105.0	106.6	
1970	110.3	113.5	116.3	113.1	109.1	107.7	106.9	108.3	109.9	
1971	113.7	115.3	115.8	115.1	113.1	111.4	110.8	111.7	116.6	
1972	117.2	121.7	121.2	121.7	115.4	113.4	113.2	113.6	119.5	
1973	127.9	146.4	160.7	143.9	120.1	118.5	115.8	120.5	123.5	
1974	147.5	166.9	180.8	164.6	139.3	138.6	126.3	146.8	149.3	
1975	163.4	181.0	181.2	181.3	156.2	153.1	138.2	163.0	162.5	
1976	170.3	180.2	194.8	177.4	165.5	161.8	144.4	173.3	173.2	
1977	180.6	189.1	201.8	186.4	176.2	172.1	152.2	185.4	184.5	
1978	194.6	206.8	216.5	204.1	188.9	183.7	165.9	195.4	199.0	
1977: Jan	175.1	181.5	220.0	176.9	171.4	167.4	149.0	179.6	173.2	
Feb	176.6	185.0	229.1	179.9	172.2	168.3	149.3	181.0	175.0	
Mar	177.5	186.6	223.6	182.0	173.0	169.2	149.7	182.3	180.7	
Apr	178.8	188.5	213.1	184.9	174.0	170.4	150.6	183.6	181.6	
May	180.3	192.3	200.0	189.9	174.8	171.1	150.8	184.8	182.4	
June	180.5	190.7	184.2	189.4	175.6	172.0	151.4	185.9	183.1	
July	181.3	192.1	192.5	190.2	176.1	172.5	151.5	186.6	183.8	
Aug	181.3	189.9	191.2	188.1	176.8	173.0	152.2	187.0	184.8	
Sept	181.9	190.0	193.4	188.0	177.6	173.7	152.2	188.1	185.6	
Oct	183.9	189.9	189.9	188.1	180.3	175.5	156.1	188.5	189.8	
Nov	184.6	190.6	196.2	188.4	180.9	175.8	156.4	188.8	190.8	
Dec	185.5	192.9	188.6	191.5	181.4	176.2	156.9	189.1	191.6	
1978: Jan	187.0	195.0	197.9	192.9	182.7	177.4	158.5	189.9	193.0	
Feb	188.5	199.6	210.2	196.9	183.2	177.8	158.3	190.7	193.7	
Mar	189.1	200.2	207.5	197.8	183.8	178.3	159.0	191.1	194.6	
Apr	191.5	204.5	220.2	201.4	185.6	180.5	163.2	191.8	195.6	
May	193.1	206.8	212.0	204.4	186.9	181.9	165.0	192.9	196.9	
June	194.5	209.5	211.7	207.3	188.0	182.9	165.3	194.4	198.1	
July	196.0	210.4	234.1	206.6	189.6	184.8	167.7	195.9	199.2	
Aug	195.6	205.9	212.8	203.4	190.4	185.6	168.4	196.9	200.0	
Sept	196.9	209.4	214.8	207.1	191.1	186.0	168.3	197.7	201.0	
Oct	199.7	212.5	220.1	209.9	193.8	188.6	171.7	199.6	204.1	
Nov	200.6	212.0	227.2	208.9	195.1	189.5	172.1	200.9	205.9	
Dec	202.4	215.8	230.0	212.7	196.2	190.8	172.8	202.6	200.3	

See next page for continuation of table.

TABLE B-55.—*Producer price indexes by stage of processing, 1947-78—Continued*

[1967=100]

Year or month	Intermediate materials, supplies, and components							Crude materials for further processing					
	Total	Foods and feeds <sup>2</sup>	Other	Materials and components		Processed fuels and lubricants	Containers	Supplies	Total	Food-stuffs and feed-stuffs	Other		
				For manufacturing	For construction						Total	Fuel	Other
1947	72.4	---	70.0	72.1	66.0	85.5	66.8	77.5	101.2	111.7	---	66.6	90.6
1948	78.3	---	76.1	77.8	73.1	96.9	69.8	81.0	110.9	120.8	---	78.7	100.7
1949	75.2	---	74.2	74.5	73.2	88.2	70.1	76.3	96.0	100.3	---	78.3	91.6
1950	78.6	---	77.7	78.1	77.0	89.9	72.0	78.9	104.6	107.6	---	77.9	104.7
1951	88.1	---	87.0	88.5	84.3	93.9	84.5	88.8	120.1	124.5	---	79.4	120.7
1952	85.5	---	84.3	84.8	83.7	92.8	79.9	88.8	110.3	117.2	---	79.9	104.6
1953	86.0	---	85.3	86.2	85.1	93.4	80.0	84.3	101.9	104.9	---	82.7	100.1
1954	86.5	---	85.7	86.3	85.5	93.3	81.5	86.3	101.0	104.9	---	79.0	98.2
1955	88.1	---	88.3	88.4	88.9	93.3	82.6	84.8	97.1	95.1	---	78.8	103.8
1956	92.0	---	92.6	92.6	93.5	96.3	88.6	87.1	97.6	93.1	---	84.4	107.6
1957	94.1	---	95.0	94.8	94.0	101.9	92.5	88.0	99.8	97.2	---	89.2	106.2
1958	94.3	---	94.8	95.2	94.0	96.0	94.7	90.0	102.0	103.0	---	90.3	102.2
1959	95.6	---	96.4	96.5	96.6	55.6	94.2	91.2	99.4	96.2	---	91.9	105.8
1960	95.6	---	96.8	96.5	95.9	98.2	95.5	90.7	97.0	95.1	---	92.8	101.4
1961	95.0	---	95.5	95.3	94.6	99.4	94.7	91.8	96.5	93.8	---	92.6	102.5
1962	94.9	---	95.3	94.7	94.2	99.0	95.9	93.8	97.5	95.7	---	92.1	102.0
1963	95.2	---	95.0	94.9	94.5	98.1	94.7	95.2	95.4	92.9	---	93.2	100.7
1964	95.5	---	95.6	95.9	95.4	96.0	94.0	94.3	94.5	90.8	---	92.8	102.4
1965	96.8	---	96.9	97.4	96.2	97.4	95.8	95.2	99.3	97.1	---	93.5	104.5
1966	99.2	---	98.9	99.3	98.8	99.2	98.4	99.4	105.7	105.9	---	96.3	106.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.3	99.4	102.6	102.2	104.9	97.7	102.4	101.2	101.6	101.0	100.0	102.2	102.3
1969	105.8	102.7	106.1	105.8	110.8	98.7	106.3	102.8	108.4	109.3	106.8	106.6	106.9
1970	109.9	109.1	109.9	110.0	112.6	105.0	111.4	108.0	112.3	112.0	112.7	122.6	109.8
1971	114.1	111.7	114.3	112.8	119.7	115.2	116.6	111.0	115.1	114.2	117.0	139.0	110.7
1972	118.7	118.5	118.9	117.0	126.2	118.9	121.9	115.6	127.6	127.5	128.0	148.7	121.9
1973	131.6	168.4	128.1	127.7	136.7	131.5	129.2	140.6	174.0	180.0	162.5	164.5	161.5
1974	162.9	200.2	159.5	162.2	161.6	199.1	152.2	154.5	196.1	189.4	208.9	219.4	205.4
1975	180.0	195.3	178.6	178.7	176.4	233.0	171.4	168.1	196.9	191.8	206.9	271.5	188.3
1976	189.3	186.6	189.5	185.6	188.0	250.8	181.5	179.1	205.1	190.1	233.6	314.7	210.2
1977	201.7	191.0	202.4	195.5	202.9	283.8	193.1	188.0	214.3	190.9	258.4	400.4	217.3
1978	215.5	201.0	216.4	208.2	224.4	296.4	212.4	196.9	240.2	215.4	287.0	464.0	235.4
1977: Jan	195.0	192.3	195.3	189.7	195.1	262.7	184.1	186.6	208.1	189.7	242.9	342.8	214.1
Feb	196.6	194.8	196.7	190.8	195.9	271.2	184.3	187.4	215.5	194.0	256.0	377.8	220.8
Mar	198.7	198.3	198.7	192.7	197.8	276.3	189.0	188.5	219.9	197.1	263.0	383.9	228.0
Apr	201.2	212.0	200.7	194.6	199.4	282.0	193.3	192.5	226.1	203.7	268.5	392.3	232.7
May	202.1	211.0	201.6	195.8	200.3	283.9	192.9	191.9	224.4	201.8	267.3	404.5	227.6
June	202.1	202.1	202.2	195.5	201.3	286.1	193.5	190.9	215.4	192.0	259.5	399.4	219.0
July	202.6	182.9	203.8	196.6	204.1	289.0	194.0	185.9	212.9	191.2	253.9	403.2	210.6
Aug	203.4	177.7	204.9	197.3	206.1	291.9	194.4	184.6	207.7	181.3	257.4	412.3	212.5
Sept	204.2	174.6	206.0	197.8	208.8	291.3	197.1	185.2	207.8	182.0	256.4	415.4	210.3
Oct	204.4	173.1	206.3	198.0	208.5	292.4	198.1	185.1	207.6	182.7	254.6	416.2	207.7
Nov	204.9	186.2	206.0	198.2	208.3	289.2	198.2	189.0	210.6	185.5	257.9	424.5	209.5
Dec	205.4	186.4	206.6	198.9	209.5	289.3	198.2	188.7	215.5	190.0	263.7	432.0	214.9
1978: Jan	207.2	189.6	208.2	200.0	212.7	291.2	202.2	190.5	219.6	194.0	267.8	430.3	220.7
Feb	208.9	189.9	210.1	202.1	216.3	291.7	204.3	189.8	225.0	201.3	269.7	431.9	222.7
Mar	210.7	197.9	211.5	203.5	218.3	294.3	205.7	192.7	230.5	206.3	276.2	441.9	228.1
Apr	212.5	200.6	213.3	205.5	220.8	294.8	206.6	194.0	239.0	216.3	281.6	454.7	231.4
May	213.9	200.8	214.7	206.5	222.5	297.3	209.3	195.1	241.2	219.1	282.6	458.3	231.7
June	215.1	201.9	215.9	207.4	224.3	299.9	211.7	195.8	245.4	223.7	286.1	465.8	234.0
July	216.0	201.5	216.8	208.2	226.2	298.1	213.5	197.1	245.4	222.0	289.7	471.8	236.4
Aug	217.3	198.8	218.4	210.1	228.3	296.7	214.6	196.9	240.2	213.2	291.6	470.8	239.1
Sept	218.7	203.4	219.6	211.7	229.1	296.7	216.5	198.9	244.9	218.5	294.9	478.6	241.1
Oct	220.7	207.6	221.5	213.8	230.2	297.9	220.7	201.9	249.9	224.4	298.2	483.5	244.0
Nov	221.8	207.4	222.7	214.7	231.8	297.9	221.6	203.5	248.6	221.3	300.6	485.3	246.5
Dec	222.8	212.3	223.5	215.4	232.5	299.9	222.4	205.8	252.4	224.7	305.1	494.9	249.5

<sup>1</sup> Formerly called producer finished goods.<sup>2</sup> Intermediate materials for food manufacturing and manufactured animal feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-56.—*Producer price indexes by stage of processing, seasonally adjusted, 1975-78*

[1967=100, seasonally adjusted]

Year and month	Finished goods									Intermediate materials, supplies, and components			Crude materials for further processing				
	Total finished goods	Consumer finished goods	Finished goods excluding consumer goods						Total consumer finished goods	Total	Foods and feeds <sup>2</sup>	Other	Total	Foodstuffs and feedstuffs	Other		
			Total	Consumer goods			Capital equipment <sup>1</sup>	Total								Foods and feeds <sup>2</sup>	Other
				Total	Durable	Non-durable											
1975: Jan....	158.6	175.6	151.6	149.1	135.0	158.4	156.9	159.1	179.5	218.7	175.9	190.4	183.5	203.5			
Feb....	158.8	174.6	152.4	149.7	135.8	158.8	158.2	158.9	179.2	209.1	176.4	187.4	179.1	203.9			
Mar....	159.0	173.1	153.3	150.2	136.6	159.1	159.7	158.7	178.4	197.4	176.6	182.2	172.6	200.8			
Apr....	160.1	175.3	153.9	150.6	136.9	159.7	160.7	159.9	178.8	198.9	177.0	189.9	183.7	201.7			
May....	161.4	178.2	154.5	151.1	137.1	160.4	161.4	161.3	178.3	192.0	177.2	196.0	191.1	205.4			
June....	162.8	181.1	155.2	152.0	137.6	161.4	162.0	162.9	177.8	184.4	177.3	195.2	190.0	205.5			
July....	164.2	183.7	156.1	152.9	138.0	162.7	162.9	164.5	178.9	193.4	177.6	199.6	196.4	205.9			
Aug....	165.0	183.9	157.1	154.2	138.6	164.4	163.3	165.3	180.0	195.8	178.6	201.6	199.3	206.6			
Sept....	166.3	186.0	158.2	155.2	139.2	165.8	164.5	166.8	180.4	192.4	179.3	204.3	200.9	210.8			
Oct....	167.5	187.1	159.4	156.4	140.1	167.0	165.9	167.9	182.3	192.3	181.4	206.7	204.2	211.5			
Nov....	168.1	186.6	160.5	157.4	141.1	168.2	166.8	168.4	182.8	186.6	182.5	204.8	201.4	211.1			
Dec....	168.2	185.2	161.3	158.3	141.5	169.2	167.7	168.3	183.2	180.5	183.5	203.2	196.5	215.8			
1976: Jan....	168.4	183.3	162.0	158.8	142.0	170.1	168.8	168.0	184.3	180.7	184.7	203.1	195.3	218.2			
Feb....	168.2	180.8	162.6	159.2	142.5	170.3	169.7	167.5	185.2	181.2	185.6	202.3	194.6	216.6			
Mar....	168.3	180.1	163.0	159.3	142.8	170.2	170.5	167.4	186.0	183.1	186.3	199.6	188.2	220.0			
Apr....	169.4	183.1	163.4	159.5	143.0	170.4	171.2	168.5	186.6	180.5	187.1	205.2	195.7	223.4			
May....	169.6	183.4	163.6	159.6	143.3	170.6	171.7	168.6	187.3	188.5	187.2	204.1	193.1	224.9			
June....	170.0	182.0	164.6	160.6	144.0	172.0	172.5	168.9	188.4	193.2	188.3	208.2	195.6	232.2			
July....	170.3	180.3	165.5	161.6	144.3	173.3	173.3	168.9	190.0	202.4	189.4	208.6	190.8	242.8			
Aug....	170.0	177.1	166.2	162.5	144.9	174.4	173.7	168.4	190.1	184.1	190.4	204.2	187.1	236.7			
Sept....	171.0	177.4	167.3	163.7	146.0	175.5	174.9	169.3	191.7	188.7	192.0	203.7	186.0	236.9			
Oct....	171.5	176.5	168.3	164.2	146.0	176.3	176.5	169.3	192.4	184.9	192.9	203.6	181.6	245.5			
Nov....	172.2	177.0	169.0	165.2	146.6	177.6	177.0	170.2	193.4	184.6	193.9	208.6	183.4	255.9			
Dec....	173.8	180.7	169.9	165.6	146.9	178.2	178.5	171.8	194.4	187.0	194.9	209.5	188.3	248.8			
1977: Jan....	174.8	181.3	171.0	167.2	148.0	180.0	178.9	173.0	195.7	189.7	196.2	210.2	192.0	244.6			
Feb....	176.6	185.9	172.0	168.1	148.7	181.2	179.9	175.2	197.3	196.2	197.5	219.0	198.2	258.8			
Mar....	178.0	188.3	173.0	169.2	149.4	182.7	180.7	176.8	199.3	201.9	199.1	221.0	198.7	263.4			
Apr....	179.2	189.6	174.3	170.7	150.6	184.2	181.7	178.1	201.1	212.5	200.5	222.5	204.3	265.5			
May....	180.6	192.2	175.2	171.5	151.3	185.2	182.8	179.6	202.0	216.9	201.2	222.3	200.0	264.1			
June....	180.8	190.3	176.0	172.4	151.9	186.1	183.7	179.5	201.6	199.9	201.8	213.4	189.9	257.9			
July....	181.1	189.9	176.5	172.6	152.4	186.2	184.5	179.5	202.2	185.3	203.2	209.8	185.8	255.4			
Aug....	181.5	189.3	177.2	173.2	153.7	186.3	185.4	179.7	202.6	176.2	204.2	206.3	180.2	255.6			
Sept....	182.1	189.2	178.2	174.1	154.0	187.5	186.4	180.3	203.5	172.9	205.3	205.7	179.8	254.4			
Oct....	183.2	189.5	179.5	174.8	154.9	188.1	188.9	180.8	204.3	172.8	206.1	207.4	182.2	254.9			
Nov....	184.5	191.9	180.3	175.4	155.5	188.8	189.9	182.1	205.2	185.4	206.4	214.4	189.9	260.9			
Dec....	185.3	192.6	181.2	176.1	156.1	189.5	191.3	182.7	206.0	183.3	207.4	217.2	191.1	266.3			
1978: Jan....	186.6	194.8	182.2	177.1	157.4	190.3	192.3	184.2	207.9	187.2	209.2	221.6	196.4	269.4			
Feb....	188.6	200.7	183.0	177.6	157.7	190.9	193.5	186.4	209.7	191.0	210.9	228.7	205.6	272.1			
Mar....	189.6	202.1	183.9	178.4	158.7	191.5	194.6	187.5	211.3	201.1	212.0	231.7	208.0	276.5			
Apr....	192.0	205.8	185.8	180.8	163.2	192.4	195.7	190.4	212.4	201.2	213.1	238.5	217.0	278.8			
May....	193.4	206.7	187.3	182.3	165.5	193.3	197.3	191.6	213.7	206.4	214.2	238.9	217.1	279.8			
June....	194.8	209.1	188.4	183.2	165.8	194.6	198.7	193.1	214.6	200.8	215.4	243.1	221.3	284.2			
July....	195.8	208.1	190.0	185.0	168.7	195.5	199.9	194.0	215.5	204.0	216.2	241.7	215.7	291.0			
Aug....	195.8	205.2	190.8	185.9	170.1	196.1	200.7	193.6	216.4	197.1	217.6	238.6	211.9	289.5			
Sept....	197.2	208.6	191.7	186.6	170.3	197.1	201.8	195.1	217.9	201.5	218.9	242.3	215.9	292.5			
Oct....	198.9	212.1	192.9	187.8	170.3	199.2	203.0	197.1	220.6	207.1	221.4	249.6	223.7	298.6			
Nov....	200.4	213.4	194.5	189.1	171.1	200.9	205.0	198.5	222.2	206.4	223.2	253.3	226.5	304.1			
Dec....	202.1	215.4	196.0	190.7	171.9	203.0	206.6	200.2	223.5	208.8	224.4	254.4	226.1	308.1			

<sup>1</sup> Formerly called producer finished goods.<sup>2</sup> Intermediate materials for food manufacturing and manufactured animal feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-57.—*Producer price indexes by major commodity groups, 1929-78*

[1967=100]

Year or month	Farm products and processed foods and feeds			Industrial commodities				
	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products, and power <sup>1</sup>	Chemicals and allied products <sup>1</sup>
1929.....		64.1		48.6		48.9	59.4	
1933.....		31.4		37.8		36.3	47.6	47.4
1939.....		40.0		43.3		42.8	52.3	51.5
1940.....		41.4		44.0		45.2	51.4	52.4
1941.....		50.3		47.3		48.4	54.6	57.0
1942.....		64.8		50.7		52.8	56.2	63.3
1943.....		75.0		51.5		52.7	57.8	64.1
1944.....		75.5		52.3		52.2	59.5	64.8
1945.....		78.5		53.0		52.9	60.1	65.2
1946.....		90.9		58.0		61.1	64.4	70.5
1947.....	94.3	109.4	82.9	70.8	103.6	83.3	76.9	93.7
1948.....	101.5	117.5	88.7	76.9	108.1	84.2	90.5	95.9
1949.....	89.6	101.6	80.6	75.3	98.9	79.9	86.2	87.6
1950.....	93.9	106.7	83.4	78.0	102.7	86.3	87.1	88.9
1951.....	106.9	124.2	92.7	86.1	114.6	99.1	90.3	101.7
1952.....	102.7	117.2	91.6	84.1	103.4	80.1	90.1	96.5
1953.....	96.0	106.2	87.4	84.8	100.8	81.3	92.6	97.7
1954.....	95.7	104.7	88.9	85.0	98.6	77.6	91.3	98.9
1955.....	91.2	98.2	85.0	86.9	98.7	77.3	91.2	98.5
1956.....	90.6	96.9	84.9	90.8	98.7	81.9	94.0	99.1
1957.....	93.7	99.5	87.4	93.3	98.8	82.0	99.1	101.2
1958.....	98.1	103.9	91.8	93.6	97.0	82.9	95.3	102.0
1959.....	93.5	97.5	89.4	95.3	98.4	94.2	95.3	101.6
1960.....	93.7	97.2	89.5	95.3	99.5	90.8	96.1	101.8
1961.....	93.7	96.3	91.0	94.8	97.7	91.7	97.2	100.7
1962.....	94.7	98.0	91.9	94.8	98.6	92.7	96.7	99.1
1963.....	93.8	96.0	92.5	94.7	98.5	90.0	96.3	97.9
1964.....	93.2	94.6	92.3	95.2	99.2	90.3	93.7	98.3
1965.....	97.1	98.7	95.5	96.4	99.8	94.3	95.5	99.0
1966.....	103.5	105.9	101.2	98.5	100.1	103.4	97.8	99.4
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	102.4	102.5	102.2	102.5	103.7	103.2	98.9	99.8
1969.....	108.0	109.1	107.3	106.0	106.0	108.9	100.9	99.9
1970.....	111.7	111.0	112.1	110.0	107.1	110.3	106.2	102.2
1971.....	113.9	112.9	114.5	114.1	109.0	114.1	115.2	104.1
1972.....	122.4	125.0	120.8	117.9	113.6	131.3	118.6	104.2
1973.....	159.1	176.3	148.1	125.9	123.8	143.1	134.3	110.0
1974.....	177.4	187.7	170.9	153.8	139.1	145.1	208.3	146.8
1975.....	184.2	186.7	182.6	171.5	137.9	148.5	245.1	181.3
1976.....	183.1	191.0	178.0	182.4	148.2	167.8	265.6	187.2
1977.....	188.8	192.5	186.1	195.1	154.0	179.3	302.2	192.8
1978.....	206.7	212.7	202.6	209.4	159.7	200.1	322.5	198.7
1977: Jan.....	184.8	193.5	179.3	188.4	150.8	175.3	278.8	188.9
Feb.....	188.4	199.1	181.9	190.0	151.7	176.9	289.1	190.1
Mar.....	190.9	202.5	183.9	191.7	152.4	177.9	293.7	191.2
Apr.....	195.9	208.2	188.5	193.3	153.7	179.9	298.8	192.9
May.....	196.8	204.3	191.9	194.2	154.0	181.9	302.4	194.0
June.....	191.5	192.8	190.1	194.7	154.6	179.4	304.3	193.9
July.....	188.7	190.2	187.2	195.9	154.5	180.0	307.0	193.6
Aug.....	184.3	181.8	184.9	196.9	154.6	180.2	309.5	193.6
Sept.....	184.0	182.0	184.4	197.8	155.1	179.6	309.9	193.2
Oct.....	184.0	182.0	184.3	199.1	155.2	179.2	310.7	193.7
Nov.....	187.0	185.6	186.9	199.3	155.3	180.0	310.5	193.9
Dec.....	189.4	188.3	189.3	200.0	155.8	181.5	312.0	194.1
1978: Jan.....	192.2	192.2	191.5	201.6	156.5	185.8	312.8	194.1
Feb.....	196.8	198.9	194.9	202.9	157.0	187.2	312.9	195.2
Mar.....	200.0	204.2	196.9	204.1	157.4	187.9	315.3	196.1
Apr.....	205.5	213.7	200.2	206.1	157.9	191.9	317.3	196.9
May.....	207.6	215.8	202.4	207.4	158.6	193.6	319.7	198.6
June.....	210.4	219.5	204.6	208.7	159.2	195.3	323.2	198.9
July.....	210.3	219.9	204.2	210.1	160.0	197.3	324.5	199.8
Aug.....	205.3	210.3	201.8	211.4	160.5	205.1	324.9	199.5
Sept.....	209.5	215.3	205.5	212.4	161.1	211.0	327.0	200.2
Oct.....	213.6	220.7	209.0	214.7	162.2	213.3	328.9	201.5
Nov.....	212.5	219.2	208.1	216.0	163.0	216.0	329.9	202.3
Dec.....	216.1	222.4	211.9	217.0	163.5	216.5	334.1	202.2

See next page for continuation of table.



TABLE B-57.—*Producer price indexes by major commodity groups, 1929-78—Continued*

[1967=100]

Year or month	Industrial commodities—Continued								
	Rubber and plastic products	Lumber and wood products	Pulp, paper, and allied products	Metals and metal products	Machinery and equipment	Furniture and household durables	Non-metallic mineral products	Transportation equipment: Motor vehicles and equipment <sup>2</sup>	Miscellaneous products
1929.....	59.4	25.0	-----	40.2	-----	55.8	51.2	41.9	-----
1933.....	40.2	19.0	-----	30.7	-----	44.6	47.2	34.8	-----
1939.....	61.2	24.8	-----	37.6	41.3	52.6	49.1	39.1	-----
1940.....	57.1	27.4	-----	37.8	41.4	53.8	49.1	40.4	-----
1941.....	61.5	32.7	-----	38.5	42.1	57.2	50.2	43.2	-----
1942.....	71.6	35.6	-----	39.1	42.8	61.8	52.3	47.2	-----
1943.....	73.6	37.7	-----	39.0	42.4	61.4	52.4	47.2	-----
1944.....	72.7	40.6	-----	39.0	42.1	63.1	53.5	47.5	-----
1945.....	70.5	41.2	-----	39.6	42.2	63.2	55.7	48.3	-----
1946.....	70.8	47.2	-----	44.3	46.4	67.1	59.3	56.0	-----
1947.....	70.5	73.4	72.5	54.9	53.7	77.0	66.3	64.1	73.5
1948.....	72.8	84.0	75.7	62.5	58.2	81.6	71.6	70.8	76.5
1949.....	70.5	77.7	72.4	63.0	61.0	82.9	73.5	75.7	78.0
1950.....	85.9	89.3	74.3	66.3	63.1	84.7	75.4	75.3	79.2
1951.....	105.4	97.2	88.0	73.8	70.5	91.8	80.1	79.4	83.9
1952.....	95.5	94.4	85.7	73.9	70.6	90.1	80.1	84.0	83.4
1953.....	89.1	94.3	85.5	76.3	72.2	91.9	83.3	83.6	85.6
1954.....	90.4	92.6	85.5	76.9	73.4	92.9	85.1	83.8	86.4
1955.....	102.4	97.1	87.8	82.1	75.7	93.3	87.5	86.3	86.5
1956.....	103.8	98.5	93.6	89.2	81.8	95.8	91.3	91.2	87.6
1957.....	103.4	93.5	95.4	91.0	87.6	98.3	94.8	95.1	90.2
1958.....	103.3	92.4	96.4	90.4	89.4	99.1	95.8	98.1	92.0
1959.....	102.9	98.8	97.3	92.3	91.3	99.3	97.0	100.3	92.2
1960.....	103.1	95.3	98.1	92.4	92.0	99.0	97.2	98.8	93.0
1961.....	99.2	91.0	95.2	91.9	91.9	98.4	97.6	98.6	93.3
1962.....	96.3	91.6	96.3	91.2	92.0	97.7	97.6	98.6	93.7
1963.....	96.8	93.5	95.6	91.3	92.2	97.0	97.1	97.8	94.5
1964.....	95.5	95.4	95.4	93.8	92.8	97.4	97.3	98.3	95.2
1965.....	95.9	95.9	96.2	96.4	93.9	96.9	97.5	98.5	95.9
1966.....	97.8	100.2	98.8	98.8	96.8	98.0	98.4	98.6	97.7
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	103.4	113.3	101.1	102.6	103.2	102.8	103.7	102.8	102.2
1969.....	105.3	125.3	104.0	108.5	106.5	104.9	107.7	104.8	105.2
1970.....	108.3	113.6	108.2	116.6	111.4	107.5	112.9	108.7	109.9
1971.....	109.1	127.3	110.1	118.7	115.5	110.0	122.4	114.9	112.9
1972.....	109.3	144.3	113.4	123.5	117.9	111.4	126.1	118.0	114.6
1973.....	112.4	177.2	122.1	132.8	121.7	115.2	130.2	119.2	119.7
1974.....	136.2	183.6	151.7	171.9	139.4	127.9	153.2	129.2	133.1
1975.....	150.2	176.9	170.4	185.6	161.4	139.7	174.0	144.6	147.7
1976.....	159.2	205.6	179.4	195.9	171.0	145.6	186.3	153.8	153.7
1977.....	167.6	236.3	186.4	209.0	181.7	151.5	200.5	163.7	164.3
1978.....	174.7	275.9	195.5	227.1	196.0	160.1	222.8	175.9	184.7
1977: Jan.....	164.6	222.8	182.9	202.1	176.7	148.8	192.4	159.2	160.2
Feb.....	164.2	224.4	183.0	203.2	177.5	149.1	193.6	159.4	160.6
Mar.....	164.6	229.0	183.6	206.5	178.2	149.6	195.1	160.7	161.0
Apr.....	165.7	229.8	185.3	208.2	178.9	150.1	198.6	161.0	162.5
May.....	166.3	229.5	186.2	208.5	180.0	150.6	199.3	161.4	163.1
June.....	167.5	228.8	187.3	207.7	180.7	151.5	200.6	161.9	163.5
July.....	168.9	235.6	187.8	210.6	181.8	151.4	201.7	161.9	163.9
Aug.....	169.3	242.7	187.8	211.7	182.8	152.6	202.5	163.2	164.2
Sept.....	169.5	252.9	188.1	212.6	183.8	152.7	204.3	163.9	166.0
Oct.....	170.2	247.8	188.7	211.8	185.6	153.0	205.4	170.7	168.4
Nov.....	170.2	243.3	188.2	212.0	186.8	153.8	205.7	170.7	168.9
Dec.....	170.0	249.2	187.6	213.3	187.5	154.2	206.6	170.9	169.7
1978: Jan.....	170.2	256.4	188.0	215.2	189.3	156.5	212.9	171.3	171.6
Feb.....	170.2	263.7	188.6	219.1	190.3	156.7	215.1	171.8	171.3
Mar.....	171.4	266.2	189.7	221.1	191.6	157.7	215.9	171.9	172.6
Apr.....	172.8	269.6	191.9	223.9	192.7	158.4	218.4	172.9	181.4
May.....	173.8	273.4	193.2	224.6	193.9	159.2	219.3	174.6	182.6
June.....	174.5	278.5	193.5	225.9	195.3	159.5	222.0	175.0	184.3
July.....	174.9	277.5	195.5	227.3	196.5	161.4	224.7	175.5	189.7
Aug.....	175.7	281.6	195.8	231.0	197.5	161.8	227.2	175.8	191.3
Sept.....	176.6	282.8	199.1	231.5	198.7	161.3	227.8	175.8	191.7
Oct.....	178.0	284.1	202.2	234.0	200.4	162.2	229.0	181.3	193.5
Nov.....	179.2	288.5	203.7	235.4	202.5	162.9	229.8	182.1	193.0
Dec.....	179.6	288.7	204.9	236.6	203.6	163.7	230.9	182.5	193.8

<sup>1</sup> Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month.<sup>2</sup> Index for total transportation equipment is not shown but is available beginning December 1968.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-58.—Changes in producer price indexes for finished goods, 1948-78

[Percent change]

Year or month	Total finished goods		Consumer finished goods		Finished goods excluding consumer foods					
					Total		Consumer goods		Capital equipment	
	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year
1948	3.0	8.0	-2.4	9.2			4.0	6.3	10.4	9.0
1949	-4.6	-2.9	-7.4	-8.1			-4.5	-2.1	-6	5.0
1950	10.4	1.8	13.3	1.9			8.2	1.6	10.3	2.4
1951	2.9	9.5	5.3	12.4			9	7.2	3.4	9.7
1952	-2.2	-6	-5.9	-9			-1.1	-1.3	.8	1.7
1953	.5	-1.0	-2.2	-5.2			1.6	.9	2.3	1.7
1954	-1	.2	-1.9	-8			.3	.3	1.1	1.2
1955	1.2	.2	-2.9	-2.5			1.7	.8	5.6	3.0
1956	4.2	2.8	3.6	-2			2.5	2.4	8.3	7.4
1957	3.2	3.6	5.3	3.5			1.7	2.5	4.3	6.2
1958	.5	2.3	.4	5.8			.2	.1	1.3	2.6
1959	-4	-2.2	-3.7	-4.7			.8	1.3	1.0	1.9
1960	1.8	.8	5.2	2.2			.4	.4	.1	.2
1961	-5	0	-1.8	-4			-3	-1	.2	.1
1962	.1	.3	.5	.9			-1	-2	.3	.4
1963	-2	-3	-1.3	-1.2			.1	0	.5	.2
1964	.5	.4	.4	.5			.1	-1	.9	1.0
1965	3.3	1.7	9.1	3.8			.9	.7	1.5	1.2
1966	2.2	3.2	1.4	6.5			1.7	1.6	3.9	2.5
1967	1.6	1.2	-.4	-1.6			2.1	1.9	3.1	3.3
1968	3.1	2.9	4.8	3.7	2.4	2.6	2.0	2.1	3.0	3.5
1969	4.8	3.6	8.2	6.1	3.4	2.7	2.9	2.4	4.6	3.3
1970	2.2	3.5	-2.5	3.2	4.3	3.5	3.9	3.0	4.9	4.8
1971	3.2	3.1	5.9	1.6	2.1	3.7	2.0	3.4	2.4	4.1
1972	3.8	3.1	8.0	5.6	2.0	2.0	2.0	1.8	2.0	2.5
1973	11.8	9.1	22.5	20.3	6.7	4.1	7.4	4.5	5.3	3.3
1974	18.3	15.3	13.0	14.0	21.2	16.0	20.5	17.0	22.6	14.2
1975	6.6	10.8	5.5	8.4	7.2	12.1	6.7	10.5	8.2	15.2
1976	3.3	4.2	-2.5	-.4	5.5	6.0	4.9	5.7	6.4	6.6
1977	6.6	6.0	6.6	4.9	6.6	6.5	6.1	6.4	7.2	6.5
1978	9.1	7.8	11.9	9.4	8.2	7.2	8.3	6.7	8.0	7.9
Change from preceding month										
	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed
1977: Jan	0.6	0.6	0.3	0.3	0.7	0.6	0.8	1.0	0.5	0.2
Feb	.9	1.0	1.9	2.5	.5	.6	.5	.5	.3	.6
Mar	.5	.8	.9	1.3	.5	.6	.5	.7	.3	.4
Apr	.7	.7	1.0	.7	.6	.8	.7	.9	.5	.6
May	.8	.8	2.0	1.4	.5	.5	.4	.5	.4	.6
June	.1	.1	-.8	-1.0	.5	.5	.5	.5	.1	.5
July	.4	.2	.7	-.2	.3	.3	.3	.1	.4	.4
Aug	0	.2	-1.1	-.3	.4	.4	.3	.3	.5	.5
Sept	.3	.3	.1	-.1	.5	.6	.4	.5	.4	.5
Oct	1.1	.6	-.1	-.2	1.5	.7	1.0	.4	2.3	1.3
Nov	.4	.7	.4	1.3	.3	.4	.2	.3	.5	.5
Dec	.5	.4	1.2	.4	.3	.5	.2	.4	.4	.7
1978: Jan	.8	.7	1.1	1.1	.7	.6	.7	.6	.7	.5
Feb	.8	1.1	2.4	3.0	.3	.4	.2	.3	.4	.6
Mar	.3	.5	.3	.7	.3	.5	.3	.5	.5	.6
Apr	1.3	1.3	2.1	1.8	1.0	1.0	1.2	1.3	.5	.6
May	.8	.7	1.1	.4	.7	.8	.8	.8	.7	.8
June	.7	.7	1.3	1.2	.6	.6	.5	.5	.6	.7
July	.8	.5	.4	-.5	.9	.8	1.0	1.0	.6	.6
Aug	-2	0	-2.1	-1.4	.4	.4	.4	.5	.4	.4
Sept	.7	.7	1.7	1.7	.4	.5	.2	.4	.5	.5
Oct	1.4	.9	1.5	1.7	1.4	.6	1.4	.6	1.5	.6
Nov	.5	.8	-.2	.6	.7	.8	.5	.7	.9	1.0
Dec	.9	.8	1.8	.9	.6	.8	.7	.8	.5	.8

<sup>1</sup> Changes from December to December are based on unadjusted indexes.

Source: Department of Labor, Bureau of Labor Statistics.

# MONEY STOCK, CREDIT, AND FINANCE

## TABLE B-59.—Money stock measures, 1953-78

(Averages of daily figures; billions of dollars, seasonally adjusted, except as noted)

Year and month	Overall measures <sup>1</sup>				Components and related items										
	M <sub>1</sub>	M <sub>1</sub> <sup>+</sup>	M <sub>2</sub>	M <sub>3</sub>	Currency	Deposits at commercial banks					Deposits at nonbank thrift institutions <sup>4</sup>	Other checkable deposits (unadjusted) <sup>5</sup>	U.S. Government deposits (unadjusted) <sup>6</sup>		
						Demand	Time and savings			Savings <sup>3</sup>					
							Total	Large CDs <sup>2</sup>	Other						
1953: Dec	128.8				27.7	101.1	44.5								3.8
1954: Dec	132.3				27.4	104.9	48.3								5.0
1955: Dec	135.2				27.8	107.4	50.0								3.4
1956: Dec	136.9				28.2	108.7	51.9								3.4
1957: Dec	135.9				28.3	107.6	57.4								3.5
1958: Dec	141.1				28.6	112.6	65.4								3.9
1959: Dec	143.4		210.9	303.8	28.9	114.5	67.4			67.4	92.9				4.9
1960: Dec	144.2		217.1	319.3	29.0	115.2	72.9			72.9	102.3				4.7
1961: Dec	148.7		228.6	342.1	29.6	119.1	82.7	2.8		79.9	113.4				4.9
1962: Dec	150.9		242.9	369.2	30.6	120.3	97.6	5.7		92.0	126.4				5.6
1963: Dec	156.5		258.9	400.3	32.5	124.1	112.0	9.6		102.3	141.4				5.1
1964: Dec	163.7		277.1	434.4	34.3	129.5	126.2	12.8		113.4	157.3				5.5
1965: Dec	171.4		301.4	471.8	36.3	135.1	146.4	16.4		130.0	170.4				4.6
1966: Dec	175.8		318.2	495.5	38.3	137.5	157.9	15.5		142.4	177.3				3.4
1967: Dec	187.4	280.7	350.0	544.0	40.4	147.0	183.3	20.6	69.4	93.3	194.0		0.1		5.0
1968: Dec	202.5	297.7	383.3	589.9	43.4	159.0	204.3	23.5	85.6	95.2	206.7		.1		5.0
1969: Dec	209.0	301.8	392.5	607.4	46.1	162.9	194.4	10.9	90.7	92.8	214.9		.1		5.6
1970: Dec	219.7	317.3	423.7	656.3	49.1	170.7	229.2	25.3	106.5	97.4	232.6		.1		7.3
1971: Dec	234.0	345.8	471.9	745.2	52.6	181.5	271.1	33.3	126.2	111.6	273.3		.1		6.9
1972: Dec	255.3	378.9	525.3	844.4	56.8	198.4	313.5	43.5	146.5	123.5	319.2		.1		7.4
1973: Dec	270.5	397.7	571.4	919.2	61.5	209.0	363.9	63.0	173.9	127.0	347.8		.3		6.3
1974: Dec	282.9	419.0	612.2	981.3	67.8	215.1	418.3	89.0	193.5	135.8	369.1		.4		4.9
1975: Dec	295.2	456.4	664.7	1,092.5	73.7	221.5	450.9	81.3	209.1	160.5	427.8		.7		4.1
1976: Dec	313.5	516.8	740.5	1,236.5	80.7	232.8	489.7	62.7	225.1	201.9	496.0		1.4		4.4
1977: Dec	338.5	560.2	809.5	1,376.1	88.6	249.9	545.0	74.0	251.5	219.6	566.6		2.1		5.1
1978: Dec	361.1	584.1	872.0	1,498.5	97.5	263.6	607.8	97.0	290.6	220.2	626.5		2.8		10.2
1977: Jan	315.9	523.1	747.4	1,249.6	81.3	234.6	494.6	63.1	225.7	205.8	502.2		1.4		3.9
Feb	317.3	527.0	753.1	1,260.7	81.9	235.4	499.0	63.3	227.5	208.3	507.6		1.4		4.2
Mar	319.5	531.1	759.2	1,271.7	82.4	237.1	502.0	62.2	229.7	210.1	512.5		1.5		4.3
Apr	323.3	536.8	766.1	1,283.4	83.1	240.0	504.5	61.6	230.9	212.0	517.3		1.6		5.4
May	323.7	538.3	769.8	1,292.2	83.8	240.0	508.9	62.9	233.0	213.0	522.4		1.6		3.6
June	325.6	540.3	775.5	1,303.3	84.2	241.4	513.2	63.3	236.9	213.0	527.8		1.7		5.0
July	328.7	544.6	784.2	1,318.5	85.1	243.6	518.3	62.8	241.4	214.1	534.3		1.8		3.6
Aug	330.5	549.4	789.2	1,331.3	85.5	245.0	521.9	63.2	241.7	217.0	542.1		1.8		3.4
Sept	333.0	553.7	795.1	1,344.9	86.3	246.6	525.9	63.8	243.3	218.8	549.8		1.9		5.0
Oct	335.9	557.5	801.4	1,357.9	87.1	248.7	531.9	66.4	246.0	219.6	556.5		2.0		3.7
Nov	336.2	557.7	805.4	1,367.1	87.7	248.5	540.1	70.9	249.7	219.4	561.7		2.1		3.5
Dec	338.5	560.2	809.5	1,376.1	88.6	249.9	545.0	74.0	251.5	219.6	566.6		2.1		5.1
1978: Jan	341.7	564.6	815.9	1,386.6	89.4	252.2	550.6	76.3	253.6	220.7	570.7		2.2		4.3
Feb	341.8	565.0	819.1	1,393.1	90.1	251.7	556.7	79.4	256.4	220.9	574.0		2.3		4.3
Mar	342.9	566.2	822.6	1,400.3	90.7	252.3	561.7	82.0	258.7	221.0	577.7		2.3		4.8
Apr	348.5	572.6	830.3	1,411.4	91.2	257.3	565.2	83.4	260.1	221.6	581.2		2.5		5.0
May	350.6	575.2	835.2	1,419.9	92.1	258.5	571.6	87.1	262.6	222.0	584.7		2.6		4.0
June	352.8	577.1	840.6	1,429.8	92.8	259.9	574.5	86.7	266.1	221.7	589.2		2.6		6.2
July	354.2	577.8	846.2	1,441.0	93.3	260.9	579.4	87.4	271.1	220.9	594.7		2.7		4.5
Aug	356.7	582.0	853.5	1,455.1	94.0	262.8	583.0	86.3	274.3	222.4	601.6		2.8		3.6
Sept	360.9	587.9	862.4	1,472.1	95.2	265.7	589.7	88.1	277.4	224.2	609.6		2.8		6.2
Oct	362.0	588.8	867.4	1,483.9	96.0	266.1	593.6	88.2	281.5	223.9	616.5		2.8		4.3
Nov	360.6	585.3	870.5	1,492.1	96.7	263.9	605.3	95.4	288.0	221.8	621.6		2.8		8.0
Dec	361.1	584.1	872.0	1,498.5	97.5	263.6	607.8	97.0	290.6	220.2	626.5		2.8		10.2

<sup>1</sup> M<sub>1</sub> is currency plus demand deposits; M<sub>1</sub><sup>+</sup> is M<sub>1</sub> plus savings deposits at commercial banks and checkable deposits at nonbank thrift institutions; M<sub>2</sub> is M<sub>1</sub> plus time and savings deposits at commercial banks other than large certificates of deposit (CDs); and M<sub>3</sub> is M<sub>2</sub> plus deposits at nonbank thrift institutions.

<sup>2</sup> Negotiable time certificates of deposit (CDs) issued in denominations of \$100,000 or more by large weekly reporting commercial banks.

<sup>3</sup> Includes negotiable order of withdrawal (NOW) accounts at commercial banks.

<sup>4</sup> Average of the beginning and end-of-month deposits of mutual savings banks, savings capital at savings and loan associations, and credit union shares.

<sup>5</sup> Includes negotiable order of withdrawal (NOW) accounts at thrift institutions, credit union share draft accounts, and demand deposits at mutual savings banks.

<sup>6</sup> Deposits at all commercial banks. Includes Treasury note balances beginning November 1978.

Source: Board of Governors of the Federal Reserve System.

TABLE B-60.—Commercial bank loans and investments, 1930-78

(Billions of dollars)

End of year or month <sup>1</sup>	Total loans and investments <sup>2</sup>	Loans		Investments		Loans plus loans sold to bank affiliates <sup>3</sup>
		Total <sup>4</sup>	Commercial and industrial	U.S. Treasury securities	Other securities	
1930: June	48.9	34.5	-----	5.0	9.4	-----
1933: June	30.4	16.3	-----	7.5	6.5	-----
1939	40.7	17.2	-----	16.3	7.1	-----
1940	43.9	18.8	-----	17.8	7.4	-----
1941	50.7	21.7	-----	21.8	7.2	-----
1942	67.4	19.2	-----	41.4	6.8	-----
1943	85.1	19.1	-----	59.8	6.1	-----
1944	105.5	21.6	-----	77.6	6.3	-----
1945	124.0	26.1	-----	90.6	7.3	-----
1946	114.0	31.1	-----	74.8	8.1	-----
1947	116.3	38.1	-----	69.2	9.0	-----
1948	114.2	42.4	-----	62.6	9.2	-----
Seasonally adjusted						
1948	113.0	41.5	-----	62.3	9.2	-----
1949	118.7	42.0	-----	66.4	10.3	-----
1950	124.7	51.1	-----	61.1	12.4	-----
1951	130.2	56.5	-----	60.4	13.4	-----
1952	139.1	62.8	-----	62.2	14.2	-----
1953	143.1	66.2	-----	62.2	14.7	-----
1954	153.1	69.1	-----	67.6	16.4	-----
1955	157.6	80.6	-----	60.3	16.8	-----
1956	161.6	88.1	-----	57.2	16.3	-----
1957	166.4	91.5	-----	56.9	17.9	-----
1958	181.2	95.6	-----	65.1	20.5	-----
1959 <sup>5</sup>	188.7	110.5	39.4	57.7	20.5	110.5
1960	197.4	116.7	42.1	59.9	20.8	116.7
1961	212.8	123.6	43.9	65.3	23.9	123.6
1962	231.2	137.3	47.6	64.7	29.2	137.3
1963	250.2	153.7	52.1	61.5	35.0	153.7
1964	272.3	172.9	58.4	60.7	38.7	172.9
1965	300.1	198.2	69.5	57.1	44.8	198.2
1966	316.1	213.9	78.6	53.5	48.7	213.9
1967	352.0	231.3	86.2	59.4	61.3	231.3
1968	390.2	258.2	95.9	60.7	71.3	258.2
1969 <sup>6</sup>	401.7	279.4	105.7	51.2	71.1	283.3
1970	435.5	292.0	110.0	57.8	85.7	294.7
1971	485.7	320.9	116.2	60.6	104.2	323.7
1972	558.0	378.9	130.4	62.6	116.5	381.5
1973	633.4	449.0	156.6	54.5	129.9	453.3
1974	691.1	500.2	183.5	51.1	139.8	505.0
1975	721.8	496.9	176.2	80.1	144.8	501.3
1976	785.1	538.9	179.7	98.0	148.2	542.7
1977	870.6	617.0	201.4	95.6	158.0	621.9
1978 <sup>7</sup>	967.3	709.0	228.9	88.4	169.9	712.8
1978: Jan	881.2	625.1	203.8	96.5	159.6	629.9
Feb	887.7	628.4	205.8	99.4	159.9	633.0
Mar	894.1	637.2	209.8	96.1	160.8	641.7
Apr	909.0	647.6	212.4	98.3	163.1	652.1
May	921.7	659.7	217.9	97.9	164.1	664.1
June	932.2	667.8	219.0	100.2	164.2	672.3
July <sup>8</sup>	940.7	675.1	220.8	100.6	165.0	679.7
Aug <sup>9</sup>	944.6	680.2	222.8	97.9	166.5	684.9
Sept <sup>9</sup>	952.4	687.3	224.6	97.2	167.9	691.9
Oct <sup>9</sup>	960.9	696.8	227.0	95.2	168.9	700.7
Nov <sup>9</sup>	966.5	706.8	228.9	90.3	169.4	710.5
Dec <sup>9</sup>	967.3	709.0	228.9	88.4	169.9	712.8

<sup>1</sup> Data are for last Wednesday of month or year (except June 30 and December 31 call dates).<sup>2</sup> Adjusted to exclude all interbank loans beginning 1948 and domestic interbank loans only beginning January 1959.<sup>3</sup> Beginning January 1959, loans and investments are reported gross, without valuation reserves deducted, rather than net of valuation reserves, as in earlier periods.<sup>4</sup> Effective June 1966, balances accumulated for payment of personal loans (then about \$1.1 billion) are excluded from loans at all commercial banks, and certain certificates of CCC and Export-Import Bank (then about \$1 billion) are included in other securities rather than in loans.<sup>5</sup> Beginning June 1969, data include all bank-premises subsidiaries and other significant majority-owned domestic subsidiaries; earlier data include commercial banks only.<sup>6</sup> Beginning June 1971, Farmers Home Administration insured notes (then about \$0.7 billion) are classified as other securities rather than as loans.<sup>7</sup> Beginning August 1974, reflects new definition of affiliates included and different group of reporting banks. Amount of total loans sold was reduced by \$0.1 billion.

Note.—In addition to footnoted changes affecting comparability of the data, comparability may also be affected by bank mergers, liquidations, loan reclassifications, etc.

Source: Board of Governors of the Federal Reserve System.

TABLE B-61.—Liquid asset holdings of private domestic nonfinancial investors, 1952-78

(Average outstanding; billions of dollars, seasonally adjusted)

Year and month	Total liquid assets	Currency and deposits					U.S. Treasury securities		Negotiable certificates of deposit <sup>5</sup>	Other private money market instruments <sup>6</sup>
		Total	Currency <sup>1</sup>	Demand deposits <sup>1</sup>	Time deposits		Savings bonds <sup>3</sup>	Short-term marketable securities <sup>4</sup>		
					Commercial banks <sup>1</sup>	Non-bank thrift institutions <sup>2</sup>				
1952: Dec	269.1	200.9	27.3	91.6	39.1	42.8	49.2	18.4	-----	0.7
1953: Dec	284.5	211.0	27.7	92.8	41.9	48.6	49.3	23.1	-----	1.1
1954: Dec	295.2	223.9	27.4	96.2	45.1	55.2	49.9	20.1	-----	1.2
1955: Dec	314.7	235.4	27.8	98.5	46.9	62.3	50.2	27.7	-----	1.4
1956: Dec	325.3	246.2	28.2	99.5	49.0	69.5	50.1	27.4	-----	1.6
1957: Dec	337.9	257.2	28.3	97.9	54.6	76.4	48.3	30.6	-----	1.8
1958: Dec	354.2	277.4	28.6	102.2	61.8	84.8	47.8	27.6	-----	1.4
1959: Dec	373.2	290.7	28.9	104.2	64.7	92.9	46.1	35.5	-----	.9
1960: Dec	386.6	305.7	29.0	104.6	69.9	102.3	45.7	32.4	-----	2.8
1961: Dec	410.4	326.2	29.6	106.3	77.0	113.4	46.5	32.0	2.7	3.1
1962: Dec	441.8	352.2	30.6	106.5	88.8	126.4	46.9	33.4	5.3	4.0
1963: Dec	479.1	382.2	32.5	109.7	98.6	141.4	48.1	35.0	9.0	4.8
1964: Dec	515.2	414.6	34.3	114.3	108.8	157.3	49.0	33.0	11.6	6.9
1965: Dec	559.4	451.2	36.3	119.4	125.1	170.4	49.6	35.8	15.1	7.6
1966: Dec	587.0	474.4	38.3	121.9	136.9	177.3	50.2	37.7	14.3	10.4
1967: Dec	638.1	521.1	40.4	130.5	156.2	194.0	51.1	34.7	18.7	12.4
1968: Dec	696.6	565.6	43.4	141.2	174.3	206.7	51.8	40.9	21.7	16.6
1969: Dec	722.5	582.9	46.1	145.2	176.8	214.9	51.7	53.2	8.3	26.4
1970: Dec	769.7	632.7	49.1	152.0	198.9	232.7	52.0	41.9	21.8	21.3
1971: Dec	852.5	719.0	52.6	161.8	233.6	271.1	54.3	31.5	27.6	20.1
1972: Dec	967.2	816.6	56.8	176.1	264.3	319.3	57.6	34.3	36.2	22.5
1973: Dec	1,085.3	887.7	61.5	183.7	294.4	348.1	60.4	43.4	53.8	40.0
1974: Dec	1,170.2	945.0	67.8	187.1	321.1	369.1	63.3	47.1	70.4	44.4
1975: Dec	1,290.6	1,055.3	73.7	192.4	360.6	428.6	67.2	66.3	58.4	43.3
1976: Dec	1,424.6	1,195.2	80.7	200.0	417.3	497.3	71.9	66.5	43.2	47.8
1977: Dec	1,591.0	1,328.3	88.6	213.9	459.2	566.6	76.6	77.6	52.3	56.3
1978: Dec	1,757.0	1,451.8	97.5	226.4	501.6	626.4	80.6	82.7	68.5	73.4
1977: Jan	1,438.1	1,206.9	81.3	201.4	422.0	502.2	72.3	66.9	43.9	48.0
Feb	1,453.0	1,217.9	81.9	202.1	426.3	507.6	72.6	70.0	44.1	48.5
Mar	1,463.9	1,228.3	82.4	203.4	430.0	512.5	73.0	70.4	42.9	49.3
Apr	1,476.2	1,240.3	83.1	206.8	433.1	517.3	73.4	70.1	41.9	50.4
May	1,485.7	1,248.1	83.8	206.0	436.0	522.4	73.8	68.9	42.9	51.8
June	1,496.5	1,258.0	84.2	206.5	439.4	527.8	74.2	67.9	43.4	52.9
July	1,512.9	1,272.6	85.1	208.4	444.8	534.3	74.7	69.2	43.2	53.2
Aug	1,527.0	1,284.0	85.5	208.5	447.8	542.1	75.1	71.7	43.7	52.5
Sept	1,542.7	1,297.8	86.3	210.3	451.4	549.8	75.3	73.3	44.0	52.1
Oct	1,561.2	1,311.2	87.1	213.0	454.6	556.5	75.8	75.5	46.1	52.6
Nov	1,576.5	1,319.2	87.7	212.1	457.6	561.7	76.2	77.1	50.0	54.0
Dec	1,591.0	1,328.3	88.6	213.9	459.2	566.6	76.6	77.6	52.3	56.3
1978: Jan	1,607.7	1,339.1	89.4	216.6	462.4	570.7	77.0	79.5	53.4	58.7
Feb	1,619.2	1,345.6	90.1	216.0	465.5	574.0	77.4	80.1	54.8	61.4
Mar	1,631.0	1,352.8	90.7	216.3	468.1	577.7	77.8	79.8	56.5	64.1
Apr	1,647.4	1,363.5	91.2	221.5	469.6	581.2	78.2	80.7	58.6	66.4
May	1,662.3	1,371.5	92.1	222.1	472.5	584.7	78.6	81.6	62.3	68.3
June	1,674.2	1,381.6	92.8	223.1	476.5	589.2	78.9	81.7	61.7	70.4
July	1,686.2	1,393.8	93.3	224.5	481.3	594.7	79.3	80.1	61.7	71.3
Aug	1,699.2	1,407.8	94.0	226.2	486.1	601.6	79.5	80.7	59.6	71.6
Sept	1,720.3	1,424.3	95.2	228.4	491.0	609.6	79.8	83.6	60.7	72.0
Oct	1,732.6	1,436.7	96.0	228.5	495.7	616.5	80.1	83.1	60.2	72.5
Nov	1,747.5	1,445.2	96.7	226.3	500.5	621.6	80.4	82.1	66.9	73.0
Dec	1,757.0	1,451.8	97.5	226.4	501.6	626.4	80.6	82.7	68.5	73.4

<sup>1</sup> Money stock components (see Table B-59) after deducting foreign holdings and holdings by domestic financial institutions. The three columns add to M<sub>2</sub> held by domestic nonfinancial sectors.

<sup>2</sup> As published in money stock statistics.

<sup>3</sup> Series E and H savings bonds, other savings bonds, and savings notes held by individuals.

<sup>4</sup> Short-term marketable U.S. Treasury securities excluding official, foreign, and financial institution holdings.

<sup>5</sup> Certificates over \$100,000 at weekly reporting banks, except foreign holdings.

<sup>6</sup> Commercial paper, bankers' acceptances, Federal funds, security repurchase agreements, and money market mutual fund shares held outside banks and other financial institutions.

Source: Board of Governors of the Federal Reserve System.

TABLE B-62.—Total funds raised in credit markets by nonfinancial sectors, 1970-78

(Billions of dollars)

Item	1970	1971	1972	1973	1974	1975	1976	1977
Total funds raised.....	100.6	153.5	176.0	203.8	188.8	208.1	272.5	340.5
U.S. Government.....	11.9	24.9	15.1	8.3	11.8	85.4	69.0	56.8
Treasury issues.....	12.9	26.0	14.3	7.9	12.0	85.8	69.1	57.6
Agency issues and mortgages.....	-1.0	-1.1	.8	.4	-2	-4	-1	-9
Foreign.....	2.7	5.2	4.0	6.2	15.3	13.2	20.7	12.3
Corporate equities.....	.1	.0	-.4	-.2	-.2	.2	.3	.4
Debt instruments.....	2.7	5.2	4.4	6.4	15.6	13.0	20.4	11.9
Private domestic nonfinancial sectors.....	86.0	123.5	156.9	189.3	161.6	109.5	182.8	271.4
Corporate equities.....	5.7	11.4	10.9	7.9	4.1	9.9	10.5	2.7
Debt instruments.....	80.3	112.0	146.0	181.4	157.5	99.6	172.3	268.7
Debt capital instruments.....	60.2	86.8	102.3	105.0	98.0	97.8	126.8	181.1
State and local government obligations.....	11.2	17.4	14.7	14.7	16.5	15.6	19.0	29.2
Corporate bonds.....	19.8	18.8	12.2	9.2	19.7	27.2	22.8	21.0
Mortgages.....	29.2	50.5	75.4	81.2	61.9	55.0	85.0	131.0
Home.....	14.4	28.6	42.6	46.4	34.8	39.5	63.7	96.4
Multi-family residential.....	6.9	9.7	12.7	10.4	6.9	.0	1.8	7.4
Commercial.....	7.1	9.8	16.5	18.9	15.1	11.0	13.4	18.4
Farm.....	.8	2.4	3.6	5.5	5.0	4.6	6.1	8.8
Other debt instruments.....	20.1	25.3	43.7	76.4	59.6	1.8	45.5	87.6
Consumer credit.....	5.9	13.1	17.1	23.8	10.2	9.4	23.6	35.0
Bank loans n.e.c.....	6.8	8.1	18.9	39.8	29.0	-14.0	3.5	30.6
Open-market paper.....	2.6	-.4	.8	2.5	6.6	-2.6	4.0	2.9
Other.....	4.8	4.4	6.9	10.3	13.7	9.0	14.4	19.0
By borrowing sector: Total.....	86.0	123.5	156.9	189.3	161.6	109.5	182.8	271.4
State and local governments.....	11.3	17.7	14.5	13.2	15.5	13.2	18.5	25.9
Households.....	24.9	45.2	64.3	80.9	49.2	48.6	89.9	139.6
Nonfinancial business.....	49.8	60.6	78.1	95.2	97.0	47.7	74.4	106.0
Farm.....	2.3	4.5	5.8	9.7	7.9	8.7	11.0	14.7
Nonfarm noncorporate.....	6.8	11.6	14.1	12.8	7.4	2.0	5.2	12.6
Corporate.....	40.7	44.5	58.3	72.7	81.8	37.0	58.2	78.7
Total funds advanced to nonfinancial sectors.....	100.6	153.5	176.0	203.8	188.8	208.1	272.5	340.5
Financed directly or indirectly by:								
Private domestic nonfinancial sectors.....	63.4	85.9	116.4	140.7	116.5	137.8	166.2	197.7
Deposits.....	64.2	92.8	105.0	90.6	75.7	96.8	128.8	144.3
Demand deposits and currency.....	8.9	13.7	21.2	14.4	8.9	12.0	16.6	24.2
Time and savings accounts.....	55.3	79.1	83.8	76.1	66.7	84.8	112.2	120.1
At commercial banks.....	38.7	39.5	38.3	47.7	45.0	25.3	43.7	51.0
At savings institutions.....	16.6	39.6	45.4	28.5	21.8	59.4	68.5	69.1
Credit market instruments, net.....	-.8	-6.9	11.5	50.1	40.8	41.0	37.5	53.4
U.S. Government securities.....	-7.3	-10.7	3.9	19.2	17.5	23.0	19.6	24.6
Private credit market instruments.....	7.2	11.0	17.6	33.6	24.6	21.9	24.6	36.0
Corporate equities.....	-1.6	-5.1	-5.7	-6.9	-2.2	-3.6	-3.4	-5.1
Less security debt.....	-9	2.1	4.3	-4.2	-.8	.2	3.3	2.0
Other sources:								
Foreign funds.....	4.2	23.1	15.5	9.3	28.6	11.7	23.0	53.8
At banks.....	-6.9	-4.1	4.6	5.8	16.8	.9	5.1	11.6
Direct.....	11.1	27.2	10.8	3.5	11.7	10.7	17.9	42.2
Change in U.S. Government cash balance.....	2.8	3.2	-.3	-1.7	-4.6	2.9	3.2	1.1
U.S. Government loans.....	2.8	2.8	1.8	2.8	9.7	15.1	8.9	11.8
Private insurance and pension reserves.....	21.9	24.4	26.1	30.6	33.2	39.6	48.2	57.0
Other.....	5.6	14.2	16.4	22.0	5.4	1.1	23.0	19.1

See next page for continuation of table.

TABLE B-62.—Total funds raised in credit markets by nonfinancial sectors, 1970-78—Continued

(Billions of dollars)

Item	1978 unadjusted quarterly flows			1978 seasonally adjusted annual rates		
	I	II	III	I	II	III
Total funds raised.....	80.2	95.4	87.7	380.4	362.4	355.7
U.S. Government.....	20.8	2.6	15.1	66.1	51.5	59.3
Treasury securities.....	21.1	2.7	15.6	67.5	51.9	61.6
Agency issues and mortgages.....	- .3	- .1	- .6	- 1.4	- .5	- 2.3
Foreign.....	2.1	4.3	.6	13.3	14.3	5.1
Corporate equities.....	- .3	- .0	- .0	- 1.3	- .3	- .2
Debt instruments.....	2.5	4.4	.7	14.6	14.6	5.3
Private domestic nonfinancial sectors.....	57.2	88.6	72.0	301.0	296.6	291.3
Corporate equities.....	.3	.2	.2	1.0	.7	.8
Debt instruments.....	57.0	88.4	71.8	299.9	295.9	290.5
Debt capital instruments.....	36.9	53.6	53.4	171.4	194.0	205.4
State and local government obligations.....	3.8	10.9	10.1	22.2	35.8	37.6
Corporate bonds.....	4.4	5.2	4.5	14.9	21.9	23.5
Mortgages.....	28.7	37.5	38.8	134.4	136.3	144.3
Home.....	19.2	25.2	26.1	92.2	90.5	93.9
Multi-family.....	2.4	2.4	2.8	10.5	8.9	11.0
Commercial.....	4.8	6.9	7.0	22.2	26.8	27.7
Farm.....	2.4	3.0	2.9	9.5	10.2	11.7
Other debt instruments.....	20.1	34.8	18.4	128.5	101.9	85.2
Consumer credit.....	2.4	15.7	13.5	38.0	51.6	43.4
Bank loans n.e.c.....	9.5	14.1	2.5	61.3	32.9	24.2
Open-market paper.....	1.8	1.0	.8	5.3	5.1	5.6
Other.....	6.4	3.9	1.7	23.9	12.3	12.1
By borrowing sector: Total.....	57.2	88.6	72.0	301.0	296.6	291.3
State and local governments.....	3.5	7.9	9.6	20.7	23.4	35.4
Households.....	24.8	43.6	37.4	142.7	152.8	142.1
Nonfinancial business.....	29.0	37.1	25.0	137.6	120.4	113.9
Farm.....	2.7	6.9	4.4	11.7	19.8	17.7
Nonfarm noncorporate.....	3.7	5.0	4.2	23.6	17.8	16.0
Corporate.....	22.6	25.2	16.4	102.2	82.8	80.2
Total funds advanced to nonfinancial sectors.....	80.2	95.4	87.7	380.4	362.4	355.7
Financed directly or indirectly by:						
Private domestic nonfinancial sectors.....	40.8	51.1	40.8	217.3	204.5	211.6
Deposits.....	17.4	40.3	21.5	118.4	140.6	143.4
Demand deposits and currency.....	- 16.8	13.7	- 2.5	11.9	25.2	21.9
Time and savings accounts.....	34.2	26.6	24.1	106.5	115.4	121.5
At commercial banks.....	17.7	12.0	7.6	54.2	57.9	48.5
At savings institutions.....	16.5	14.6	16.4	52.3	57.5	73.0
Credit market instruments, net.....	23.4	10.8	19.3	99.0	63.9	68.2
U.S. Government securities.....	8.8	- .1	11.9	44.7	22.9	37.9
Private credit market instruments.....	13.7	14.2	9.8	55.3	55.1	43.5
Corporate equities.....	1.1	- 2.0	- .9	.1	- 8.8	- 7.5
Less security debt.....	.3	1.3	1.4	1.1	5.3	5.7
Other sources:						
Foreign funds.....	14.4	- .1	6.9	62.7	2.1	21.6
At banks.....	- 2.1	.7	1.4	1.7	2.4	4.0
Direct.....	16.4	- .8	5.4	61.0	- .4	17.5
Change in U.S. Government cash balance.....	- 6.4	11.4	4.8	- 19.3	27.9	12.2
U.S. Government loans.....	5.6	3.4	5.0	28.7	9.8	16.6
Private insurance and pension reserves.....	13.3	16.2	15.3	52.6	65.3	59.5
Other.....	12.4	13.4	14.9	38.3	52.8	34.4

Source: Board of Governors of the Federal Reserve System.

TABLE B-63.—Federal Reserve Bank credit and member bank reserves, 1929-78

[Averages of daily figures; millions of dollars]

Year and month	Reserve Bank credit outstanding				Member bank reserves			
	Total	U.S. Government securities	Member bank borrowings		Other	Total	Re-quired	Excess
			Total	Seasonal				
1929: Dec.	1,643	446	801		396	2,395	2,347	48
1933: Dec.	2,669	2,432	95		142	2,588	1,822	1,766
1939: Dec.	2,612	2,510	3		99	11,473	6,462	5,011
1940: Dec.	2,305	2,188	3		114	14,049	7,403	6,646
1941: Dec.	2,404	2,219	5		180	12,812	9,422	3,390
1942: Dec.	6,035	5,549	4		482	13,152	10,776	2,376
1943: Dec.	11,914	11,166	90		658	12,749	11,701	1,048
1944: Dec.	19,612	18,693	265		654	14,168	12,884	1,284
1945: Dec.	24,744	23,708	334		702	16,027	14,536	1,491
1946: Dec.	24,746	23,767	157		822	16,517	15,617	900
1947: Dec.	22,858	21,905	224		729	17,261	16,275	986
1948: Dec.	23,978	23,002	134		842	19,990	19,193	797
1949: Dec.	19,012	18,287	118		607	16,291	15,488	803
1950: Dec.	21,606	20,345	142		1,119	17,391	16,364	1,027
1951: Dec.	25,446	23,409	657		1,380	20,310	19,484	826
1952: Dec.	27,299	24,400	1,593		1,306	21,180	20,457	723
1953: Dec.	27,107	25,639	441		1,027	19,920	19,227	693
1954: Dec.	26,317	24,917	246		1,154	19,279	18,576	703
1955: Dec.	26,853	24,602	839		1,412	19,240	18,646	594
1956: Dec.	27,156	24,765	688		1,703	19,535	18,883	652
1957: Dec.	26,186	23,982	710		1,494	19,420	18,843	577
1958: Dec.	28,412	26,312	557		1,543	18,899	18,383	516
1959: Dec.	29,435	27,036	906		1,493	18,932	18,450	482
1960: Dec.	29,060	27,248	87		1,725	19,283	18,514	769
1961: Dec.	31,217	29,098	149		1,970	20,118	19,550	568
1962: Dec.	33,218	30,546	304		2,368	20,040	19,468	572
1963: Dec.	36,610	33,729	327		2,554	20,746	20,210	536
1964: Dec.	39,873	37,126	243		2,504	21,609	21,198	411
1965: Dec.	43,853	40,885	454		2,514	22,719	22,267	452
1966: Dec.	46,864	43,760	557		2,547	23,830	23,438	392
1967: Dec.	51,268	48,891	238		2,139	25,260	24,915	345
1968: Dec.	56,610	52,529	765		3,316	27,221	26,766	455
1969: Dec.	64,100	57,500	1,086		5,514	28,031	27,774	257
1970: Dec.	66,708	61,688	321		4,699	29,265	28,993	272
1971: Dec.	74,255	69,158	107		4,990	31,329	31,164	165
1972: Dec.	76,851	71,094	1,049		4,708	31,353	31,134	219
1973: Dec.	85,642	79,701	1,298	41	4,643	35,068	34,806	262
1974: Dec.	93,967	86,679	703	32	6,585	36,941	36,602	339
1975: Dec.	99,651	92,108	127	13	7,416	34,989	34,727	262
1976: Dec.	107,632	100,328	62	12	7,242	35,136	34,964	172
1977: Dec.	116,382	107,948	558	54	7,876	36,471	36,297	174
1978: Dec.	129,430	117,344	874	134	11,212	41,669	41,487	182
1978: Jan.	118,598	108,195	481	32	9,922	38,185	37,880	305
Feb.	115,227	106,808	405	52	8,014	36,738	36,605	133
Mar.	114,848	107,790	344	47	6,714	36,231	35,925	306
Apr.	116,784	109,358	539	43	6,887	36,880	36,816	64
May	119,603	111,314	1,227	93	7,062	37,119	36,867	252
June	121,992	112,794	1,111	120	8,087	37,262	37,125	137
July	126,958	117,210	1,286	143	8,462	38,189	38,049	140
Aug.	125,955	117,463	1,147	188	7,345	37,666	37,404	262
Sept.	127,811	118,927	1,068	191	7,816	37,689	37,614	75
Oct.	133,273	123,361	1,261	221	8,651	38,434	38,222	212
Nov.	129,544	119,352	722	185	9,470	39,728	39,423	305
Dec.	129,430	117,344	874	134	11,212	41,669	41,487	182

<sup>1</sup> Data are for licensed banks only.<sup>2</sup> Beginning December 1959, total reserves held include vault cash allowed.<sup>3</sup> Beginning November 1972, includes \$450 million of reserve deficiencies on which Federal Reserve Banks were allowed to waive penalties for a transition period in connection with bank adaptation to Regulation J as amended effective November 9, 1972. Beginning 1973, allowable deficiencies included are (beginning with first statement week of quarter): first quarter, \$279 million; second quarter, \$173 million; third quarter, \$112 million; fourth quarter, \$84 million. Beginning 1974, allowable deficiencies included are: first quarter, \$67 million and second quarter, \$58 million. Transition period ended after second quarter 1974.<sup>4</sup> Effective November 1975, includes reserve deficiencies on which penalties are waived over a 24-month period when a nonmember bank merges into an existing member bank, or when a nonmember bank joins the Federal Reserve System.

Source: Board of Governors of the Federal Reserve System.



TABLE B-64.—Aggregate reserves and deposits of member banks, 1959-78

[Averages of daily figures; billions of dollars, seasonally adjusted]

Year and month	Member bank reserves <sup>1</sup>			Member bank deposits subject to reserve requirements <sup>2</sup>			
	Total	Non-borrowed	Required	Total	Time and savings	Demand	
						Private	U.S. Government
1959: Dec.....	18.63	17.68	18.12	158.2	54.3	99.0	4.8
1960: Dec.....	18.92	18.84	18.17	162.5	58.8	99.1	4.6
1961: Dec.....	19.75	19.61	19.16	175.5	67.7	102.9	4.9
1962: Dec.....	19.66	19.40	19.08	189.0	79.9	103.3	5.7
1963: Dec.....	20.31	19.98	19.82	203.2	92.1	105.9	5.2
1964: Dec.....	21.19	20.92	20.78	218.7	103.7	109.1	5.9
1965: Dec.....	22.18	21.74	21.76	238.3	120.7	112.8	4.9
1966: Dec.....	23.28	22.75	22.94	246.3	128.7	113.9	3.7
1967: Dec.....	24.76	24.54	24.39	275.7	148.9	121.3	5.5
1968: Dec.....	27.06	26.31	26.63	299.8	164.5	130.5	4.9
1969: Dec.....	27.99	26.87	27.70	287.8	150.5	132.1	5.2
1970: Dec.....	29.11	28.78	28.86	321.1	178.8	136.1	6.2
1971: Dec.....	31.17	31.04	30.98	360.2	210.5	144.0	5.8
1972: Dec.....	31.34	30.29	31.06	402.0	241.6	154.4	6.1
1973: Dec.....	34.91	33.61	34.61	442.2	279.2	158.1	4.9
1974: Dec.....	36.57	35.84	36.31	486.1	322.1	160.6	3.3
1975: Dec.....	34.68	34.55	34.42	504.6	337.1	164.5	2.9
1976: Dec.....	34.93	34.88	34.66	529.0	354.3	171.5	3.2
1977: Dec.....	36.14	35.57	35.95	569.1	387.0	178.5	3.6
1978: Dec.....	41.54	40.67	41.27	617.3	429.7	185.2	2.4
1977: Jan.....	34.56	34.49	34.29	532.5	357.3	172.3	2.9
Feb.....	34.54	34.46	34.34	533.4	360.1	170.5	2.9
Mar.....	34.54	34.43	34.32	536.1	361.3	171.7	3.1
Apr.....	34.76	34.69	34.57	538.4	361.4	173.3	3.7
May.....	34.80	34.59	34.59	538.7	364.1	172.4	2.3
June.....	34.82	34.55	34.67	543.4	366.3	173.8	3.2
July.....	35.27	34.95	35.00	547.2	368.9	175.3	3.0
Aug.....	35.50	34.44	35.30	550.5	370.8	176.5	3.2
Sept.....	35.52	34.89	35.31	553.0	373.0	176.7	3.3
Oct.....	35.81	34.50	35.60	558.5	377.1	178.3	3.1
Nov.....	35.96	35.10	35.71	564.4	383.5	178.0	3.0
Dec.....	36.14	35.57	35.95	569.1	387.0	178.5	3.6
1978: Jan.....	36.61	36.12	36.34	575.8	390.5	182.2	3.1
Feb.....	36.93	36.52	36.69	577.9	395.4	179.5	3.0
Mar.....	36.67	36.34	36.47	582.1	399.2	179.5	3.4
Apr.....	36.95	36.39	36.80	586.0	400.7	182.0	3.3
May.....	37.26	36.05	37.04	592.0	406.0	183.4	2.6
June.....	37.73	36.63	37.55	595.6	407.1	184.6	3.9
July.....	38.19	36.88	38.00	600.3	410.5	186.1	3.7
Aug.....	37.91	36.77	37.74	601.1	411.4	186.5	3.3
Sept.....	38.17	37.11	37.97	606.4	416.0	186.3	4.1
Oct.....	38.43	37.15	38.26	608.1	417.5	187.2	3.5
Nov.....	39.73	39.03	39.50	617.3	427.9	187.2	2.3
Dec.....	41.54	40.67	41.27	617.3	429.7	185.2	2.4

<sup>1</sup> Series reflects actual reserve requirement percentages with no adjustment to eliminate the effect of changes in Regulations D and M.

<sup>2</sup> Includes total time and savings deposits and net demand deposits as defined by Regulation D. Private demand deposits include all demand deposits except those due to the U.S. Government, less cash items in process of collection and demand balances due from domestic commercial banks.

Source: Board of Governors of the Federal Reserve System.

TABLE B-65.—Bond yields and interest rates, 1929-78

[Percent per annum]

Year or month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) (2)	Prime commercial paper, 4-6 months	Prime rate charged by banks 4	Discount rate, Federal Reserve Bank of New York 4	Federal funds rate 6
	Bills (new issues) 1		Constant maturities 2		Aaa	Baa						
	3-month	6-month	3 years	10 years								
1929					4.73	5.90	4.27		5.85		5.16	
1933	0.515				4.49	7.76	4.71		1.73		2.56	
1939	.023				3.01	4.96	2.76		.59		1.00	
1940	.014				2.84	4.75	2.50		.56		1.00	
1941	.103				2.77	4.33	2.10		.53		1.00	
1942	.326				2.83	4.28	2.36		.66		1.00	
1943	.373				2.73	3.91	2.06		.69		1.00	
1944	.375				2.72	3.61	1.86		.73		1.00	
1945	.375				2.62	3.29	1.67		.75		1.00	
1946	.375				2.53	3.05	1.64		.81		1.00	
1947	.594				2.61	3.24	2.01		1.03		1.00	
1948	1.040				2.82	3.47	2.40		1.44		1.34	
1949	1.102				2.66	3.42	2.21		1.49	2.00	1.50	
1950	1.218				2.62	3.24	1.98		1.45	2.07	1.59	
1951	1.552				2.86	3.41	2.00		2.16	2.56	1.75	
1952	1.766				2.96	3.52	2.19		2.33	3.00	1.75	
1953	1.931		2.47	2.85	3.20	3.74	2.72		2.52	3.17	1.99	
1954	.953		1.63	2.40	2.90	3.51	2.37		1.58	3.05	1.60	
1955	1.753		2.47	2.82	3.06	3.53	2.53		2.18	3.16	1.89	1.78
1956	2.658		3.19	3.18	3.36	3.88	2.93		3.31	3.77	2.77	2.73
1957	3.267		3.98	3.65	3.89	4.71	3.60		3.81	4.20	3.12	3.11
1958	1.839		2.84	3.32	3.79	4.73	3.56		2.46	3.83	2.15	1.57
1959	3.405	3.832	4.46	4.33	4.38	5.05	3.95		3.97	4.48	3.36	3.30
1960	2.928	3.247	3.98	4.12	4.41	5.19	3.73		3.85	4.82	3.53	3.22
1961	2.378	2.605	3.54	3.88	4.35	5.08	3.46		2.97	4.50	3.00	1.96
1962	2.778	2.908	3.47	3.95	4.33	5.02	3.18		3.26	4.50	3.00	2.68
1963	3.157	3.253	3.67	4.00	4.26	4.86	3.23	5.89	3.55	4.50	3.23	3.18
1964	3.549	3.686	4.03	4.19	4.40	4.83	3.22	5.82	3.97	4.50	3.55	3.50
1965	3.954	4.055	4.22	4.28	4.49	4.87	3.27	5.81	4.38	4.54	4.04	4.07
1966	4.881	5.082	5.23	4.92	5.13	5.67	3.82	6.25	5.55	5.63	4.50	5.11
1967	4.321	4.630	5.03	5.07	5.51	6.23	3.98	6.46	5.10	5.61	4.19	4.22
1968	5.339	5.470	5.68	5.65	6.18	6.94	4.51	6.97	5.90	6.30	5.17	5.66
1969	6.677	6.853	7.02	6.67	7.03	7.81	5.81	7.80	7.83	7.96	5.87	8.22
1970	6.458	6.562	7.29	7.35	8.04	9.11	6.51	8.45	7.72	7.91	5.95	7.17
1971	4.348	4.511	5.65	6.16	7.39	8.56	5.70	7.74	5.11	5.72	4.88	4.67
1972	4.071	4.466	5.72	6.21	7.21	8.16	5.27	7.60	4.69	5.25	4.50	4.44
1973	7.041	7.178	6.95	6.84	7.44	8.24	5.18	7.95	8.15	8.03	6.45	8.74
1974	7.886	7.926	7.82	7.56	8.57	9.50	6.09	8.92	9.87	10.81	7.83	10.51
1975	5.838	6.122	7.49	7.99	8.83	10.61	6.89	9.01	6.33	7.86	6.25	5.82
1976	4.989	5.266	6.77	7.61	8.43	9.75	6.49	8.99	5.35	6.84	5.50	5.05
1977	5.265	5.510	6.69	7.42	8.02	8.97	5.56	9.01	5.60	6.83	5.46	5.54
1978	7.221	7.572	8.29	8.41	8.73	9.49	5.90	9.54	7.99	9.06	7.46	7.94

See next page for continuation of table.

TABLE B-65.—Bond yields and interest rates, 1929-78—Continued

[Percent per annum]

Year or month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) (2)	Prime commercial paper, 4-6 months	Prime rate charged by banks 4	Discount rate, Federal Reserve Bank of New York 4	Federal funds rate 6
	Bills (new issues) 1		Constant maturities 2		Aaa	Baa						
	3-month	6-month	3 years	10 years								
<b>1976:</b>												
Jan....	4.961	5.238	6.99	7.74	8.60	10.41	6.80	8.99	5.27	7 1/4 - 6 3/4	6 - 5 1/2	4.87
Feb....	4.852	5.144	7.06	7.79	8.55	10.24	6.91	8.93	5.23	6 3/4 - 6 3/4	5 1/2 - 5 1/2	4.77
Mar....	5.047	5.488	7.13	7.73	8.52	10.12	6.86	8.93	5.37	6 3/4 - 6 3/4	5 1/2 - 5 1/2	4.84
Apr....	4.878	5.201	6.84	7.56	8.40	9.94	6.62	8.92	5.23	6 3/4 - 6 3/4	5 1/2 - 5 1/2	4.82
May....	5.185	5.600	7.27	7.90	8.58	9.86	6.87	8.97	5.54	6 3/4 - 6 3/4	5 1/2 - 5 1/2	5.29
June...	5.443	5.784	7.32	7.86	8.62	9.89	6.85	8.89	5.94	7 - 7 1/4	5 1/2 - 5 1/2	5.48
July...	5.278	5.597	7.12	7.83	8.56	9.82	6.64	8.97	5.67	7 1/4 - 7 1/4	5 1/2 - 5 1/2	5.31
Aug....	5.153	5.416	6.86	7.77	8.45	9.64	6.28	9.02	5.47	7 1/4 - 7	5 1/2 - 5 1/2	5.29
Sept...	5.075	5.311	6.66	7.59	8.38	9.40	6.20	9.08	5.45	7 - 7	5 1/2 - 5 1/2	5.25
Oct....	4.930	5.073	6.24	7.41	8.32	9.29	6.06	9.07	5.22	7 - 6 3/4	5 1/2 - 5 1/2	5.03
Nov....	4.810	4.944	6.09	7.29	8.25	9.23	6.05	9.05	5.05	6 1/2 - 6 1/2	5 1/2 - 5 1/4	4.95
Dec....	4.355	4.513	5.68	6.87	7.98	9.12	5.69	9.10	4.70	6 1/2 - 6 1/4	5 1/4 - 5 1/4	4.65
<b>1977:</b>												
Jan....	4.597	4.783	6.22	7.21	7.96	9.08	5.70	9.05	4.74	6 1/4 - 6 1/4	5 1/4 - 5 1/4	4.61
Feb....	4.662	4.896	6.44	7.39	8.04	9.12	5.75	8.99	4.82	6 1/4 - 6 1/4	5 1/4 - 5 1/4	4.68
Mar....	4.613	4.883	6.47	7.46	8.10	9.12	5.76	8.95	4.87	6 1/4 - 6 1/4	5 1/4 - 5 1/4	4.69
Apr....	4.540	4.790	6.31	7.37	8.04	9.07	5.61	8.94	4.87	6 1/4 - 6 1/4	5 1/4 - 5 1/4	4.73
May....	4.942	5.193	6.55	7.46	8.05	9.01	5.64	8.96	5.35	6 1/4 - 6 3/4	5 1/4 - 5 1/4	5.35
June...	5.004	5.198	6.39	7.28	7.95	8.91	5.53	8.98	5.49	5 3/4 - 6 3/4	5 1/4 - 5 1/4	5.39
July...	5.146	5.351	6.51	7.33	7.94	8.87	5.50	9.00	5.41	6 3/4 - 6 3/4	5 1/4 - 5 1/4	5.42
Aug....	5.500	5.810	6.79	7.40	7.98	8.82	5.46	9.02	5.84	6 3/4 - 7	5 1/4 - 5 1/4	5.90
Sept...	5.770	5.991	6.84	7.34	7.92	8.80	5.37	9.04	6.17	7 - 7 1/4	5 3/4 - 5 3/4	6.14
Oct....	6.188	6.410	7.19	7.52	8.04	8.89	5.53	9.07	6.55	7 1/4 - 7 3/4	5 3/4 - 6	6.47
Nov....	6.160	6.433	7.22	7.58	8.08	8.95	5.38	9.07	6.59	7 3/4 - 7 3/4	6 - 6	6.51
Dec....	6.063	6.377	7.30	7.69	8.19	8.99	5.48	9.09	6.64	7 3/4 - 7 3/4	6 - 6	6.56
<b>1978:</b>												
Jan....	6.448	6.685	7.61	7.96	8.41	9.17	5.60	9.15	6.79	7 3/4 - 8	6 - 6 1/2	6.70
Feb....	6.457	6.740	7.67	8.03	8.47	9.20	5.51	9.18	6.80	8 - 8	6 1/2 - 6 1/2	6.78
Mar....	6.319	6.644	7.70	8.04	8.47	9.22	5.49	9.26	6.80	8 - 8	6 1/2 - 6 1/2	6.79
Apr....	6.306	6.700	7.85	8.15	8.56	9.32	5.71	9.30	6.86	8 - 8	6 1/2 - 6 1/2	6.89
May....	6.430	7.019	8.07	8.35	8.69	9.49	5.97	9.37	7.11	8 - 8 1/2	6 1/2 - 7	7.36
June...	6.707	7.200	8.30	8.46	8.76	9.60	6.13	9.46	7.63	8 1/2 - 9	7 - 7	7.60
July...	7.074	7.471	8.54	8.64	8.88	9.60	6.18	9.57	7.91	9 - 9	7 - 7 1/4	7.81
Aug....	7.036	7.363	8.33	8.41	8.69	9.48	5.98	9.70	7.90	9 - 9 1/4	7 1/4 - 7 3/4	8.04
Sept...	7.836	7.948	8.41	8.42	8.69	9.42	5.93	9.73	8.44	9 1/4 - 9 3/4	7 3/4 - 8	8.45
Oct....	8.132	8.493	8.62	8.64	8.89	9.59	5.95	9.83	9.03	9 3/4 - 10 1/4	8 - 8 1/2	8.96
Nov....	8.787	9.204	9.04	8.81	9.03	9.83	6.03	9.87	10.23	10 1/2 - 11 1/2	9 1/2 - 9 1/2	9.76
Dec....	9.122	9.397	9.33	9.01	9.16	9.94	6.33	10.02	10.43	11 1/2 - 11 3/4	9 1/2 - 9 1/2	10.03

1 Rate on new issues within period.

2 Yields on the more actively traded issues adjusted to constant maturities by the Treasury Department.

3 Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assumed, on the average, repayment at end of 10 years. Rates beginning January 1973 not strictly comparable with prior rates.

4 Average effective rate for the year; opening and closing rate for the month.

5 Based on seven-day averages of daily effective rates for weeks ending Wednesday. Since July 19, 1975, the daily effective rate is an average of the rates on a given day weighted by the volume of transactions at these rates. Prior to that date, the daily effective rate was the rate considered most representative of the day's transactions, usually the one at which most transactions occurred.

6 From October 30, 1942, to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing in 1 year or less.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Home Loan Bank Board (FHLBB), Moody's Investors Service, and Standard &amp; Poor's Corporation.

TABLE B-66.—Consumer installment credit, 1970-78

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Installment credit extended			Installment credit liquidated			Net change in amount outstanding		
	Total <sup>1</sup>	Auto-mobile	Revolving	Total <sup>1</sup>	Auto-mobile	Revolving	Total <sup>1</sup>	Auto-mobile	Revolving
1970 .....	115,132	30,857	8,689	110,352	31,414	7,278	4,780	-557	1,411
1971 .....	138,046	36,706	21,862	127,789	32,512	20,818	10,257	4,194	1,044
1972 .....	151,749	43,702	24,659	136,787	38,081	23,485	14,962	5,621	1,174
1973 .....	173,035	49,606	28,702	152,817	43,696	26,699	20,218	5,910	2,003
1974 .....	172,765	46,514	33,213	163,276	46,019	31,243	9,489	495	1,970
1975 .....	180,441	52,420	36,956	172,676	49,444	35,616	7,765	2,976	1,340
1976 .....	211,028	63,743	43,934	189,381	53,278	41,764	21,647	10,465	2,170
1977 .....	254,071	75,641	86,756	218,793	60,437	80,508	35,278	15,204	6,248
1978 <sup>2</sup> .....	298,700	88,900	104,993	254,300	69,700	97,515	44,400	19,200	7,478
1977: Jan .....	19,379	5,797	6,395	17,272	4,795	6,412	2,107	1,002	-17
Feb .....	19,927	6,006	6,724	17,566	4,855	6,429	2,361	1,151	295
Mar .....	20,802	6,261	6,929	17,434	4,885	6,275	3,368	1,376	654
Apr .....	20,953	6,182	7,124	17,864	4,954	6,503	3,089	1,228	621
May .....	20,991	6,184	7,340	18,091	4,937	6,717	2,900	1,247	623
June .....	20,764	6,212	7,199	18,200	5,089	6,690	2,564	1,123	509
July .....	20,796	6,293	7,010	18,389	5,135	6,730	2,407	1,158	280
Aug .....	21,408	6,332	7,275	18,473	5,094	6,795	2,935	1,238	480
Sept .....	21,528	6,413	7,333	18,683	5,082	6,865	2,845	1,331	468
Oct .....	22,273	6,503	7,666	19,066	5,274	6,999	3,207	1,229	667
Nov .....	22,487	6,719	7,716	18,891	5,179	7,024	3,596	1,540	692
Dec .....	22,832	6,889	7,985	19,252	5,252	7,226	3,579	1,637	758
1978: Jan .....	21,983	6,541	7,960	19,546	5,215	7,545	2,437	1,326	415
Feb .....	22,758	6,730	8,147	19,896	5,297	7,698	2,862	1,333	449
Mar .....	23,925	7,043	8,398	19,849	5,409	7,566	4,076	1,634	832
Apr .....	24,682	7,434	8,523	20,576	5,622	7,840	4,106	1,812	683
May .....	25,104	7,592	8,563	20,824	5,715	7,919	4,280	1,877	644
June .....	25,565	7,595	9,062	21,358	5,953	8,107	4,207	1,642	955
July .....	25,022	7,652	8,700	21,556	5,941	8,100	3,466	1,711	600
Aug .....	25,669	7,744	9,028	22,037	6,140	8,291	3,632	1,604	737
Sept .....	25,537	7,542	9,006	21,857	6,010	8,384	3,680	1,532	622
Oct .....	25,758	7,501	8,846	22,384	6,126	8,500	3,374	1,375	346
Nov .....	26,214	7,787	9,176	22,115	6,032	8,511	4,099	1,755	665
Dec <sup>2</sup> .....	26,033	7,725	9,112	22,308	6,125	8,582	3,725	1,600	530

<sup>1</sup> Includes other categories not shown separately.<sup>2</sup> Preliminary; December by Council of Economic Advisers.

Note: Consumer installment credit consists of short- and intermediate-term credit extended through regular business channels to finance the purchase of goods and services for personal consumption, or to refinance debts incurred for such purposes, and scheduled to be repaid in two or more installments. Mortgage credit generally is excluded.

Source: Board of Governors of the Federal Reserve System (except as noted).

TABLE B-67.—Mortgage debt outstanding by type of property and of financing, 1939-78

[Billions of dollars]

End of year or quarter	All properties	Farm properties	Nonfarm properties				Nonfarm properties by type of mortgage					
			Total	1- to 4-family houses	Multi-family properties <sup>1</sup>	Commer- cial properties <sup>1</sup>	Government underwritten			Conventional <sup>3</sup>		
							Total <sup>2</sup>	1- to 4-family houses			Total	1- to 4-family houses
								Total	FHA insured	VA guaranteed		
1939.....	35.5	6.6	28.9	16.3	5.6	7.0	1.8	1.8	1.8	.....	27.1	14.5
1940.....	36.5	6.5	30.0	17.4	5.7	6.9	2.3	2.3	2.3	.....	27.7	15.1
1941.....	37.6	6.4	31.2	18.4	5.9	7.0	3.0	3.0	3.0	.....	28.2	15.4
1942.....	36.7	6.0	30.8	18.2	5.8	6.7	3.7	3.7	3.7	.....	27.1	14.5
1943.....	35.3	5.4	29.9	17.8	5.8	6.3	4.1	4.1	4.1	.....	25.8	13.7
1944.....	34.7	4.9	29.7	17.9	5.6	6.2	4.2	4.2	4.2	.....	25.5	13.7
1945.....	35.5	4.8	30.8	18.6	5.7	6.4	4.3	4.3	4.1	0.2	26.5	14.3
1946.....	41.8	4.9	36.9	23.0	6.1	7.7	6.3	6.1	3.7	2.4	30.6	16.9
1947.....	48.9	5.1	43.9	28.2	6.6	9.1	9.8	9.3	3.8	5.5	31.1	18.9
1948.....	56.2	5.3	50.9	33.3	7.5	10.2	13.6	12.5	5.3	7.2	37.3	20.8
1949.....	62.7	5.6	57.1	37.6	8.6	10.8	17.1	15.0	6.9	8.1	40.0	22.6
1950.....	72.8	6.1	66.7	45.2	10.1	11.5	22.1	18.9	8.6	10.3	44.6	26.3
1951.....	82.3	6.7	75.6	51.7	11.5	12.5	26.6	22.9	9.7	13.2	49.0	28.8
1952.....	91.4	7.2	84.2	58.5	12.3	13.4	29.3	25.4	10.8	14.6	54.9	33.1
1953.....	101.3	7.7	93.6	66.1	12.9	14.5	32.1	28.1	12.0	16.1	61.5	38.0
1954.....	113.7	8.2	105.4	75.7	13.5	16.3	36.2	32.1	12.8	19.3	69.2	43.6
1955.....	129.9	9.0	120.9	88.2	14.3	18.3	42.9	38.9	14.3	24.6	78.0	49.3
1956.....	144.5	9.8	134.6	99.0	14.9	20.7	47.8	43.9	15.5	28.4	86.8	55.1
1957.....	156.5	10.4	146.1	107.6	15.3	23.2	51.6	47.2	16.5	30.7	94.6	60.4
1958.....	171.8	11.1	160.7	117.7	16.8	26.1	55.1	50.1	19.7	30.4	105.5	67.6
1959.....	190.8	12.1	178.7	130.9	18.7	29.2	59.3	53.8	23.8	30.0	119.4	77.0
1960.....	207.5	12.8	194.7	141.9	20.3	32.4	62.3	56.4	26.7	29.7	132.3	85.5
1961.....	228.0	13.9	214.1	154.7	23.0	36.4	65.6	59.1	29.5	29.6	148.5	95.6
1962.....	251.4	15.2	236.2	169.3	25.8	41.1	69.4	62.2	32.3	29.9	166.9	107.1
1963.....	278.5	16.8	261.7	186.4	29.0	46.2	73.4	65.9	35.0	30.9	188.2	120.5
1964.....	305.9	18.9	287.0	203.4	33.6	50.0	77.2	69.2	38.3	30.9	209.8	134.1
1965.....	333.3	21.2	312.1	220.5	37.2	54.5	81.2	73.1	42.0	31.1	231.0	147.4
1966.....	356.5	23.1	333.4	232.9	40.3	60.1	84.1	76.1	44.8	31.3	249.3	156.9
1967.....	381.2	25.1	356.1	247.3	43.9	64.8	88.2	79.9	47.4	32.5	267.9	167.4
1968.....	410.9	27.4	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
1969.....	441.4	29.2	412.2	282.8	52.3	77.1	100.2	90.2	54.5	35.7	312.0	192.7
1970.....	474.2	30.3	443.8	298.1	60.1	85.6	109.2	97.3	59.9	37.3	334.6	200.8
1971.....	526.5	32.2	494.3	328.3	70.1	95.9	120.7	105.2	65.7	39.5	373.5	223.1
1972.....	603.4	35.8	567.7	372.2	82.8	112.7	131.1	113.0	68.2	44.7	436.5	259.2
1973.....	682.3	41.3	641.1	416.2	93.1	131.7	135.0	116.2	66.2	50.0	506.0	300.0
1974.....	742.5	46.3	696.2	449.4	100.0	146.9	140.2	121.3	65.1	56.2	556.0	328.1
1975.....	801.5	50.9	750.7	490.8	100.6	159.3	147.0	127.7	66.1	61.6	603.7	363.0
1976.....	889.2	57.0	832.2	556.5	104.5	171.2	154.1	133.5	66.5	67.0	678.0	422.9
1977.....	1,023.4	65.7	957.7	657.2	111.5	189.0	161.7	141.6	68.0	73.6	796.0	515.6
1976: I.....	818.4	52.2	766.2	503.3	101.8	161.2	148.3	129.1	66.2	62.9	617.9	374.2
II.....	840.5	53.8	786.7	519.8	102.9	164.0	150.5	131.2	67.1	64.1	636.2	388.6
III.....	865.6	55.5	810.2	538.8	103.9	167.5	150.8	131.2	66.4	64.8	659.4	407.6
IV.....	889.2	57.0	832.2	556.5	104.5	171.2	154.1	133.5	66.5	67.0	678.0	422.9
1977: I.....	912.2	59.2	853.0	573.7	105.3	174.0	155.7	134.9	66.9	68.0	637.3	438.7
II.....	950.5	61.9	888.6	603.2	107.6	177.8	158.7	137.4	67.8	69.6	730.0	465.9
III.....	988.5	64.0	924.5	632.7	109.5	182.3	161.6	139.9	67.9	71.9	763.0	492.8
IV.....	1,023.4	65.7	957.7	657.2	111.5	189.0	161.7	141.6	68.0	73.6	796.0	515.6
1978: I.....	1,050.2	68.1	982.1	674.8	113.9	193.4	165.3	144.7	68.6	76.1	816.9	530.1
II.....	1,091.5	70.9	1,020.6	704.5	116.5	199.6	167.4	146.7	69.2	77.6	853.2	557.8
III.....	1,131.9	73.8	1,058.1	731.7	119.2	207.1	174.7	150.7	69.9	80.8	883.4	581.0

<sup>1</sup> Includes negligible amount of farm loans held by savings and loan associations.<sup>2</sup> Includes FHA insured multifamily properties, not shown separately.<sup>3</sup> Derived figures. Total includes multifamily and commercial properties, not shown separately.

Source: Board of Governors of the Federal Reserve System, estimated and compiled from data supplied by various Government and private organizations.

TABLE B-68.—Mortgage debt outstanding by holder, 1939-78

[Billions of dollars]

End of year or quarter	Total	Major financial institutions					Other holders	
		Total	Savings and loan associa- tions	Mutual savings banks	Com- mer- cial banks <sup>1</sup>	Life insurance com- panies	Federal and related agencies <sup>2</sup>	Indi- viduals and others
1939	35.5	18.6	3.8	4.8	4.3	5.7	5.0	11.9
1940	36.5	19.5	4.1	4.9	4.6	6.0	4.9	12.0
1941	37.6	20.7	4.6	4.8	4.9	6.4	4.7	12.2
1942	36.7	20.7	4.6	4.6	4.7	6.7	4.3	11.7
1943	35.3	20.2	4.6	4.4	4.5	6.7	3.6	11.5
1944	34.7	20.2	4.8	4.3	4.4	6.7	3.0	11.5
1945	35.5	21.0	5.4	4.2	4.8	6.6	2.4	12.1
1946	41.8	26.0	7.1	4.4	7.2	7.2	2.0	13.8
1947	48.9	31.8	8.9	4.9	9.4	8.7	1.8	15.3
1948	56.2	37.8	10.3	5.8	10.9	10.8	1.8	16.6
1949	62.7	42.9	11.6	6.7	11.6	12.9	2.3	17.5
1950	72.8	51.7	13.7	8.3	13.7	16.1	2.8	18.4
1951	82.3	59.5	15.6	9.9	14.7	19.3	3.5	19.3
1952	91.4	66.9	18.4	11.4	15.9	21.3	4.1	20.4
1953	101.3	75.1	22.0	12.9	16.9	23.3	4.6	21.7
1954	113.7	85.7	26.1	15.0	18.6	26.0	4.8	23.2
1955	129.9	99.3	31.4	17.5	21.0	29.4	5.3	25.3
1956	144.5	111.2	35.7	19.7	22.7	33.0	6.2	27.1
1957	156.5	119.7	40.0	21.2	23.3	35.2	7.7	29.1
1958	171.8	131.5	45.6	23.3	25.5	37.1	8.0	32.3
1959	190.8	145.5	53.1	25.0	28.1	39.2	10.2	35.1
1960	207.5	157.6	60.1	26.9	28.8	41.8	11.5	38.4
1961	228.0	172.6	68.8	29.1	30.4	44.2	12.2	43.1
1962	251.4	192.5	78.8	32.3	34.5	46.9	12.6	46.3
1963	278.5	217.1	90.9	36.2	39.4	50.5	11.8	49.5
1964	305.9	241.0	101.3	40.6	44.0	55.2	12.2	52.7
1965	333.3	264.6	110.3	44.6	49.7	60.0	13.5	55.2
1966	356.5	280.8	114.4	47.3	54.4	64.6	17.5	58.2
1967	381.2	298.8	121.8	50.5	59.0	67.5	20.9	61.4
1968	410.9	319.9	130.8	53.5	65.7	70.0	25.1	65.9
1969	441.4	339.1	140.2	56.1	70.7	72.0	31.1	71.2
1970	474.2	355.9	150.3	57.9	73.3	74.4	38.3	79.9
1971	526.5	394.2	174.3	62.0	82.5	75.5	46.4	85.9
1972	603.4	450.0	206.2	67.6	99.3	76.9	54.6	98.9
1973	682.3	505.4	231.7	73.2	119.1	81.4	64.8	112.2
1974	742.5	542.6	249.3	74.9	132.1	86.2	82.1	117.8
1975	801.5	581.2	278.6	77.2	136.2	89.2	101.0	119.3
1976	889.2	647.5	323.0	81.6	151.3	91.6	116.6	125.1
1977	1,023.4	745.0	381.2	88.1	179.0	96.8	140.3	138.1
1976: I	818.4	593.2	286.3	77.9	139.6	89.4	105.0	120.2
II	840.5	611.5	299.2	78.8	143.7	89.7	107.3	121.8
III	865.6	630.0	311.8	80.2	147.8	90.2	112.3	123.4
IV	889.2	647.5	323.0	81.6	151.3	91.6	116.6	125.1
1977: I	912.2	662.8	333.6	82.3	155.2	91.8	121.5	127.9
II	950.5	690.5	350.6	84.1	163.0	92.9	127.1	132.9
III	988.5	717.9	366.6	86.1	171.2	54.1	133.7	136.9
IV	1,023.4	745.0	381.2	88.1	179.0	96.8	140.3	138.1
1978: I	1,050.2	764.6	392.4	89.8	184.4	98.0	146.1	139.5
II	1,091.5	794.0	408.0	91.5	194.5	100.0	152.6	144.9
III	1,131.9	822.2	421.0	93.4	205.4	102.4	160.8	148.9

<sup>1</sup> Includes loans held by nondeposit trust companies, but not by bank trust departments.<sup>2</sup> Includes former Federal National Mortgage Association (FNMA) and new Government National Mortgage Association (GNMA), as well as Federal Housing Administration, Veterans Administration, Public Housing Administration, Farmers Home Administration, and in earlier years Reconstruction Finance Corporation, Homeowners Loan Corporation, and Federal Farm Mortgage Corporation. Also includes GNMA Pools and U.S.-sponsored agencies such as new FNMA, Federal Land Banks, and Federal Home Loan Mortgage Corporation. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

# GOVERNMENT FINANCE

TABLE B-69.—Federal budget receipts and outlays, fiscal years 1929-80

(Millions of dollars)

Fiscal year	Receipts	Outlays	Surplus or deficit (—)
1929	3,862	3,127	734
1933	1,997	4,598	-2,602
1939	4,979	8,841	-3,862
1940	6,361	9,456	-3,095
1941	8,621	13,634	-5,013
1942	14,350	35,114	-20,764
1943	23,649	78,533	-54,884
1944	44,276	91,280	-47,004
1945	45,216	92,690	-47,474
1946	39,327	55,183	-15,856
1947	38,394	34,532	3,862
1948	41,774	29,773	12,001
1949	39,437	38,834	603
1950	39,485	42,597	-3,112
1951	51,646	45,546	6,100
1952	66,204	67,721	-1,517
1953	69,574	76,107	-6,533
1954	69,719	70,890	-1,170
1955	65,469	68,509	-3,041
1956	74,547	70,460	4,087
1957	79,990	76,741	3,249
1958	79,636	82,575	-2,939
1959	79,249	92,104	-12,855
1960	92,492	92,223	269
1961	94,389	97,795	-3,406
1962	99,676	106,813	-7,137
1963	106,560	111,311	-4,751
1964	112,662	118,584	-5,922
1965	116,833	118,430	-1,596
1966	130,856	134,652	-3,796
1967	149,552	158,254	-8,702
1968	153,671	178,833	-25,161
1969	187,784	184,548	3,236
1970	193,743	196,588	-2,845
1971	188,392	211,425	-23,033
1972	208,649	232,021	-23,373
1973	232,225	247,074	-14,849
1974	264,932	269,620	-4,688
1975	280,997	326,185	-45,188
1976	300,005	366,439	-66,434
Transition quarter	81,773	94,729	-12,956
1977	357,762	402,725	-44,963
1978	401,997	450,836	-48,839
1979 <sup>1</sup>	455,989	493,368	-37,379
1980 <sup>1</sup>	502,553	531,566	-29,013

<sup>1</sup> Estimates.

Note.—Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis. The 3-month period from July 1, 1976, through September 30, 1976 is a separate fiscal period known as the transition quarter.

Data for 1929-39 are according to the administrative budget and those beginning 1940 according to the unified budget.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1980" for additional information.

Sources: Department of the Treasury and Office of Management and Budget.

TABLE E-70.—Federal budget receipts, outlays, and debt, fiscal years 1970-80

[Millions of dollars; fiscal years]

Description	Actual					
	1970	1971	1972	1973	1974	1975
<b>BUDGET RECEIPTS AND OUTLAYS:</b>						
Total receipts.....	193,743	188,392	208,649	232,225	264,932	280,997
Federal funds.....	143,158	133,785	148,846	161,357	181,219	187,505
Trust funds.....	59,362	66,193	72,959	92,193	104,846	118,590
Interfund transactions.....	-8,778	-11,586	-13,156	-21,325	-21,133	-25,098
Total outlays.....	196,588	211,425	232,021	247,074	269,620	326,185
Federal funds.....	156,300	163,651	178,110	186,951	199,918	240,115
Trust funds.....	49,066	59,360	67,067	81,448	90,835	111,168
Interfund transactions.....	-8,778	-11,586	-13,156	-21,325	-21,133	-25,098
Total surplus or deficit (-).....	-2,845	-23,033	-23,373	-14,849	-4,688	-45,188
Federal funds.....	-13,142	-29,866	-29,264	-25,594	-18,699	-52,609
Trust funds.....	10,296	6,833	5,892	10,745	14,011	7,422
<b>OUTSTANDING DEBT, END OF PERIOD:</b>						
Gross Federal debt.....	382,603	409,467	437,329	468,426	486,247	544,131
Held by Government agencies.....	97,723	105,140	113,559	125,381	140,194	147,225
Held by the public.....	284,880	304,328	323,770	343,045	346,053	396,906
Federal Reserve System.....	57,714	65,518	71,426	75,182	80,649	84,993
Other.....	227,166	238,810	252,344	267,863	265,404	311,913
<b>BUDGET RECEIPTS.....</b>	<b>193,743</b>	<b>188,392</b>	<b>208,649</b>	<b>232,225</b>	<b>264,932</b>	<b>280,997</b>
Individual income taxes.....	90,412	86,230	94,737	103,246	118,952	122,386
Corporation income taxes.....	32,829	26,785	32,166	36,153	38,620	40,621
Social insurance taxes and contributions.....	45,298	48,578	53,914	64,542	76,780	86,441
Excise taxes.....	15,705	16,614	15,477	16,260	16,844	16,551
Estate and gift taxes.....	3,644	3,735	5,436	4,917	5,035	4,611
Customs duties.....	2,430	2,591	3,287	3,188	3,334	3,676
Miscellaneous receipts:						
Deposits of earnings by Federal Reserve System.....	3,266	3,533	3,252	3,495	4,845	5,777
All other.....	158	525	381	426	524	934
<b>BUDGET OUTLAYS.....</b>	<b>196,588</b>	<b>211,425</b>	<b>232,021</b>	<b>247,074</b>	<b>269,620</b>	<b>326,185</b>
National defense.....	78,553	75,808	76,550	74,541	77,781	85,552
International affairs.....	4,297	4,097	4,693	4,066	5,681	6,922
General science, space, and technology.....	4,507	4,180	4,173	4,030	3,977	3,989
Energy.....	990	1,031	1,270	1,179	837	2,170
Natural resources and environment.....	3,061	3,909	4,235	4,763	5,670	7,335
Agriculture.....	5,161	4,288	5,280	4,852	2,227	1,659
Commerce and housing credit.....	2,108	2,358	2,216	924	3,925	5,607
Transportation.....	7,006	8,050	8,388	9,065	9,172	10,388
Community and regional development.....	2,360	2,833	3,388	4,537	4,080	3,689
Education, training, employment, and social services.....	8,625	9,839	12,519	12,735	12,344	15,870
Health.....	13,051	14,716	17,467	18,832	22,073	27,648
Income security.....	43,073	55,426	63,913	72,965	84,437	108,610
Veterans benefits and services.....	8,677	9,776	10,730	12,013	13,386	16,597
Administration of justice.....	952	1,299	1,650	2,131	2,462	2,942
General government.....	1,888	2,104	2,449	2,626	3,296	3,182
General purpose fiscal assistance.....	536	535	673	7,351	6,890	7,187
Interest.....	18,309	19,602	20,563	22,782	28,032	30,911
Allowances.....						
Undistributed offsetting receipts.....	-6,567	-8,427	-8,137	-12,318	-16,651	-14,075
Composition of undistributed offsetting receipts:						
Employer share, employee retirement.....	-2,444	-2,611	-2,768	-2,927	-3,319	-3,980
Interest received by trust funds.....	-3,936	-4,765	-5,089	-5,436	-6,583	-7,667
Rents and royalties on the Outer Continental Shelf.....	-187	-1,051	-279	-3,956	-6,748	-2,428

See next page for continuation of table.



TABLE B-70.—Federal budget receipts, outlays, and debt, fiscal years 1970-80—Continued

(Millions of dollars; fiscal years)

Description	Actual				Estimate	
	1976	Transition quarter	1977	1978	1979	1980
<b>BUDGET RECEIPTS AND OUTLAYS:</b>						
Total receipts.....	300,005	81,773	357,762	401,997	455,989	502,553
Federal funds.....	201,099	54,085	241,312	270,484	306,135	332,798
Trust funds.....	133,695	32,071	152,763	168,012	189,496	212,208
Interfund transactions.....	-34,789	-4,383	-36,313	-36,498	-39,641	-42,452
Total outlays.....	366,439	94,729	402,725	450,836	493,368	531,566
Federal funds.....	269,943	65,089	295,772	332,016	361,315	381,844
Trust funds.....	131,286	34,023	143,267	155,318	171,694	192,175
Interfund transactions.....	-34,789	-4,383	-36,313	-36,498	-39,641	-42,452
Total surplus or deficit (-).....	-66,434	-12,956	-44,963	-48,839	-37,379	-29,013
Federal funds.....	-68,843	-11,004	-54,459	-61,533	-55,180	-49,046
Trust funds.....	2,410	-1,952	9,496	12,694	17,801	20,033
<b>OUTSTANDING DEBT, END OF PERIOD:</b>						
Gross Federal debt.....	631,866	646,379	709,138	780,425	839,187	898,956
Held by Government agencies.....	151,566	148,052	157,295	169,477	188,238	209,008
Held by the public.....	480,300	498,327	551,843	610,948	650,948	689,948
Federal Reserve System.....	94,714	96,702	105,004	114,955	-----	-----
Other.....	385,586	401,625	446,839	495,983	-----	-----
<b>BUDGET RECEIPTS</b> .....	300,005	81,773	357,762	401,997	455,989	502,553
Individual income taxes.....	131,603	38,801	157,626	180,988	203,602	227,322
Corporation income taxes.....	41,409	8,460	54,892	59,952	70,307	70,987
Social insurance taxes and contributions.....	92,714	25,760	108,688	123,410	141,789	161,453
Excise taxes.....	16,963	4,473	17,548	18,376	18,395	18,455
Estate and gift taxes.....	5,216	1,455	7,327	5,285	5,686	6,011
Customs duties.....	4,074	1,212	5,150	6,573	7,517	8,447
Miscellaneous receipts:						
Deposits of earnings by Federal Reserve System.....	5,451	1,500	5,908	6,641	7,600	8,600
All other.....	2,575	112	622	772	1,093	1,278
<b>BUDGET OUTLAYS</b> .....	366,439	94,729	402,725	450,836	493,368	531,566
National defense.....	89,430	22,307	97,501	105,186	114,503	125,830
International affairs.....	5,552	2,193	4,813	5,922	7,312	8,213
General science, space, and technology.....	4,370	1,161	4,677	4,742	5,226	5,457
Energy.....	3,127	794	4,172	5,861	8,630	7,878
Natural resources and environment.....	8,124	2,532	10,000	10,925	11,207	11,456
Agriculture.....	2,504	581	5,532	7,731	6,224	4,269
Commerce and housing credit.....	3,792	1,392	-44	3,325	2,968	3,390
Transportation.....	13,435	3,304	14,636	15,444	17,449	17,609
Community and regional development.....	4,709	1,340	6,286	11,000	9,063	7,281
Education, training, employment, and social services.....	18,737	5,162	20,985	26,463	30,656	30,210
Health.....	33,448	8,721	38,785	43,676	49,136	53,379
Income security.....	127,412	32,797	137,915	146,212	158,867	179,120
Veterans benefits and services.....	18,432	3,962	18,038	18,974	20,329	20,461
Administration of justice.....	3,320	859	3,600	3,802	4,351	4,388
General government.....	3,006	883	3,374	3,777	4,413	4,412
General purpose fiscal assistance.....	7,235	2,092	9,499	9,601	8,936	8,814
Interest.....	34,511	7,216	38,009	43,966	52,766	57,022
Allowances.....	-----	-----	-----	-----	-----	1,398
Undistributed offsetting receipts.....	-14,704	-2,567	-15,053	-15,772	-18,670	-19,021
Composition of undistributed offsetting receipts:						
Employer share, employee retirement.....	-4,242	-985	-4,548	-4,983	-5,388	-5,482
Interest received by trust funds.....	-7,800	-270	-8,131	-8,530	-9,782	-10,940
Rents and royalties on the Outer Continental Shelf.....	-2,662	-1,311	-2,374	-2,259	-3,500	-2,600

Note.—Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis. Beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis. The period July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

See "Budget of the United States Government, Fiscal Year 1980" for additional information.

Sources: Department of the Treasury and Office of Management and Budget.

TABLE B-71.—*Relation of Federal Government receipts and expenditures in the national income and product accounts to the unified budget, 1978-80*

[Billions of dollars; fiscal years]

Receipts and expenditures	1978	Estimate	
		1979	1980
<b>RECEIPTS</b>			
Total budget receipts.....	402.0	456.0	502.6
Government contribution for employee retirement (grossing).....	7.1	7.9	8.3
Other netting and grossing.....	3.0	3.5	6.3
Adjustment to accruals.....	2.8	-1.9	-2.0
Other.....	-1.0	-1.1	-1.3
Federal sector, national income and product accounts, receipts.....	413.8	464.3	513.8
<b>EXPENDITURES</b>			
Total budget outlays.....	450.8	493.4	531.6
Lending and financial transactions.....	-8.4	-5.2	-3.7
Government contribution for employee retirement (grossing).....	7.1	7.9	8.3
Other netting and grossing.....	3.0	3.5	6.3
Defense timing adjustment.....	2.7	1.5	1.8
Bonuses on Outer Continental Shelf land leases.....	1.2	2.2	1.1
Other.....	-5.8	-7.0	-6.2
Federal sector, national income and product accounts, expenditures....	450.6	496.3	539.2

Note.—See Note, Table B-69.

See Special Analysis B, "Special Analyses, Budget of the United States Government, Fiscal Year 1980" for description of these categories.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, and Office of Management and Budget.

TABLE B-72.—Government receipts and expenditures, national income and product accounts, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Total government			Federal Government			State and local government		
	Re-ceipts	Ex-pen-ditures	Sur-plus or deficit (-), national income and product accounts	Re-ceipts	Ex-pen-ditures	Sur-plus or deficit (-), national income and product accounts	Re-ceipts	Ex-pen-ditures	Sur-plus or deficit (-), national income and product accounts
1929.....	11.3	10.3	1.0	3.8	2.6	1.2	7.6	7.8	-0.2
1933.....	9.3	10.7	-1.4	2.7	4.0	-1.3	7.2	7.2	-1
1939.....	15.4	17.6	-2.2	6.7	8.9	-2.2	9.6	9.6	0
1940.....	17.7	18.4	-0.7	8.6	10.0	-1.3	10.0	9.3	.6
1941.....	25.0	29.8	-4.8	15.4	20.5	-5.1	10.4	9.1	1.3
1942.....	32.6	64.0	-31.4	22.9	56.1	-33.1	10.6	8.8	1.8
1943.....	49.2	93.3	-44.1	39.3	85.8	-46.6	10.9	8.4	2.5
1944.....	51.2	103.0	-51.8	41.0	95.5	-54.5	11.1	8.5	2.7
1945.....	53.2	92.7	-39.5	42.5	84.6	-42.1	11.6	9.0	2.6
1946.....	51.0	45.6	5.4	39.1	35.6	3.5	13.0	11.1	1.9
1947.....	56.9	42.5	14.4	43.2	29.8	13.4	15.4	14.4	1.0
1948.....	58.9	50.5	8.4	43.2	34.9	8.3	17.7	17.6	.1
1949.....	55.9	59.3	-3.4	38.7	41.3	-2.6	19.5	20.2	-0.7
1950.....	69.0	61.0	8.0	50.0	40.8	9.2	21.3	22.5	-1.2
1951.....	85.2	79.2	6.1	64.3	57.8	6.5	23.4	23.9	-0.4
1952.....	90.1	93.9	-3.8	67.3	71.1	-3.7	25.4	25.5	-0.1
1953.....	94.6	101.6	-6.9	70.0	77.1	-7.1	27.4	27.3	.1
1954.....	89.9	97.0	-7.1	63.7	69.8	-6.0	29.0	30.2	-1.1
1955.....	101.1	98.0	3.1	72.6	68.1	4.4	31.7	32.9	-1.3
1956.....	109.7	104.5	5.2	78.0	71.9	6.1	35.0	35.9	-0.9
1957.....	116.2	115.3	.9	81.9	79.6	2.3	38.5	39.8	-1.4
1958.....	115.0	127.6	-12.6	78.7	88.9	-10.3	42.0	44.3	-2.4
1959.....	129.4	131.0	-1.6	89.8	91.0	-1.1	46.4	46.9	-0.4
1960.....	139.5	136.4	3.1	96.1	93.1	3.0	43.9	49.8	-5.9
1961.....	144.8	149.1	-4.3	98.1	101.9	-3.9	54.0	54.4	-0.4
1962.....	156.7	160.5	-3.8	106.2	110.4	-4.2	58.5	62.0	-3.5
1963.....	168.5	167.8	.7	114.4	114.2	.3	63.2	58.8	4.4
1964.....	174.0	176.3	-2.3	114.9	118.2	-3.3	69.5	68.5	1.0
1965.....	188.3	187.8	.5	124.3	123.8	.5	75.1	75.1	0
1966.....	212.3	213.6	-1.3	141.8	143.6	-1.8	84.8	84.3	.5
1967.....	228.2	242.4	-14.2	150.5	163.7	-13.2	93.6	94.7	-1.1
1968.....	263.4	268.9	-5.5	174.7	180.6	-5.8	107.2	106.9	.3
1969.....	296.3	285.6	10.7	197.0	188.4	8.5	119.7	117.6	2.1
1970.....	302.6	311.9	-9.4	192.1	204.2	-12.1	134.9	132.2	2.8
1971.....	322.2	340.5	-18.3	198.6	220.6	-22.0	152.6	148.9	3.7
1972.....	367.4	370.9	-3.5	227.5	244.7	-17.3	177.4	163.7	13.7
1973.....	411.2	404.9	6.3	258.3	265.0	-6.7	193.5	180.5	13.0
1974.....	455.1	458.2	-3.2	288.6	299.3	-10.7	210.4	202.8	7.6
1975.....	468.5	532.8	-64.4	286.2	356.8	-70.6	236.9	230.6	6.2
1976.....	537.2	570.4	-33.2	331.4	385.2	-53.8	266.9	246.3	20.7
1977.....	603.3	621.8	-18.6	374.5	422.6	-48.1	296.2	266.6	29.6
1978 p.....	682.7	684.2	-1.5	431.6	461.0	-29.4	327.7	299.8	27.8
1976: I.....	516.1	561.1	-44.9	318.6	376.3	-57.7	256.4	243.6	12.8
II.....	532.8	562.8	-29.9	329.4	375.8	-46.4	262.6	246.2	16.4
III.....	543.6	574.2	-30.6	335.5	387.5	-52.0	268.6	247.2	21.4
IV.....	556.4	583.5	-27.1	342.3	401.4	-59.1	280.2	248.2	32.0
1977: I.....	587.4	595.3	-7.8	366.6	403.9	-37.3	283.0	253.5	29.5
II.....	598.0	609.8	-11.8	371.4	411.7	-40.3	292.0	263.5	28.5
III.....	605.2	630.5	-25.2	374.3	430.7	-56.4	301.8	270.7	31.2
IV.....	622.3	651.9	-29.6	385.5	444.1	-58.6	307.9	278.9	29.0
1978: I.....	638.0	659.1	-21.1	396.2	448.8	-52.6	315.7	284.2	31.5
II.....	676.3	670.1	6.2	424.7	448.3	-23.6	327.4	297.7	29.8
III.....	693.3	692.7	.6	441.7	464.5	-22.8	329.2	305.8	23.4
IV p.....	.....	714.8	.....	.....	482.3	.....	.....	311.6	.....

Note.—Federal grants-in-aid to State and local governments are reflected in Federal expenditures and State and local receipts. Total government receipts and expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-73.—Federal Government receipts and expenditures, national income and product accounts 1952-80

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Receipts					Expenditures							Surplus or deficit (-), national income and product accounts
	Total	Personal tax and non-tax receipts	Corporate profits tax accruals	Indirect business tax and non-tax accruals	Contributions for social insurance	Total <sup>1</sup>	Purchases of goods and services	Transfer payments		Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises	
								To persons	To foreigners				
Fiscal year:													
1952	65.2	28.8	19.4	9.7	7.3	66.0	47.2	8.5	2.6	2.5	4.5	0.8	-0.8
1953	69.4	31.4	19.7	10.7	7.6	75.9	56.4	9.2	2.1	2.8	4.5	.9	-6.5
1954	65.8	30.3	17.3	10.4	7.8	74.3	53.9	10.5	1.7	2.9	4.6	.8	-8.5
1955	67.4	29.7	18.9	10.0	8.7	67.2	44.3	12.1	2.1	3.0	4.6	1.2	.2
1956	76.3	33.6	21.5	10.8	10.3	70.0	45.5	12.8	1.8	3.2	4.8	1.7	6.3
1957	81.0	36.7	20.8	11.7	11.7	76.0	48.1	14.4	1.9	3.7	5.3	2.6	5.0
1958	78.1	36.3	17.9	11.6	12.3	82.8	51.1	17.8	1.7	4.7	5.4	2.4	-4.7
1959	85.4	38.2	21.4	12.0	13.9	91.2	54.8	19.9	1.8	6.2	5.6	2.5	-5.8
1960	94.8	42.5	22.3	13.2	16.7	91.3	52.9	20.6	1.8	6.9	6.8	2.4	3.4
1961	95.0	43.6	20.0	13.3	18.1	98.1	55.8	23.6	2.1	6.9	6.4	3.3	-3.1
1962	104.0	47.3	22.7	14.2	19.9	106.2	61.0	25.1	2.1	7.6	6.4	4.1	-2.2
1963	110.0	49.6	23.3	15.0	22.1	111.7	63.7	26.5	2.1	8.3	7.1	4.0	-1.7
1964	115.6	50.7	25.7	15.6	23.6	117.2	65.9	27.4	2.2	9.8	7.7	4.1	-1.5
1965	120.0	51.4	27.1	16.9	24.5	118.5	64.6	28.4	2.2	10.9	8.2	4.3	1.4
1966	132.7	57.5	30.8	15.5	28.9	132.7	72.4	31.8	2.3	12.7	8.7	4.8	.0
1967	146.0	64.4	30.3	15.8	35.5	154.9	86.0	37.2	2.2	14.8	9.6	5.2	-8.9
1968	160.0	71.4	33.2	17.1	38.4	172.2	95.0	42.7	2.1	17.8	10.5	4.1	-12.2
1969	190.1	90.0	37.0	18.6	44.5	184.7	98.0	48.7	2.2	19.2	12.1	4.6	5.4
1970	194.9	93.6	33.0	19.2	49.2	195.6	97.0	55.0	2.0	22.6	13.6	5.4	-6
1971	192.5	87.5	32.0	20.0	52.9	212.7	94.8	67.7	2.3	26.8	14.2	6.8	-20.2
1972	213.5	100.3	34.2	19.9	59.1	232.9	100.9	76.1	2.8	32.6	14.1	6.4	-19.5
1973	240.5	107.3	41.0	20.7	71.5	256.2	101.7	87.1	2.7	40.4	15.9	9.1	-15.7
1974	271.8	122.6	43.7	21.4	84.2	278.8	104.6	101.7	3.0	41.6	19.8	8.0	-7.0
1975	283.5	127.1	42.1	22.2	92.1	328.7	118.0	131.2	3.1	48.4	21.9	5.7	-45.3
1976	313.9	136.9	51.9	24.2	100.9	371.5	126.2	153.5	3.0	57.5	25.2	6.2	-57.6
1977	365.3	165.9	58.8	24.5	116.1	412.0	140.7	166.4	3.2	66.2	28.4	7.0	-46.7
1978	413.8	186.3	67.2	27.2	133.1	450.6	151.1	178.4	3.4	74.6	33.7	9.4	-36.8
1979 <sup>2</sup>	464.3	206.6	76.9	29.0	151.8	496.3	166.0	196.6	3.6	78.2	41.6	10.3	-32.0
1980 <sup>2</sup>	513.8	236.4	78.2	30.4	168.8	539.2	178.2	222.5	3.9	78.9	45.2	10.5	-25.4
Calendar year:													
1952	67.3	31.0	18.6	10.3	7.4	71.1	52.4	8.8	2.1	2.6	4.5	.8	-3.7
1953	70.0	32.2	19.5	10.9	7.4	77.1	57.5	9.4	2.0	2.8	4.6	1.0	-7.1
1954	63.7	29.0	16.9	9.7	8.2	69.8	47.9	11.5	1.8	2.9	4.6	1.7	-6.0
1955	72.6	31.4	21.1	10.7	9.4	68.1	44.5	12.4	2.0	3.1	4.6	1.5	4.4
1956	78.0	35.2	20.9	11.2	10.6	71.9	45.9	13.4	1.9	3.3	5.1	2.4	6.1
1957	81.9	37.4	20.4	11.8	12.3	79.6	50.0	15.7	1.8	4.2	5.5	2.4	2.3
1958	78.7	36.8	18.0	11.5	12.4	88.9	53.9	19.6	1.8	5.6	5.2	2.8	-10.3
1959	89.8	39.9	22.5	12.5	14.9	91.0	53.9	20.1	1.8	6.8	6.2	2.1	-1.1
1960	96.1	43.6	21.4	13.4	17.6	93.1	53.7	21.6	1.9	6.5	6.8	2.6	3.0
1961	98.1	44.7	21.5	13.6	18.3	101.9	57.4	25.0	2.1	7.2	6.2	4.0	-3.9
1962	106.2	48.6	22.5	14.6	20.5	110.4	63.7	25.6	2.2	8.0	6.8	4.2	-4.2
1963	114.4	51.5	24.6	15.3	23.1	114.2	64.6	27.0	2.2	9.1	7.3	3.9	.3
1964	114.9	48.6	26.1	16.2	24.0	118.2	65.2	27.9	2.2	10.4	8.0	4.5	-3.3
1965	124.3	53.9	28.9	16.5	25.0	123.8	67.3	30.3	2.2	11.1	8.4	4.6	.5
1966	141.8	61.7	31.4	15.6	33.1	143.6	78.8	33.5	2.3	14.4	9.2	5.5	-1.8
1967	150.5	67.5	30.0	16.3	36.7	163.7	90.9	40.1	2.2	15.9	9.8	4.7	-13.2
1968	174.7	79.6	36.3	18.0	40.8	180.6	98.0	46.0	2.1	18.6	11.4	4.5	-5.8
1969	197.0	94.8	36.2	19.0	47.0	188.4	97.5	50.6	2.1	20.3	12.9	5.2	8.5
1970	192.1	92.2	30.8	19.3	49.7	204.2	95.6	61.3	2.2	24.4	14.3	6.3	-12.1
1971	198.6	89.9	33.5	20.4	54.9	220.6	96.2	72.7	2.6	29.0	14.0	6.2	-22.0
1972	227.5	108.2	36.6	20.0	62.8	244.7	102.1	80.5	2.7	37.5	14.6	7.8	-17.3
1973	258.3	114.6	43.0	21.2	79.4	265.0	102.2	93.2	2.6	40.6	18.2	8.2	-6.7
1974	288.6	131.1	45.9	21.7	89.9	299.3	111.1	114.4	3.2	43.9	20.9	5.3	-10.7
1975	286.2	125.4	42.8	23.9	94.2	356.8	123.1	146.0	3.1	54.6	23.2	6.8	-70.6
1976	331.4	146.8	54.8	23.4	106.4	385.2	129.9	158.4	3.2	61.1	26.8	5.8	-53.8
1977	374.5	169.4	61.3	25.0	118.7	422.6	145.1	169.5	3.2	67.4	29.1	8.3	-48.1
1978 <sup>p</sup>	431.6	193.2	71.7	27.9	138.7	461.0	154.0	181.8	3.5	76.6	35.5	9.6	-29.4
1977:													
I	366.6	168.3	58.4	24.4	115.5	403.9	138.3	165.6	3.0	62.1	28.1	6.7	-37.3
II	371.4	167.0	61.8	24.8	117.7	411.7	142.9	165.2	3.0	65.4	28.8	6.4	-40.3
III	374.3	167.6	62.0	25.4	119.3	430.7	146.8	172.0	3.7	70.9	28.9	8.4	-56.4
IV	385.5	174.8	62.9	25.6	122.2	444.1	152.2	175.0	3.4	71.1	30.7	11.8	-58.6
1978:													
I	396.2	176.8	59.6	26.5	133.3	448.8	151.5	176.9	3.3	73.9	33.2	10.0	-52.6
II	424.7	186.7	72.6	27.9	137.6	448.3	147.2	177.0	3.7	75.9	34.6	10.0	-23.6
III	441.7	199.7	73.6	28.2	140.1	464.5	154.0	185.5	3.4	77.5	36.3	8.0	-22.8
IV <sup>p</sup>	209.7			29.0	144.0	482.3	163.4	187.8	3.6	79.1	37.9	10.5	

<sup>1</sup> Includes an item for the difference between wage accruals and disbursements, not shown separately.

<sup>2</sup> Estimates.

Sources: Department of Commerce (Bureau of Economic Analysis) and Office of Management and Budget.

TABLE B-74.—State and local government receipts and expenditures, national income and product accounts, 1946-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Receipts						Expenditures					Surplus or deficit (-), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Federal grants-in-aid	Total <sup>1</sup>	Purchases of goods and services	Transfer payments to persons	Net interest paid	Subsidies less current surplus of government enterprises	
1946.....	13.0	1.5	0.5	9.3	0.6	1.1	11.1	9.9	1.7	0.2	-0.7	1.9
1947.....	15.4	1.7	.6	10.7	.7	1.7	14.4	12.8	2.3	.1	-.8	1.0
1948.....	17.7	2.1	.7	12.2	.8	2.0	17.6	15.3	3.0	.1	-.8	1.1
1949.....	19.5	2.4	.6	13.3	.9	2.2	20.2	18.0	3.0	.1	-.9	-.7
1950.....	21.3	2.5	.8	14.6	1.1	2.3	22.5	19.8	3.6	.1	-.9	-1.2
1951.....	23.4	2.8	.9	15.9	1.4	2.5	23.9	21.8	3.1	.0	-1.0	-.4
1952.....	25.4	3.0	.8	17.4	1.6	2.6	25.5	23.2	3.3	.0	-1.1	-.0
1953.....	27.4	3.2	.8	18.8	1.7	2.8	27.3	25.0	3.5	.0	-1.2	.1
1954.....	29.0	3.5	.8	19.9	2.0	2.9	30.2	27.8	3.6	.1	-1.3	-1.1
1955.....	31.7	3.9	1.0	21.6	2.1	3.1	32.9	30.6	3.8	.1	-1.5	-1.3
1956.....	35.0	4.5	1.0	23.8	2.3	3.3	35.9	33.5	3.9	.1	-1.6	-.9
1957.....	38.5	5.0	1.0	25.7	2.6	4.2	39.8	37.1	4.3	.1	-1.7	-1.4
1958.....	42.0	5.4	1.0	27.2	2.8	5.6	44.3	41.1	4.8	.1	-1.7	-2.4
1959.....	46.4	6.1	1.2	29.3	3.1	6.8	46.9	43.7	5.1	.1	-2.0	-.4
1960.....	49.9	6.7	1.2	32.0	3.4	6.5	49.8	46.5	5.4	.1	-2.2	.1
1961.....	54.0	7.4	1.3	34.4	3.7	7.2	54.4	50.8	5.8	.1	-2.3	-.4
1962.....	58.5	8.2	1.5	37.0	3.9	8.0	58.0	54.3	6.0	.1	-2.5	.5
1963.....	63.2	8.8	1.7	39.4	4.2	9.1	62.8	59.0	6.4	.1	-2.8	.5
1964.....	69.5	10.0	1.8	42.6	4.7	10.4	68.5	64.6	6.9	-.1	-2.8	1.0
1965.....	75.1	10.9	2.0	46.1	5.0	11.1	75.1	71.1	7.3	-.3	-3.0	-.0
1966.....	84.8	12.8	2.2	49.7	5.7	14.4	84.3	79.8	8.1	-.7	-3.0	.5
1967.....	93.6	14.6	2.5	54.0	6.7	15.9	94.7	89.3	9.4	-.9	-3.1	-1.1
1968.....	107.2	17.4	3.1	60.8	7.2	18.6	106.9	100.7	10.6	-1.2	-3.2	.3
1969.....	119.7	20.6	3.4	67.4	7.9	20.3	117.6	110.4	12.1	-1.6	-3.3	2.1
1970.....	134.9	23.1	3.7	74.7	9.0	24.4	132.2	123.2	14.6	-2.0	-3.6	2.8
1971.....	152.6	26.4	4.2	83.1	9.9	29.0	148.9	137.5	17.2	-1.8	-3.8	3.7
1972.....	177.4	33.0	5.0	91.0	10.8	37.5	163.7	151.0	18.9	-2.1	-4.2	13.7
1973.....	193.5	36.1	5.7	99.0	12.1	40.6	180.5	167.3	20.3	-2.9	-4.4	13.0
1974.....	210.4	39.2	6.5	106.9	13.9	43.9	202.8	191.5	20.5	-4.9	-4.3	7.6
1975.....	236.9	43.4	7.1	115.4	16.4	54.6	230.6	215.4	24.5	-4.8	-4.5	6.2
1976.....	266.9	49.7	9.4	128.0	18.7	61.1	246.3	229.6	27.2	-5.4	-5.1	20.7
1977.....	296.2	56.6	10.5	140.0	21.7	67.4	266.6	248.9	29.7	-6.5	-5.6	29.6
1978.....	327.7	62.9	12.3	150.3	25.5	76.6	299.8	280.2	33.5	-7.9	-5.9	27.8
1976: I.....	256.4	46.7	9.1	123.7	18.0	58.8	243.6	226.9	26.4	-4.9	-4.9	12.8
II.....	262.6	48.7	9.6	126.6	18.5	59.2	246.2	229.4	26.9	-5.2	-4.9	16.4
III.....	268.6	50.3	9.5	129.2	19.0	60.5	247.2	230.5	27.5	-5.7	-5.1	21.4
IV.....	280.2	52.9	9.3	132.4	19.5	66.1	248.2	231.7	28.0	-5.9	-5.5	32.0
1977: I.....	283.0	54.5	9.9	135.9	20.5	62.1	253.5	236.7	28.6	-6.2	-5.7	29.5
II.....	292.0	56.2	10.6	138.5	21.4	65.4	263.5	245.9	29.3	-6.4	-5.3	28.5
III.....	301.8	57.0	10.7	141.2	22.0	70.9	270.7	252.7	30.1	-6.5	-5.7	31.2
IV.....	307.9	58.5	10.9	144.6	22.8	71.1	278.9	260.3	30.9	-6.8	-5.5	29.0
1978: I.....	315.7	60.5	10.4	146.8	24.1	73.9	284.2	265.2	32.0	-7.1	-6.0	31.5
II.....	327.4	62.5	12.4	151.5	25.2	75.9	297.7	277.6	33.1	-7.3	-5.7	29.8
III.....	329.2	63.5	12.5	149.5	26.1	77.5	305.8	285.8	34.1	-8.2	-5.9	23.4
IV.....	.....	65.3	.....	153.3	26.7	79.1	311.6	292.2	34.6	-9.1	-6.1	.....

<sup>1</sup> Includes an item for the difference between wage accruals and disbursements, not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-75.—State and local government revenues and expenditures, selected fiscal years, 1927-77

[Millions of dollars]

Fiscal year <sup>1</sup>	General revenues by source <sup>2</sup>						General expenditures by function <sup>3</sup>					
	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corporation net income taxes	Revenue from Federal Government	All other <sup>4</sup>	Total	Edu- cation	High- ways	Public wel- fare	All other <sup>4</sup>
1927.....	7,271	4,730	470	70	92	116	1,793	7,210	2,235	1,809	151	3,015
1932.....	7,267	4,487	752	74	79	232	1,643	7,765	2,311	1,741	444	3,269
1934.....	7,678	4,076	1,008	80	49	1,016	1,449	7,181	1,831	1,509	889	2,952
1936.....	8,395	4,093	1,484	153	113	948	1,604	7,644	2,177	1,425	827	3,215
1938.....	9,228	4,440	1,794	218	165	800	1,811	8,757	2,491	1,650	1,069	3,547
1940.....	9,609	4,430	1,982	224	156	945	1,872	9,229	2,638	1,573	1,156	3,862
1942.....	10,418	4,537	2,351	276	272	858	2,123	9,190	2,586	1,490	1,225	3,889
1944.....	10,908	4,604	2,289	342	451	954	2,269	8,863	2,793	1,200	1,133	3,737
1946.....	12,356	4,986	2,986	422	447	855	2,661	11,028	3,356	1,672	1,409	4,591
1948.....	17,250	6,126	4,442	543	592	1,861	3,685	17,684	5,379	3,036	2,099	7,170
1950.....	20,911	7,349	5,154	788	593	2,486	4,541	22,787	7,177	3,803	2,940	8,867
1952.....	25,181	8,652	6,357	998	846	2,566	5,763	26,098	8,318	4,650	2,788	10,342
1953.....	27,307	9,375	6,927	1,065	817	2,870	6,252	27,910	9,390	4,987	2,914	10,619
1954.....	29,012	9,967	7,276	1,127	778	2,966	6,897	30,701	10,557	5,527	3,060	11,557
1955.....	31,073	10,735	7,643	1,237	744	3,131	7,584	33,724	11,907	6,452	3,168	12,197
1956.....	34,667	11,749	8,691	1,538	890	3,335	8,465	36,711	13,220	6,953	3,139	13,399
1957.....	38,164	12,864	9,467	1,754	984	3,843	9,250	40,375	14,134	7,816	3,485	14,940
1958.....	41,219	14,047	9,829	1,759	1,018	4,865	9,699	44,851	15,919	8,567	3,818	16,547
1959.....	45,306	14,983	10,437	1,994	1,001	6,377	10,516	48,887	17,283	9,592	4,136	17,876
1960.....	50,505	16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,325
1961.....	54,037	18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,063
1962.....	58,252	19,054	13,494	3,037	1,308	7,871	13,489	60,206	22,216	10,357	5,084	22,549
1963.....	62,890	20,089	14,456	3,269	1,505	8,722	14,850	64,816	23,776	11,136	5,481	24,423
1962-63 <sup>5</sup>	62,269	19,833	14,446	3,267	1,505	8,663	14,556	63,977	23,729	11,150	5,420	23,678
1963-64 <sup>5</sup>	68,443	21,241	15,762	3,791	1,695	10,002	15,951	69,302	26,286	11,664	5,766	25,586
1964-65 <sup>5</sup>	74,000	22,583	17,118	4,090	1,929	11,029	17,250	74,546	28,563	12,221	6,315	27,447
1965-66 <sup>5</sup>	83,036	24,670	19,085	4,760	2,038	13,214	19,269	82,843	33,287	12,770	6,757	30,029
1966-67 <sup>5</sup>	91,197	26,047	20,530	5,826	2,227	15,370	21,197	93,350	37,919	13,932	8,218	33,281
1967-68 <sup>5</sup>	101,264	27,747	22,911	7,308	2,518	17,181	23,598	102,411	41,158	14,481	9,857	36,915
1968-69 <sup>5</sup>	114,550	30,673	26,519	8,908	3,180	19,153	26,118	116,728	47,238	15,417	12,110	41,963
1969-70 <sup>5</sup>	130,756	34,054	30,322	10,812	3,738	21,857	29,971	131,332	52,718	16,427	14,679	47,508
1970-71 <sup>5</sup>	144,927	37,852	33,233	11,900	3,424	26,146	32,374	150,674	59,413	18,095	18,226	54,940
1971-72 <sup>5</sup>	166,352	42,133	37,488	15,237	4,416	31,253	35,826	166,873	64,886	19,010	21,070	61,907
1972-73 <sup>5</sup>	190,214	45,283	42,047	17,994	5,425	39,256	40,210	181,227	69,714	18,615	23,582	69,316
1973-74 <sup>5</sup>	207,670	47,705	46,098	19,491	6,015	41,820	46,541	198,959	75,833	19,946	25,085	78,096
1974-75 <sup>5</sup>	228,171	51,491	49,815	21,454	6,642	47,034	51,735	230,721	87,858	22,528	28,155	92,180
1975-76 <sup>5</sup>	256,176	57,001	54,547	24,575	7,273	55,589	57,191	256,731	97,216	23,907	32,604	103,004
1976-77 <sup>5</sup>	285,796	62,535	60,595	29,245	9,174	62,575	61,673	274,388	102,805	23,105	35,941	112,537

<sup>1</sup> Fiscal years not the same for all governments. See footnote 5.<sup>2</sup> Excludes revenues or expenditures of publicly owned utilities and liquor stores, and of insurance-trust activities. Intergovernmental receipts and payments between State and local governments are also excluded.<sup>3</sup> Includes licenses and other taxes and charges and miscellaneous revenues.<sup>4</sup> Includes expenditures for health, hospitals, police, local fire protection, natural resources, sanitation, housing and urban renewal, local parks and recreation, general control, financial administration, interest on general debt, and unallocable expenditures.<sup>5</sup> Data for fiscal year ending in the 12-month period through June 30. Data for 1963 and earlier years include local government amounts grouped in terms of fiscal years ended during the particular calendar year.

Note.—Data are not available for intervening years.

Source: Department of Commerce, Bureau of the Census.

TABLE B-76.—Interest-bearing public debt securities by kind of obligation, 1967-78

(Millions of dollars)

End of year or month	Total interest-bearing public debt securities	Marketable				Nonmarketable				
		Total	Bills	Treasury notes	Treasury bonds <sup>1</sup>	Total	U.S. savings bonds	Foreign government series <sup>2</sup>	Government account series <sup>3</sup>	Other <sup>4</sup>
<b>Fiscal year:</b>										
1967	322,286	210,672	58,535	49,108	97,418	111,614	51,213	1,514	56,155	2,731
1968	344,401	226,592	64,440	71,073	91,079	117,808	51,712	3,741	59,526	2,828
1969	351,729	226,107	68,356	78,946	78,805	125,623	51,711	4,070	66,790	3,051
1970	369,026	232,599	76,154	93,489	62,956	136,426	51,281	4,755	76,323	4,068
1971	396,289	245,473	86,677	104,807	53,989	150,816	53,003	9,270	82,784	5,759
1972	425,360	257,202	94,648	113,419	49,135	168,158	55,921	18,985	89,598	3,654
1973	456,353	262,971	100,061	117,840	45,071	193,382	59,418	28,524	101,738	3,701
1974	473,238	266,575	105,019	128,419	33,137	206,663	61,921	25,011	115,442	4,289
1975	532,122	315,606	128,569	150,257	36,779	216,516	65,482	23,216	124,173	3,644
1976	619,254	392,581	161,198	191,758	39,626	226,673	69,733	21,500	130,557	4,883
1977	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,797
1978	766,971	485,155	160,936	267,865	56,355	281,816	79,798	21,680	153,271	27,067
1977: Jan.	652,980	423,995	164,005	219,474	40,516	228,985	72,234	22,209	126,810	7,731
Feb.	662,320	431,607	164,175	225,856	41,576	230,714	72,640	22,069	127,770	8,235
Mar.	668,216	435,379	164,264	229,625	41,490	232,837	73,037	22,078	128,192	9,529
Apr.	668,509	434,065	161,977	230,655	41,433	234,444	73,457	21,903	128,992	10,092
May	670,958	431,447	157,931	230,230	43,286	239,511	73,908	21,831	133,029	10,743
June	673,389	431,149	155,064	232,885	43,200	242,240	74,282	21,732	134,754	11,473
July	671,386	430,248	154,227	231,371	44,650	241,138	74,803	21,545	132,447	12,342
Aug.	684,081	438,146	154,283	238,084	45,778	245,935	75,059	21,370	136,329	13,176
Sept.	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,797
Oct.	696,301	447,435	156,174	245,587	45,674	248,866	75,816	21,123	136,890	15,039
Nov.	706,973	454,862	156,656	251,104	47,102	252,111	76,224	21,665	138,580	15,642
Dec.	715,227	459,927	161,081	251,800	47,045	255,300	76,602	22,187	139,774	16,737
1978: Jan.	720,563	466,780	161,221	257,077	48,483	253,783	76,987	22,787	136,364	17,644
Feb.	728,474	470,766	161,817	258,472	50,477	257,707	77,415	22,597	139,422	18,273
Mar.	736,929	478,252	165,652	262,179	50,420	258,677	77,804	23,649	137,956	19,267
Apr.	733,074	472,193	159,640	262,180	50,373	260,881	78,220	23,433	138,833	20,395
May	740,579	473,684	159,391	261,612	52,681	266,895	78,645	22,419	144,394	21,436
June	748,002	477,699	159,757	265,310	52,632	270,303	78,965	21,460	146,448	23,439
July	749,462	481,041	160,092	266,586	54,363	268,420	79,281	20,813	144,665	23,660
Aug.	763,404	485,557	160,615	268,531	56,410	277,847	79,543	22,224	149,047	27,032
Sept.	766,971	485,155	160,936	267,865	56,355	281,816	79,758	21,680	153,271	27,067
Oct.	775,452	491,651	161,227	272,610	57,814	283,801	80,091	24,042	152,685	26,983
Nov.	782,048	493,337	161,548	271,663	60,125	288,711	80,331	26,624	154,812	26,944
Dec.	782,371*	487,546	161,747	265,791	60,007	294,825	80,546	29,593	157,522	27,164

<sup>1</sup> Includes Treasury bonds and minor amounts of Panama Canal and postal savings bonds.

<sup>2</sup> Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series and foreign-currency-series issues.

<sup>3</sup> Includes Treasury deposit funds and some special issues formerly included in "Other."

<sup>4</sup> Includes depository bonds, retirement plan bonds, Rural Electrification Administration bonds, State and local bonds, and special issues held only by U.S. Government agencies and trust funds and the Federal home loan banks.

\* Includes \$5,610 million in certificates not shown separately.

Note.—Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning October 1976 (fiscal year 1977) the fiscal year is on an October 1-September 30 basis.

Source: Department of the Treasury.

TABLE B-77.—Estimated ownership of public debt securities, 1967-78

[Par values;<sup>1</sup> billions of dollars]

End of year or month	Total public debt securities									
	Total <sup>2</sup>	Held by Government accounts	Held by Federal Reserve Banks	Held by private investors						
				Total <sup>3</sup>	Com- mercial banks <sup>4</sup>	Mutual savings banks and in- sur- ance com- panies	Corpo- rations <sup>5</sup>	State and local govern- ments <sup>6</sup>	Indi- viduals <sup>7</sup>	Miscel- laneous inves- tors <sup>8, 9</sup>
Fiscal year:										
1967.....	322.9	71.8	46.7	204.4	55.5	13.2	11.0	23.6	70.4	30.7
1968.....	345.4	76.1	52.2	217.0	59.7	12.5	12.0	25.1	74.2	33.4
1969.....	352.9	84.8	54.1	214.0	55.3	11.6	11.1	26.4	77.3	32.3
1970.....	370.1	95.2	57.7	217.2	52.6	10.4	8.5	29.0	81.8	35.0
1971.....	397.3	102.9	65.5	228.9	61.0	10.3	7.4	25.9	75.4	49.1
1972.....	426.4	111.5	71.4	243.6	60.9	10.2	9.3	26.9	73.2	63.2
1973.....	457.3	123.4	75.0	258.9	58.8	9.6	9.8	28.8	75.9	76.0
1974.....	474.2	138.2	80.5	255.6	53.2	8.5	10.8	28.3	80.7	74.2
1975.....	533.2	145.3	84.7	303.2	69.0	10.6	13.2	31.7	87.1	91.5
1976.....	620.4	149.6	94.4	376.4	92.5	16.0	24.3	39.3	96.4	107.9
1977.....	698.8	155.5	104.7	438.6	99.8	20.5	23.3	53.0	103.9	138.1
1978.....	771.5	168.0	115.3	488.3	95.3	20.5	21.5	67.8	109.3	173.9
1977: Jan.....	653.9	144.1	94.1	415.7	102.4	18.6	29.7	44.8	101.0	119.2
Feb.....	663.3	144.4	95.8	423.1	104.4	18.8	31.0	43.3	101.5	124.1
Mar.....	669.2	144.9	96.0	428.3	104.9	18.9	29.2	44.4	101.9	129.0
Apr.....	671.0	145.5	99.8	425.7	104.1	18.9	29.2	48.4	102.2	122.9
May.....	672.1	149.4	97.4	425.3	102.6	19.0	27.6	49.1	102.7	124.3
June.....	674.4	151.2	102.2	421.0	102.8	19.0	24.3	47.6	103.0	124.3
July.....	673.9	148.7	98.6	426.5	100.7	19.4	23.5	47.9	103.4	131.6
Aug.....	685.2	151.9	98.4	434.9	100.4	20.2	25.0	52.1	103.7	133.5
Sept.....	698.8	155.5	104.7	438.6	99.8	20.5	23.3	53.0	103.9	138.1
Oct.....	697.4	152.2	94.6	450.6	99.7	20.6	23.2	54.0	104.4	148.7
Nov.....	708.0	153.9	96.5	457.6	100.6	20.9	22.8	55.3	104.9	153.1
Dec.....	718.9	154.8	102.8	461.3	101.4	21.0	22.7	55.2	105.3	155.7
1978: Jan.....	721.6	151.5	97.0	473.1	100.9	20.9	23.4	56.7	106.1	165.1
Feb.....	729.8	154.2	98.5	477.1	102.2	20.8	22.3	58.6	106.6	166.6
Mar.....	738.0	152.7	101.6	483.7	101.1	20.6	20.8	61.2	106.9	173.1
Apr.....	736.6	153.6	103.5	479.5	100.7	20.4	19.9	61.2	107.1	170.2
May.....	741.6	159.1	102.8	479.7	98.4	20.5	19.7	60.2	107.7	173.2
June.....	749.0	161.1	110.1	477.8	98.5	20.2	19.0	62.7	108.1	169.3
July.....	750.5	159.3	108.9	482.3	97.7	20.6	20.0	61.7	108.5	173.9
Aug.....	764.4	163.7	111.7	489.0	95.8	20.6	22.4	69.2	108.9	172.1
Sept.....	771.5	168.0	115.3	488.3	95.3	20.5	21.5	67.8	109.3	173.9
Oct.....	776.4	166.3	115.3	494.7	94.3	20.7	21.0	67.1	109.8	181.8
Nov.....	783.0	167.4	113.3	502.3	93.5	20.4	20.9	69.1	110.2	188.2
Dec.....	789.2	170.0	110.6	508.6						

<sup>1</sup> U.S. savings bonds, series A-F and J, and U.S. savings notes are included at current redemption value.<sup>2</sup> As of July 31, 1974, public debt outstanding has been adjusted to exclude the notes of the International Monetary Fund to conform with the Budget presentation. This adjustment applies to the 1967-78 data in this table.<sup>3</sup> For comparability with 1975-78 published data, published data for 1967-74 have been adjusted to exclude notes of the International Monetary Fund. These adjustments amounted to \$3.3 billion in 1967, \$2.2 billion in 1968, and \$0.8 billion in each year 1969 through 1974. These adjustments were necessary in order to add to the total public debt figures as published by the Department of the Treasury.<sup>4</sup> Includes commercial banks, trust companies, and stock savings banks in the United States and Territories and island possessions; figures exclude securities held in trust departments. Since the estimates in this table are on the basis of par values and include holdings of banks in United States Territories and possessions, they do not agree with the estimates in Table B-60, which are based on book values and relate only to banks within the United States.<sup>5</sup> Exclusive of banks and insurance companies.<sup>6</sup> Includes trust, sinking, and investment funds of State and local governments and their agencies, and of Territories and possessions.<sup>7</sup> Includes partnerships and personal trust accounts.<sup>8</sup> Includes savings and loan associations, nonprofit institutions, corporate pension trust funds, dealers and brokers, certain government deposit accounts and government-sponsored agencies, and investments of foreign balances and international accounts in the United States.

Note.—Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis.

Source: Department of the Treasury.



TABLE B-78.—Average length and maturity distribution of marketable interest-bearing public debt securities held by private investors, 1967-78

End of year or month	Amount outstanding privately held	Maturity class					Average length	
		Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over	Years	Months
		Millions of dollars						
<b>Fiscal year:</b>								
1967.....	150,321	56,561	53,584	21,057	6,153	12,968	5	1
1968.....	159,671	66,746	52,295	21,850	6,110	12,670	4	5
1969.....	156,008	69,311	50,182	18,078	6,097	12,337	4	2
1970.....	157,910	76,443	57,035	8,286	7,876	8,272	3	8
1971.....	161,863	74,803	58,557	14,503	6,357	7,645	3	6
1972.....	165,978	79,509	57,157	16,033	6,358	6,922	3	3
1973.....	167,869	84,041	54,139	16,385	8,741	4,564	3	1
1974.....	164,862	87,150	50,103	14,197	9,930	3,481	2	11
1975.....	210,382	115,677	65,852	15,385	8,857	4,611	2	8
1976.....	279,782	151,723	89,151	24,169	8,087	6,652	2	7
1977.....	326,674	161,329	113,319	33,067	8,428	10,531	2	11
1978.....	356,501	163,819	132,993	33,500	11,383	14,805	3	3
1977: Jan.....	313,497	162,633	101,626	33,688	7,342	8,208	2	9
Feb.....	319,982	165,942	106,685	31,204	7,291	8,860	2	9
Mar.....	323,604	166,427	109,983	31,155	7,236	8,803	2	9
Apr.....	318,699	162,419	106,929	33,469	7,172	8,709	2	9
May.....	318,619	162,211	106,823	32,658	7,180	9,746	2	11
June.....	313,485	157,353	107,000	32,442	7,092	9,598	2	10
July.....	316,177	160,332	105,255	32,521	8,440	9,628	2	10
Aug.....	325,001	161,932	110,681	33,260	8,512	10,616	3	0
Sept.....	326,674	161,329	113,319	33,067	8,428	10,531	2	11
Oct.....	338,290	167,699	115,744	35,913	8,406	10,529	2	10
Nov.....	343,870	169,552	121,346	32,858	8,364	11,750	3	0
Dec.....	343,019	171,376	118,975	32,729	8,293	11,646	2	11
1978: Jan.....	355,374	177,642	123,692	32,712	9,733	11,595	2	11
Feb.....	358,320	175,195	130,715	29,853	9,719	12,838	3	0
Mar.....	362,693	178,474	132,501	29,414	9,635	12,669	2	11
Apr.....	355,144	170,272	130,884	31,816	9,571	12,601	3	0
May.....	356,892	166,094	135,524	31,758	9,847	13,668	3	1
June.....	353,660	162,533	137,543	30,458	9,766	13,360	3	1
July.....	358,255	163,619	139,017	30,573	11,512	13,533	3	1
Aug.....	359,919	163,512	136,462	33,603	11,407	14,936	3	3
Sept.....	356,501	163,819	132,993	33,500	11,383	14,805	3	3
Oct.....	362,443	165,337	136,064	33,476	12,746	14,820	3	2
Nov.....	367,256	170,492	133,876	33,695	13,879	15,314	3	4
Dec.....	365,239	174,231	128,293	33,604	13,833	15,278	3	4

Note.—All issues classified to final maturity.

Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis, beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis.

Source: Department of the Treasury.

# CORPORATE PROFITS AND FINANCE

TABLE B-79.—*Corporate profits by industry, 1929-78*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment										Rest of the world
	Total	Domestic industries								Total	
		Total	Financial <sup>1</sup>			Nonfinancial					
			Total	Federal Reserve banks	Other	Total	Manufacturing <sup>2</sup>	Wholesale and retail trade	Utilities <sup>3</sup>		
1929.....	10.5	10.2	1.3	0.0	1.3	8.9	5.2	1.0	1.8	0.9	0.2
1933.....	-1.2	-1.2	.3	.0	.3	-1.5	-.4	-.5	.0	-.7	.0
1939.....	6.3	6.1	.8	.0	.8	5.3	3.3	.7	1.0	.3	.2
1940.....	9.8	9.6	1.0	.0	.9	8.6	5.5	1.2	1.3	.6	.2
1941.....	15.2	15.0	1.1	.0	1.0	14.0	9.5	1.4	2.0	1.1	.2
1942.....	20.3	20.1	1.2	.0	1.2	18.9	11.8	2.2	3.4	1.5	.2
1943.....	24.4	24.1	1.3	.0	1.3	22.8	13.8	3.0	4.4	1.6	.2
1944.....	23.8	23.5	1.6	.1	1.6	21.9	13.2	3.2	3.9	1.6	.3
1945.....	19.2	18.9	1.7	.1	1.6	17.3	9.7	3.3	2.7	1.5	.2
1946.....	19.3	18.9	2.1	.1	2.0	16.8	9.0	3.8	1.8	2.1	.4
1947.....	25.6	24.9	1.7	.1	1.6	23.2	13.6	4.6	2.2	2.9	.7
1948.....	33.0	32.2	2.6	.2	2.3	29.6	17.6	5.5	3.0	3.6	.8
1949.....	30.8	29.9	3.1	.2	2.9	26.8	16.2	4.5	3.0	3.1	.8
1950.....	37.6	36.7	3.1	.2	3.0	33.5	20.9	5.0	4.0	3.6	1.0
1951.....	42.7	41.5	3.6	.3	3.3	37.9	24.6	5.0	4.6	3.7	1.2
1952.....	39.8	38.7	4.0	.4	3.7	34.7	21.7	4.8	4.9	3.3	1.1
1953.....	39.5	38.4	4.5	.4	4.1	33.9	22.0	3.8	5.0	3.1	1.1
1954.....	37.8	36.4	4.6	.3	4.3	31.8	19.9	3.8	4.7	3.4	1.4
1955.....	46.7	45.1	4.8	.3	4.5	40.3	26.0	5.0	5.6	3.6	1.6
1956.....	45.9	44.1	5.0	.5	4.5	39.1	24.7	4.5	5.9	4.1	1.8
1957.....	45.4	43.5	5.2	.6	4.6	38.3	24.0	4.4	5.8	4.0	1.9
1958.....	40.8	39.1	5.7	.6	5.1	33.5	19.4	4.6	5.9	3.6	1.7
1959.....	51.2	49.4	6.8	.7	6.0	42.6	26.2	5.9	7.0	3.5	1.8
1960.....	48.9	47.0	7.2	1.0	6.2	39.8	23.9	4.9	7.4	3.5	1.9
1961.....	48.7	46.3	7.0	.8	6.3	39.3	23.0	4.9	7.8	3.6	2.3
1962.....	53.7	51.1	7.3	.9	6.4	43.8	26.0	5.7	8.4	3.8	2.6
1963.....	57.6	54.9	6.8	1.0	5.8	48.1	28.7	5.9	9.3	4.2	2.6
1964.....	64.2	61.0	6.9	1.1	5.8	54.1	31.9	7.4	9.9	4.9	3.1
1965.....	73.3	70.1	7.5	1.4	6.2	62.5	38.3	7.9	11.0	5.3	3.3
1966.....	78.6	75.9	8.5	1.7	6.8	67.4	41.6	8.0	11.8	6.0	2.8
1967.....	75.6	72.6	9.0	2.0	7.0	63.6	37.9	8.9	10.7	6.1	3.0
1968.....	82.1	78.9	10.4	2.5	7.9	68.5	41.2	10.1	10.7	6.5	3.2
1969.....	77.9	74.2	11.3	3.1	8.2	62.9	36.8	10.1	10.2	5.8	3.7
1970.....	66.4	62.6	12.6	3.6	9.0	50.1	27.1	9.4	8.2	5.3	3.8
1971.....	76.9	72.4	14.1	3.3	10.8	58.2	32.4	11.7	8.3	5.8	4.6
1972.....	89.6	84.7	15.4	3.4	12.1	69.3	40.6	13.3	9.0	6.4	4.8
1973.....	97.2	90.4	16.2	4.5	11.7	74.1	44.1	14.7	8.3	7.0	6.8
1974.....	86.5	76.9	14.4	5.7	8.7	62.5	36.6	12.9	5.6	7.4	9.6
1975.....	107.9	101.8	13.0	5.7	7.3	88.9	48.3	20.7	9.2	10.7	6.1
1976.....	141.4	133.2	17.5	6.0	11.6	115.6	65.6	24.0	13.7	12.4	8.2
1977.....	159.1	149.5	20.9	6.2	14.6	128.6	74.7	24.0	16.1	13.8	9.6
1978 <sup>p</sup> .....	178.1	168.1	25.4	7.6	17.8	142.8	84.7				10.0
1976: I.....	141.2	132.3	15.8	6.0	9.9	116.4	67.0	25.5	12.4	11.5	8.9
II.....	143.0	135.4	17.0	5.9	11.1	118.4	67.5	24.5	14.3	12.2	7.6
III.....	144.5	136.3	18.3	6.0	12.3	118.0	65.9	24.5	14.9	12.7	8.2
IV.....	137.0	128.7	19.1	6.1	13.0	109.7	61.9	21.4	13.3	13.0	8.2
1977: I.....	144.5	134.8	19.7	6.0	13.7	115.1	66.4	20.6	15.4	12.7	9.7
II.....	158.5	148.1	19.9	6.2	13.7	128.1	77.4	22.8	14.5	13.5	10.4
III.....	169.9	159.5	21.9	6.2	15.7	137.6	74.7	30.6	17.5	14.7	10.3
IV.....	163.5	155.6	21.9	6.4	15.5	133.7	80.2	22.1	17.1	14.3	7.9
1978: I.....	148.7	139.2	22.7	6.9	15.7	116.6	69.8	16.7	17.3	12.8	9.4
II.....	180.6	168.9	24.3	7.3	17.0	144.6	87.8	22.0	19.3	15.4	11.7
III.....	184.5	175.4	26.0	8.0	18.0	149.4	87.1	25.8	20.7	15.8	9.1

See next page for continuation of table.

TABLE B-79.—Corporate profits by industry, 1929-78—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

## Corporate profits before deduction of capital consumption allowances, with inventory valuation adjustment

Year or quarter	Domestic industries										Rest of the world
	Total	Financial <sup>1</sup>			Nonfinancial				Other		
		Total	Federal Reserve banks	Other	Total	Manufacturing <sup>2</sup>	Wholesale and retail trade	Utilities <sup>3</sup>			
1929.....	14.7	14.4	1.4	0.0	1.4	13.0	7.1	1.3	2.9	1.7	0.2
1933.....	2.6	2.6	.4	.0	.4	2.2	1.3	-.2	1.1	.0	.0
1939.....	10.1	9.9	.9	.0	.9	9.0	4.9	1.0	2.0	1.1	.2
1940.....	13.6	13.4	1.1	.0	1.1	12.3	7.2	1.5	2.3	1.4	.2
1941.....	19.5	19.3	1.2	.0	1.2	18.1	11.4	1.7	3.1	1.9	.2
1942.....	25.4	25.2	1.3	.0	1.3	23.9	14.2	2.6	4.8	2.2	.2
1943.....	29.7	29.5	1.4	.0	1.4	28.1	16.6	3.3	5.8	2.4	.2
1944.....	29.9	29.6	1.7	.1	1.6	27.9	16.5	3.5	5.5	2.4	.3
1945.....	25.5	25.3	1.7	.1	1.6	23.6	13.0	3.6	4.6	2.3	.2
1946.....	24.0	23.6	2.2	.1	2.1	21.4	11.2	4.2	3.0	2.9	.4
1947.....	31.4	30.7	1.8	.1	1.7	28.9	16.3	5.2	3.6	3.8	.7
1948.....	40.0	39.2	2.7	.2	2.5	36.5	20.8	6.2	4.7	4.8	.8
1949.....	38.7	37.9	3.3	.2	3.0	34.6	19.8	5.4	4.8	4.6	.8
1950.....	46.5	45.5	3.3	.2	3.1	42.2	24.9	6.0	6.1	5.2	1.0
1951.....	53.0	51.8	3.8	.3	3.5	48.0	29.1	6.2	7.1	5.6	1.2
1952.....	51.3	50.2	4.2	.4	3.9	46.0	26.9	6.1	7.6	5.4	1.1
1953.....	52.7	51.6	4.8	.4	4.4	46.8	28.3	5.1	8.1	5.3	1.1
1954.....	52.8	51.4	4.9	.3	4.6	46.5	27.1	5.2	8.2	5.9	1.4
1955.....	64.1	62.6	5.2	.3	4.8	57.4	34.3	6.7	9.8	6.6	1.6
1956.....	64.9	63.1	5.4	.5	4.9	57.7	33.6	6.3	10.3	7.4	1.8
1957.....	66.3	64.4	5.7	.6	5.0	58.7	33.9	6.5	10.5	7.8	1.9
1958.....	62.9	61.2	6.1	.6	5.5	55.0	29.8	6.6	10.9	7.6	1.7
1959.....	74.8	73.0	7.3	.7	6.5	65.7	37.1	8.0	12.5	8.0	1.8
1960.....	74.1	72.2	7.7	1.0	6.8	64.4	35.5	7.3	13.3	8.4	1.9
1961.....	75.3	72.9	7.8	.8	6.9	65.3	35.2	7.4	14.0	8.8	2.3
1962.....	84.2	81.5	8.0	.9	7.1	73.6	40.2	8.4	15.4	9.6	2.6
1963.....	90.0	87.4	7.6	1.0	6.6	79.8	43.9	8.7	16.8	10.4	2.6
1964.....	98.7	95.6	7.9	1.2	6.7	87.7	48.0	10.4	17.9	11.4	3.1
1965.....	110.8	107.5	8.5	1.4	7.2	99.0	55.9	11.1	19.6	12.3	3.3
1966.....	119.3	116.5	9.6	1.7	7.9	106.9	60.5	11.5	21.3	13.6	2.8
1967.....	119.7	116.7	10.2	2.0	8.2	106.5	58.7	12.7	21.0	14.1	3.0
1968.....	130.2	127.0	11.8	2.5	9.3	115.1	63.9	14.3	21.9	15.0	3.2
1969.....	130.9	127.2	13.0	3.1	9.9	114.2	61.5	14.9	22.4	15.4	3.7
1970.....	123.0	119.2	14.5	3.6	11.0	104.7	53.1	14.7	21.4	15.5	3.8
1971.....	137.8	133.3	16.3	3.4	13.0	116.9	59.8	17.5	23.2	16.4	4.6
1972.....	157.4	152.6	18.0	3.4	14.7	134.6	69.9	20.2	26.3	18.3	4.8
1973.....	170.9	164.1	19.5	4.5	14.9	144.6	75.0	22.1	27.4	20.2	6.8
1974.....	168.1	158.5	18.3	5.7	12.6	140.2	70.5	21.3	26.7	21.7	9.6
1975.....	197.2	191.1	17.3	5.7	11.6	173.8	85.2	29.9	32.3	26.4	6.1
1976.....	238.5	230.3	22.3	6.0	16.3	208.0	105.5	34.9	38.5	29.1	8.2
1977.....	265.1	255.5	26.0	6.2	19.8	229.5	118.6	36.2	42.9	31.8	9.6
1978 <sup>p</sup> .....	292.5	282.5	31.0	7.7	23.3	251.5	132.1	41.1	47.8	35.4	10.0
1976: I.....	235.1	226.2	20.4	6.0	14.4	205.8	105.7	35.8	36.4	27.9	8.9
II.....	238.9	231.3	21.7	5.9	15.8	209.6	106.6	35.3	38.9	28.8	7.6
III.....	242.6	234.4	23.1	6.0	17.1	211.3	106.3	35.7	39.9	29.5	8.2
IV.....	237.5	229.2	24.0	6.1	17.9	205.3	103.4	32.9	38.8	30.2	8.2
1977: I.....	246.5	236.8	24.7	6.0	18.7	212.1	108.7	32.4	40.9	30.2	9.7
II.....	263.5	253.1	25.1	6.2	18.8	228.0	120.7	34.8	41.1	31.4	10.4
III.....	277.5	267.1	27.1	6.2	20.9	240.0	119.4	43.0	44.8	32.8	10.3
IV.....	272.8	265.0	27.2	6.4	20.8	237.7	125.5	34.8	44.8	32.6	7.9
1978: I.....	260.0	250.6	28.1	7.0	21.1	222.5	116.0	29.8	45.3	31.4	9.4
II.....	294.0	282.2	29.8	7.3	22.5	252.4	134.8	35.5	47.7	34.4	11.7
III.....	299.9	290.8	31.6	8.0	23.6	259.2	134.9	39.7	49.5	35.0	9.1

<sup>1</sup> Consists of the following industries: Banking; credit agencies other than banks; security and commodity brokers, dealers, and services; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

<sup>2</sup> See Table B-80 for industry detail.

<sup>3</sup> Consists of transportation, communication, and electric, gas, and sanitary services.

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-80.—Corporate profits of manufacturing industries, 1929-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment												
	Total manufacturing	Nondurable goods					Durable goods						
		Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other	Total	Primary metal industries	Fabricated metal products	Machinery, except electrical	Electric and electronic equipment	Motor vehicles and equipment	Other
1929	5.2	2.6					2.6						
1933	— .4	.0					— .4						
1939	3.3	1.7					1.7						
1940	5.5	2.4					3.1						
1941	9.5	3.1					6.4						
1942	11.8	4.6					7.2						
1943	13.8	5.7					8.1						
1944	13.2	5.9					7.4						
1945	9.7	5.2					4.5						
1946	9.0	6.6					2.4						
1947	13.6	7.8					5.8						
1948	17.6	10.0	1.9	1.7	2.8	3.7	7.5	1.6	0.8	1.2	0.7	1.4	1.8
1949	16.2	8.1	1.6	1.8	1.9	2.8	8.1	1.5	.7	1.3	.8	2.1	1.7
1950	20.9	8.9	1.6	2.3	2.3	2.7	12.0	2.3	1.1	1.6	1.2	3.1	2.6
1951	24.6	11.4	1.4	2.8	2.7	4.4	13.2	3.1	1.3	2.3	1.3	2.4	2.8
1952	21.7	9.9	1.7	2.3	2.3	3.6	11.7	1.9	1.0	2.3	1.5	2.4	2.6
1953	22.0	10.1	1.8	2.2	2.8	3.3	11.9	2.5	1.0	1.9	1.4	2.6	2.6
1954	19.9	9.4	1.6	2.2	2.7	2.9	10.5	1.7	.9	1.7	1.2	2.1	2.9
1955	26.0	11.8	2.2	3.0	3.0	3.6	14.3	2.9	1.0	1.7	1.1	4.1	3.5
1956	24.7	11.9	1.8	2.8	3.3	4.1	12.8	3.0	1.1	2.1	1.2	2.2	3.2
1957	24.0	10.7	1.8	2.8	2.6	3.6	13.3	3.0	1.1	2.0	1.5	2.6	3.1
1958	19.4	10.0	2.1	2.5	2.1	3.3	9.3	1.9	.9	1.4	1.3	.9	2.9
1959	26.2	12.7	2.6	3.4	2.5	4.2	13.5	2.3	1.1	2.1	1.7	2.9	3.4
1960	23.9	11.9	2.1	3.1	2.5	4.2	12.0	2.1	.9	1.8	1.3	3.0	2.9
1961	23.0	11.7	2.3	3.1	2.2	4.0	11.3	1.5	1.0	1.8	1.3	2.5	3.1
1962	26.0	11.9	2.3	3.2	2.1	4.3	14.1	1.6	1.2	2.3	1.5	4.0	3.5
1963	28.7	12.8	2.7	3.6	2.1	4.5	15.9	1.9	1.2	2.4	1.5	4.9	3.9
1964	31.9	14.4	2.8	3.9	2.4	5.3	17.5	2.4	1.4	3.1	1.6	4.7	4.2
1965	38.3	15.8	2.6	4.5	2.8	5.8	22.6	3.1	2.0	3.8	2.5	6.1	5.0
1966	41.6	18.0	3.3	4.8	3.2	6.7	23.5	3.6	2.4	4.4	3.0	5.1	5.1
1967	37.9	17.3	3.1	4.2	3.8	6.2	20.6	2.7	2.4	4.0	2.9	3.9	4.7
1968	41.2	18.8	3.2	5.0	3.6	7.0	22.4	2.0	2.4	4.1	2.8	5.5	5.7
1969	36.8	17.7	2.9	4.6	3.3	6.9	19.2	1.4	2.0	3.6	2.2	4.8	5.2
1970	27.1	16.8	3.5	3.9	3.6	5.8	10.3	.9	1.2	2.7	1.1	1.4	3.0
1971	32.4	17.3	3.3	4.2	3.6	6.2	15.1	.5	1.3	2.7	1.8	4.9	3.8
1972	40.6	18.1	2.8	5.0	3.5	6.8	22.5	1.6	2.1	3.9	2.9	5.9	6.0
1973	44.1	20.1	2.2	5.8	4.9	7.2	24.0	2.0	2.6	4.5	2.6	5.8	6.6
1974	36.6	25.1	3.0	5.1	10.2	6.8	11.5	4.9	1.2	1.5	.3	.2	3.4
1975	48.3	30.1	7.9	5.8	8.1	8.2	18.3	2.9	2.9	4.3	2.1	1.7	4.3
1976	65.6	37.5	7.3	7.9	11.6	10.6	28.1	2.0	3.8	5.6	2.7	7.4	6.6
1977	74.7	39.6	5.7	8.2	12.8	12.9	35.1	1.8	4.0	7.1	3.9	9.5	8.8
1978 <sup>p</sup>	84.7	41.8					42.9						
1976: I	67.0	39.6	8.4	8.4	11.4	11.5	27.4	2.3	3.7	5.4	2.7	6.9	6.3
II	67.5	37.7	7.0	8.1	11.4	11.2	29.7	2.8	4.0	5.4	2.6	7.9	7.1
III	65.9	37.4	8.1	7.9	11.3	10.1	28.5	1.7	4.1	5.7	2.6	7.6	6.8
IV	61.9	35.0	5.8	7.3	12.4	9.6	26.9	1.0	3.6	6.0	2.7	7.1	6.4
1977: I	66.4	36.4	4.5	8.2	11.8	12.0	29.9	1.0	3.7	5.9	3.3	8.8	7.3
II	77.4	40.2	5.7	8.5	13.4	12.6	37.2	2.9	4.1	6.8	3.9	11.0	8.6
III	74.7	40.6	7.0	7.9	12.3	13.4	34.2	.9	3.9	7.3	4.1	9.2	8.7
IV	80.2	41.1	5.7	8.2	13.8	13.4	39.1	2.4	4.2	8.5	4.4	9.1	10.5
1978: I	69.8	37.0	4.3	8.1	10.4	14.3	32.8	1.2	3.2	6.4	4.3	7.9	9.7
II	87.8	41.7	5.4	8.3	14.4	13.7	46.1	5.1	4.3	9.2	4.8	10.8	11.9
III	87.1	42.5	6.6	8.2	14.6	13.2	44.6	5.0	4.7	7.4	5.8	10.2	11.7

See next page for continuation of table.

TABLE B-80.—Corporate profits of manufacturing industries, 1929-78—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits before deduction of capital consumption allowances, with inventory valuation adjustment												
	Total manufacturing	Nondurable goods					Durable goods						
		Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other	Total	Primary metal industries	Fabricated metal products	Machinery, except electrical	Electric and electronic equipment	Motor vehicles and equipment	Other
1929	7.1	3.6					3.4						
1933	1.3	1.1					.2						
1939	4.9	2.6					2.3						
1940	7.2	3.4					3.8						
1941	11.4	4.1					7.2						
1942	14.2	5.9					8.4						
1943	16.6	7.1					9.5						
1944	16.5	7.5					9.0						
1945	13.0	7.0					6.0						
1946	11.2	7.9					3.3						
1947	16.3	9.3					6.9						
1948	20.8	11.8	2.2	2.0	3.4	4.2	9.0	1.9	1.0	1.5	0.8	1.6	2.2
1949	19.8	10.1	2.0	2.1	2.6	3.4	9.7	1.9	.9	1.6	.9	2.3	2.1
1950	24.9	11.1	2.1	2.7	3.1	3.3	13.7	2.8	1.3	1.9	1.4	3.3	3.0
1951	29.1	13.9	2.0	3.2	3.6	5.1	15.3	3.6	1.5	2.6	1.5	2.7	3.3
1952	26.9	12.7	2.3	2.8	3.2	4.4	14.2	2.6	1.3	2.7	1.7	2.7	3.3
1953	28.3	13.2	2.3	2.8	3.9	4.1	15.0	3.5	1.2	2.3	1.6	3.0	3.3
1954	27.1	13.1	2.3	3.0	4.1	3.8	14.1	2.9	1.2	2.2	1.5	2.5	3.7
1955	34.3	16.0	2.9	3.9	4.6	4.6	18.3	4.2	1.4	2.3	1.5	4.6	4.4
1956	33.6	16.5	2.5	3.8	4.9	5.2	17.2	4.3	1.4	2.8	1.6	2.9	4.2
1957	33.9	15.7	2.6	3.8	4.4	4.9	18.2	4.5	1.5	2.7	2.0	3.3	4.2
1958	29.8	15.4	3.0	3.6	4.0	4.7	14.4	3.2	1.3	2.2	1.8	1.6	4.2
1959	37.1	18.4	3.6	4.6	4.5	5.7	18.7	3.6	1.5	2.9	2.2	3.7	4.8
1960	35.5	17.8	3.2	4.4	4.5	5.8	17.7	3.4	1.4	2.7	1.8	4.0	4.4
1961	35.2	18.0	3.4	4.5	4.3	5.7	17.2	2.9	1.5	2.8	1.9	3.5	4.6
1962	40.2	19.1	3.6	4.8	4.4	6.2	21.1	3.3	1.8	3.4	2.1	5.2	5.3
1963	43.9	20.5	4.0	5.3	4.7	6.5	23.3	3.7	1.9	3.5	2.2	6.3	5.7
1964	48.0	22.6	4.2	5.7	5.1	7.5	25.5	4.3	2.1	4.3	2.3	6.3	6.2
1965	55.9	24.4	4.0	6.5	5.8	8.1	31.4	5.1	2.7	5.2	3.3	8.0	7.1
1966	60.5	27.2	4.9	6.8	6.3	9.2	33.3	5.7	3.1	5.8	3.9	7.5	7.3
1967	58.7	27.1	4.7	6.3	7.2	8.9	31.6	5.0	3.3	5.7	3.9	6.4	7.3
1968	63.9	29.3	4.9	7.3	7.3	9.9	34.6	4.5	3.4	6.0	4.1	8.1	8.6
1969	61.5	29.2	4.8	7.1	7.1	10.2	32.3	4.0	3.0	5.7	3.7	7.5	8.4
1970	53.1	29.0	5.6	6.6	7.6	9.2	24.1	3.5	2.3	5.2	2.8	3.8	6.5
1971	59.8	30.4	5.5	7.1	7.9	9.9	29.4	3.1	2.4	5.4	3.7	7.3	7.5
1972	69.9	32.2	5.1	8.2	8.0	10.8	37.6	4.1	3.3	6.8	5.1	8.4	9.9
1973	75.0	35.1	4.8	9.0	9.7	11.6	39.9	4.7	3.8	7.6	4.9	8.3	10.6
1974	70.5	40.8	5.7	8.6	15.1	11.5	29.7	8.1	2.6	4.9	3.0	3.1	8.1
1975	85.2	47.2	10.9	9.7	13.3	13.3	38.0	6.3	4.5	7.9	5.0	4.8	9.5
1976	105.5	56.5	10.6	12.5	17.4	16.0	49.0	5.6	5.6	9.7	5.7	10.7	11.7
1977	118.6	60.9	9.3	13.5	19.3	18.8	57.7	5.8	5.9	11.5	7.3	12.9	14.3
1978 <sup>a</sup>	132.1	65.1					67.0						
1976: I	105.7	57.9	11.5	12.7	17.0	16.6	47.7	5.9	5.4	9.3	5.7	10.0	11.4
II	106.6	56.5	10.3	12.6	17.1	16.5	50.1	6.4	5.8	9.3	5.6	11.0	12.0
III	106.3	56.7	11.3	12.7	17.1	15.6	49.6	5.4	5.8	9.8	5.7	11.0	11.8
IV	103.4	54.8	9.1	12.1	18.4	15.2	48.6	4.8	5.4	10.2	5.9	10.8	11.5
1977: I	108.7	56.7	8.0	13.2	17.8	17.7	52.0	4.9	5.5	10.2	6.6	12.2	12.6
II	120.7	61.3	9.2	13.7	19.7	18.7	59.3	6.9	5.9	11.3	7.2	14.0	14.1
III	119.4	62.2	10.7	13.2	19.0	19.3	57.2	4.9	6.0	11.9	7.5	12.6	14.3
IV	125.5	63.2	9.4	13.7	20.5	19.5	62.4	6.5	6.2	12.9	8.0	12.6	16.1
1978: I	116.0	59.6	8.1	13.7	17.2	20.6	56.4	5.4	5.3	11.1	7.9	11.3	15.4
II	134.8	64.8	9.2	14.2	21.4	20.0	70.0	9.4	6.4	14.0	8.4	14.2	17.6
III	134.9	66.1	10.6	14.2	21.7	19.6	68.8	9.3	6.8	12.3	9.4	13.6	17.3

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-81.—Corporate profits with inventory valuation and capital consumption adjustments, 1946-78

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation and capital consumption adjustments	Corporate profits tax liability	Profits after tax with inventory valuation and capital consumption adjustments		
			Total	Dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1946	16.6	9.1	7.5	5.6	2.0
1947	22.2	11.3	10.9	6.3	4.6
1948	29.1	12.4	16.7	7.0	9.7
1949	26.9	10.2	16.7	7.2	9.5
1950	33.7	17.9	15.7	8.8	6.9
1951	38.1	22.6	15.5	8.5	7.0
1952	35.4	19.4	16.0	8.5	7.5
1953	35.5	20.3	15.2	8.8	6.4
1954	34.6	17.6	17.0	9.1	7.9
1955	44.6	22.0	22.6	10.3	12.2
1956	42.9	22.0	20.9	11.1	9.8
1957	42.1	21.4	20.6	11.5	9.1
1958	37.5	19.0	18.5	11.3	7.2
1959	48.2	23.6	24.6	12.2	12.4
1960	46.6	22.7	23.9	12.9	11.0
1961	46.9	22.8	24.1	13.3	10.8
1962	54.9	24.0	30.9	14.4	16.5
1963	59.6	26.2	33.4	15.5	17.9
1964	67.0	28.0	39.0	17.3	21.7
1965	77.1	30.9	46.2	19.1	27.1
1966	82.5	33.7	48.9	19.4	29.4
1967	79.3	32.5	46.8	20.1	26.7
1968	85.8	39.4	46.4	21.9	24.4
1969	81.4	39.7	41.8	22.6	19.2
1970	67.9	34.5	33.4	22.9	10.5
1971	77.2	37.7	39.5	23.0	16.5
1972	92.1	41.5	50.5	24.6	25.9
1973	99.1	48.7	50.4	27.8	22.6
1974	83.6	52.4	31.2	31.0	.2
1975	95.9	49.8	46.1	31.9	14.2
1976	127.0	64.3	62.7	37.9	24.8
1977	144.2	71.8	72.3	43.7	28.7
1978 <sup>a</sup>	160.0	84.1	76.0	49.3	26.7
1976: I	126.8	63.6	63.3	34.5	28.7
II	128.6	66.3	62.3	37.2	25.1
III	130.0	64.7	65.3	38.4	26.9
IV	122.5	62.4	60.1	41.4	18.7
1977: I	129.9	68.3	61.6	41.5	20.1
II	143.7	72.3	71.4	42.7	28.7
III	154.8	72.8	82.1	44.1	38.0
IV	148.2	73.9	74.3	46.3	28.0
1978: I	132.6	70.0	62.6	47.0	15.6
II	163.4	85.0	78.4	48.1	30.3
III	165.2	86.2	79.0	50.1	29.0

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-82.—Sales, profits, and stockholders' equity, all manufacturing corporations, 1947-78  
(Billions of dollars)

Year or quarter	All manufacturing corporations				Durable goods industries				Nondurable goods industries			
	Sales (net)	Profits		Stockholders' equity <sup>2</sup>	Sales (net)	Profits		Stockholders' equity <sup>2</sup>	Sales (net)	Profits		Stockholders' equity <sup>2</sup>
		Before income taxes <sup>1</sup>	After income taxes			Before income taxes <sup>1</sup>	After income taxes			Before income taxes <sup>1</sup>	After income taxes	
1947	150.7	16.6	10.1	65.1	66.6	7.6	4.5	31.1	84.1	9.0	5.6	34.0
1948	165.6	18.4	11.5	72.2	75.3	8.9	5.4	34.1	90.4	9.5	6.2	38.1
1949	154.9	14.4	9.0	77.6	70.3	7.5	4.5	37.0	84.6	7.0	4.6	40.6
1950	181.9	23.2	12.9	83.3	86.8	12.9	6.7	39.9	95.1	10.3	6.1	43.5
1951	245.0	27.4	11.9	98.3	116.8	15.4	6.1	47.2	128.1	12.1	5.7	51.1
1952	250.2	22.9	10.7	103.7	122.0	12.9	5.5	49.8	128.0	10.0	5.2	53.9
1953	265.9	24.4	11.3	108.2	137.9	14.0	5.8	52.4	128.0	10.4	5.5	55.7
1954	248.5	20.9	11.2	113.1	122.8	11.4	5.6	54.9	125.7	9.6	5.6	58.2
1955	278.4	28.6	15.1	120.1	142.1	16.5	8.1	58.8	136.3	12.1	7.0	61.3
1956	307.3	29.8	16.2	131.6	159.5	16.5	8.3	65.2	147.8	13.2	7.8	66.4
1957	320.0	28.2	15.4	141.1	166.0	15.8	7.9	70.5	154.1	12.4	7.5	70.6
1958	305.3	22.7	12.7	147.4	148.6	11.4	5.8	72.8	156.7	11.3	6.9	74.6
1959	338.0	29.7	16.3	157.1	169.4	15.8	8.1	77.9	168.5	13.9	8.3	79.2
1960	345.7	27.5	15.2	165.4	173.9	14.0	7.0	82.3	171.8	13.5	8.2	83.1
1961	356.4	27.5	15.3	172.6	175.2	13.6	6.9	84.9	181.2	13.9	8.5	87.7
1962	389.9	31.9	17.7	181.4	195.5	16.7	8.6	89.1	194.4	15.1	9.2	92.3
1963	412.7	34.9	19.5	189.7	209.0	18.5	9.5	93.3	203.6	16.4	10.0	96.3
1964	443.1	39.6	23.2	199.8	226.3	21.2	11.6	98.5	216.8	18.3	11.6	101.3
1965	492.2	46.5	27.5	211.7	257.0	26.2	14.5	105.4	235.2	20.3	13.0	106.3
1966	554.2	51.8	30.9	230.3	291.7	29.2	16.4	115.2	262.4	22.6	14.6	115.1
1967	575.4	47.8	29.0	247.6	300.6	25.7	14.6	125.0	274.8	22.0	14.4	122.6
1968	631.9	55.4	32.1	265.9	335.5	30.6	16.5	135.6	296.4	24.8	15.5	130.3
1969	694.6	58.1	33.2	289.9	366.5	31.5	16.9	147.6	328.1	26.6	16.4	142.3
1970	708.8	48.1	28.6	306.8	363.1	23.0	12.9	155.1	345.7	25.2	15.7	151.7
1971	751.4	53.2	31.3	320.9	382.5	26.5	14.5	160.6	368.9	26.7	16.7	160.3
1972	849.5	63.2	36.5	343.4	435.8	33.6	18.4	171.4	413.7	29.6	18.0	172.0
1973	1,017.2	81.4	48.1	374.1	527.3	43.6	24.8	188.7	489.9	37.8	23.3	185.4
1973: IV	275.1	21.4	13.0	386.4	140.1	10.8	6.3	194.7	135.0	10.6	6.7	191.7
New series:												
1974	1,060.6	92.1	58.7	395.0	529.0	41.1	24.7	196.0	531.6	51.0	34.1	199.0
1975	1,065.2	79.9	49.1	423.4	521.1	35.3	21.4	208.1	544.1	44.6	27.7	215.3
1976	1,203.2	104.9	64.5	462.7	589.6	50.7	30.8	224.3	613.7	54.3	33.7	238.4
1977	1,328.1	115.1	70.4	496.7	657.3	57.9	34.8	239.9	670.8	57.2	35.5	256.8
1973: IV	236.6	20.6	13.2	368.0	122.7	10.1	6.2	185.8	113.9	10.5	7.0	182.1
1974: I	242.0	21.2	13.5	379.0	120.3	9.5	5.7	189.4	121.7	11.7	7.8	189.6
II	269.4	25.9	16.3	389.9	136.8	12.6	7.6	194.1	132.6	13.3	8.7	195.8
III	272.1	25.0	15.5	402.7	134.8	10.5	6.2	199.9	137.3	14.5	9.4	202.8
IV	277.0	20.1	13.4	408.4	137.1	8.6	5.2	200.8	140.0	11.5	8.2	207.6
1975: I	247.1	15.4	9.3	410.7	121.3	7.0	4.1	201.7	125.8	8.4	5.2	209.0
II	265.8	20.2	12.4	420.2	132.4	9.3	5.7	207.3	133.3	10.9	6.8	212.9
III	271.0	21.7	13.2	427.4	131.0	9.1	5.5	209.7	140.0	12.7	7.7	217.6
IV	281.3	22.6	14.2	435.5	136.3	10.0	6.2	213.7	145.0	12.6	8.1	221.8
1976: I	284.2	24.5	14.8	446.5	137.8	11.3	6.7	216.7	146.3	13.2	8.1	229.8
II	307.6	29.3	18.1	460.1	153.7	14.8	9.0	223.4	153.9	14.5	9.1	236.7
III	301.6	26.2	16.0	468.9	146.2	12.2	7.4	227.1	155.4	14.0	8.6	241.7
IV	309.8	24.9	15.6	475.3	151.8	12.4	7.7	229.9	158.1	12.6	7.9	245.5
1977: I	311.5	25.6	15.6	479.8	151.2	12.5	7.5	230.8	160.3	13.0	8.1	249.1
II	338.6	32.4	19.7	492.9	169.5	16.9	10.2	238.4	169.1	15.5	9.5	254.5
III	331.7	27.3	16.7	502.4	163.8	13.0	7.8	243.1	167.9	14.3	8.9	259.3
IV	346.2	29.9	18.4	511.7	172.7	15.5	9.4	247.5	173.5	14.3	9.0	264.2
1978: I	340.4	26.9	16.1	519.3	169.1	13.6	7.9	251.1	171.3	13.3	8.1	268.2
II	377.9	36.1	22.2	534.1	194.1	19.9	12.0	259.9	183.8	16.2	10.2	274.2
III	377.1	33.5	20.4	548.8	188.7	17.1	10.3	267.7	188.5	16.4	10.1	281.1

<sup>1</sup> In the old series, "income taxes" refers to Federal income taxes only, as State and local income taxes had already been deducted. In the new series, no income taxes have been deducted.

<sup>2</sup> Annual data are average equity for the year (using four end-of-quarter figures).

Note.—Data are not necessarily comparable from one period to another due to changes in accounting procedures, industry classifications, sampling procedures, etc. For explanatory notes concerning compilation of the series, see "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations," Federal Trade Commission.

Source: Federal Trade Commission.

TABLE B-83.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947-78*

Year or quarter	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent <sup>1</sup>			Profits after income taxes per dollar of sales—cents		
	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1947.....	15.6	14.4	16.6	6.7	6.7	6.7
1948.....	16.0	15.7	16.2	7.0	7.1	6.8
1949.....	11.6	12.1	11.2	5.8	6.4	5.4
1950.....	15.4	16.9	14.1	7.1	7.7	6.5
1951.....	12.1	13.0	11.2	4.8	5.3	4.5
1952.....	10.3	11.1	9.7	4.3	4.5	4.1
1953.....	10.5	11.1	9.9	4.3	4.2	4.3
1954.....	9.9	10.3	9.6	4.5	4.6	4.4
1955.....	12.6	13.8	11.4	5.4	5.7	5.1
1956.....	12.3	12.8	11.8	5.3	5.2	5.3
1957.....	10.9	11.3	10.6	4.8	4.8	4.9
1958.....	8.6	8.0	9.2	4.2	3.9	4.4
1959.....	10.4	10.4	10.4	4.8	4.8	4.9
1960.....	9.2	8.5	9.8	4.4	4.0	4.8
1961.....	8.9	8.1	9.6	4.3	3.9	4.7
1962.....	9.8	9.6	9.9	4.5	4.4	4.7
1963.....	10.3	10.1	10.4	4.7	4.5	4.9
1964.....	11.6	11.7	11.5	5.2	5.1	5.4
1965.....	13.0	13.8	12.2	5.6	5.7	5.5
1966.....	13.4	14.2	12.7	5.6	5.6	5.6
1967.....	11.7	11.7	11.8	5.0	4.8	5.3
1968.....	12.1	12.2	11.9	5.1	4.9	5.2
1969.....	11.5	11.4	11.5	4.8	4.6	5.0
1970.....	9.3	8.3	10.3	4.0	3.5	4.5
1971.....	9.7	9.0	10.3	4.1	3.8	4.5
1972.....	10.6	10.8	10.5	4.3	4.2	4.4
1973.....	12.8	13.1	12.6	4.7	4.7	4.8
1973: IV.....	13.4	12.9	14.0	4.7	4.5	5.0
New series:						
1974.....	14.9	12.6	17.1	5.5	4.7	6.4
1975.....	11.6	10.3	12.9	4.6	4.1	5.1
1976.....	13.9	13.7	14.2	5.4	5.2	5.5
1977.....	14.2	14.5	13.8	5.3	5.3	5.3
1973: IV.....	14.3	13.3	15.3	5.6	5.0	6.1
1974: I.....	14.3	12.1	16.4	5.6	4.8	6.4
II.....	16.7	15.6	17.8	6.0	5.5	6.6
III.....	15.4	12.3	18.5	5.7	4.6	6.8
IV.....	13.2	10.4	15.8	4.8	3.8	5.9
1975: I.....	9.0	8.1	10.0	3.7	3.4	4.1
II.....	11.8	10.9	12.8	4.7	4.3	5.1
III.....	12.4	10.5	14.1	4.9	4.2	5.5
IV.....	13.1	11.6	14.5	5.1	4.5	5.6
1976: I.....	13.3	12.4	14.2	5.2	4.9	5.6
II.....	15.7	16.1	15.4	5.9	5.8	5.9
III.....	13.7	13.0	14.3	5.3	5.1	5.6
IV.....	13.1	13.4	12.9	5.0	5.1	5.0
1977: I.....	13.0	13.0	13.0	5.0	5.0	5.0
II.....	16.0	17.1	15.0	5.8	6.0	5.6
III.....	13.3	12.9	13.7	5.0	4.8	5.3
IV.....	14.4	15.1	13.7	5.3	5.4	5.2
1978: I.....	12.4	12.7	12.1	4.7	4.7	4.7
II.....	16.6	18.5	14.8	5.9	6.2	5.5
III.....	14.9	15.4	14.4	5.4	5.5	5.4

<sup>1</sup> Annual ratios based on average equity for the year (using four end-of-quarter figures). Quarterly ratios based on equity at end of quarter only.

Note.—Based on data in millions of dollars.  
See Note, Table B-82.

Source: Federal Trade Commission.



TABLE B-84.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, by industry group, 1977-78*

Industry	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent <sup>1</sup>					Profits after income taxes per dollar of sales—cents				
	1977		1978			1977		1978		
	III	IV	I	II	III	III	IV	I	II	III
All manufacturing corporations.....	13.3	14.4	12.4	16.6	14.9	5.0	5.3	4.7	5.9	5.4
Durable goods industries.....	12.9	15.1	12.7	18.5	15.4	4.8	5.4	4.7	6.2	5.5
Stone, clay, and glass products.....	17.5	13.9	7.6	19.1	21.4	6.4	5.3	3.3	6.7	7.5
Primary metal industries.....	-1.0	5.5	3.9	12.6	10.0	-4	2.4	1.6	4.7	3.9
Iron and steel.....	-4.1	6.1	2.7	13.1	10.5	-1.7	2.5	1.1	4.6	3.9
Nonferrous metals.....	4.9	4.4	6.1	11.6	9.1	2.5	2.1	2.9	5.0	3.9
Fabricated metal products.....	15.3	15.1	12.5	19.6	16.4	4.7	4.6	4.0	5.6	4.8
Machinery, except electrical.....	16.3	17.8	14.4	20.3	16.1	7.5	8.0	6.7	8.6	7.1
Electrical and electronic equipment.....	14.9	16.9	14.8	17.6	17.6	5.2	5.8	5.2	5.9	6.1
Transportation equipment <sup>2</sup> .....	12.2	16.6	16.0	19.6	12.8	3.9	4.7	4.7	5.2	4.0
Motor vehicles and equipment.....	11.3	18.1	17.0	22.1	11.0	3.8	5.2	5.1	6.0	3.6
Aircraft, guided missiles, and parts.....	14.7	15.0	14.4	18.0	17.6	4.3	4.1	4.2	5.0	5.1
Instruments and related products.....	17.2	19.8	14.9	19.8	18.4	9.1	10.3	8.2	10.0	9.3
Other durable manufacturing products.....	18.5	15.4	12.9	20.6	18.4	4.8	4.0	3.7	5.2	4.8
Nondurable goods industries.....	13.7	13.7	12.1	14.8	14.4	5.3	5.2	4.7	5.5	5.4
Food and kindred products.....	13.1	13.6	11.4	15.4	13.4	3.1	3.2	2.7	3.5	3.1
Tobacco manufactures.....	15.8	18.6	16.4	18.9	19.5	8.1	9.2	9.0	9.9	10.1
Textile mill products.....	9.7	11.1	9.0	13.2	11.8	2.8	3.0	2.6	3.6	3.2
Paper and allied products.....	12.8	11.8	11.3	14.2	12.2	5.4	4.9	4.9	5.7	5.0
Printing and publishing.....	17.8	20.8	14.6	19.8	18.5	6.0	6.5	4.9	6.4	6.1
Chemicals and allied products <sup>2</sup> .....	14.8	13.8	14.3	16.5	15.1	7.1	6.8	6.8	7.4	7.1
Industrial chemicals and synthetics.....	12.3	11.9	13.1	14.8	13.2	6.0	6.0	6.2	6.7	6.3
Drugs.....	18.1	17.4	19.8	20.0	18.8	12.1	11.7	12.9	13.5	12.5
Petroleum and coal products.....	13.7	12.9	10.9	13.2	14.1	7.7	7.0	6.2	7.3	7.5
Rubber and miscellaneous plastics products.....	10.9	10.2	10.0	11.6	10.8	3.6	3.3	3.3	3.5	3.4
Other nondurable manufacturing products.....	11.1	15.5	14.0	13.1	16.9	2.3	3.3	3.2	2.9	3.5

<sup>1</sup> Ratios based on equity at end of quarter.

<sup>2</sup> Includes other industries not shown separately.

Source: Federal Trade Commission.

TABLE B-85.—Sources and uses of funds, nonfarm nonfinancial corporate business, 1946-78

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Sources							Uses			Discrepancy (sources less uses)
	Total	Internal <sup>1</sup>	External				Other	Total	Purchase of physical assets <sup>4</sup>	In- crease in financial assets	
			Total	Credit market funds							
				Total	Long- term <sup>2</sup>	Short- term <sup>3</sup>					
1946	18.4	7.8	10.6	6.9	3.6	3.3	3.7	17.1	18.5	-1.4	1.3
1947	26.7	12.6	14.1	8.4	5.4	3.0	5.8	25.3	17.0	8.4	1.4
1948	28.5	18.8	9.8	6.5	6.7	-2	3.3	24.9	19.9	5.0	3.6
1949	19.7	19.3	.4	3.1	4.9	-1.8	-2.7	17.9	14.4	3.5	1.9
1950	41.8	17.8	24.0	8.1	4.2	3.9	15.9	39.9	23.6	16.4	1.9
1951	35.9	19.7	16.2	10.6	6.4	4.1	5.6	37.2	29.8	7.4	-1.3
1952	29.2	21.2	8.0	9.5	8.0	1.4	-1.4	29.1	24.5	4.6	.1
1953	27.3	21.1	6.1	5.7	6.0	-3	.5	27.7	25.4	2.3	-5.5
1954	29.1	23.5	5.7	6.4	6.7	-3	-8	27.7	22.8	4.9	1.4
1955	52.0	28.8	23.2	10.2	6.4	3.8	13.0	49.2	32.7	16.5	2.8
1956	44.0	28.7	15.4	12.9	7.5	5.4	2.5	41.1	37.1	4.0	3.0
1957	42.3	30.4	11.9	12.3	10.4	1.9	-4	39.4	35.2	4.2	2.9
1958	41.3	29.6	11.7	10.5	10.5	-0	1.2	38.7	27.9	10.8	2.5
1959	55.2	35.0	20.2	12.5	8.1	4.4	7.7	51.7	37.5	14.2	3.5
1960	47.6	34.7	12.9	11.9	7.5	4.5	1.0	40.6	38.0	2.7	7.0
1961	54.3	35.3	19.1	12.4	10.8	1.6	6.7	50.4	37.2	13.2	3.9
1962	58.8	41.6	17.2	12.3	9.4	3.0	4.9	54.9	43.8	11.1	3.9
1963	66.0	44.5	21.4	12.5	8.4	4.0	9.0	59.1	44.9	14.2	6.9
1964	72.3	50.1	22.2	14.7	8.8	5.9	7.4	64.1	50.7	13.4	8.2
1965	90.9	56.1	34.9	20.5	9.3	11.2	14.4	82.2	62.0	20.2	8.8
1966	96.9	60.5	36.4	25.5	15.9	9.6	10.9	90.5	75.7	14.8	6.4
1967	93.7	61.3	32.4	29.3	21.6	7.8	3.1	87.5	73.0	14.5	6.2
1968	114.5	62.3	52.1	31.8	18.8	13.0	20.3	105.3	77.2	28.2	9.1
1969	118.4	61.7	56.7	38.2	20.7	17.6	18.5	113.1	84.3	28.8	5.3
1970	104.3	58.9	45.5	40.7	32.1	8.6	4.8	95.9	80.3	15.6	8.4
1971	127.1	68.6	58.5	44.5	40.6	3.9	14.1	119.6	86.0	33.6	7.5
1972	161.7	80.8	80.9	58.3	40.6	17.6	22.7	145.8	100.3	45.6	15.9
1973	199.8	83.8	115.9	72.7	37.0	35.7	43.3	185.6	123.3	62.3	14.2
1974	190.8	75.7	115.1	81.8	39.1	42.6	33.4	179.0	134.7	44.4	11.8
1975	143.8	106.8	37.0	37.0	49.3	-12.3	.0	131.9	99.9	32.0	11.9
1976	205.0	124.7	80.3	58.2	48.8	9.5	22.0	184.9	141.2	43.7	20.1
1977	239.0	135.3	103.6	78.7	46.2	32.6	24.9	212.3	164.6	47.8	26.7
1977: I	244.3	123.8	120.5	75.9	34.4	41.6	44.6	214.6	152.5	62.1	29.6
1977: II	198.6	134.9	63.7	63.7	35.3	28.5	-0	177.3	162.4	14.9	21.3
1977: III	266.0	145.5	120.6	80.1	53.5	26.6	40.5	234.6	175.2	59.4	31.4
1977: IV	247.1	137.3	109.9	95.2	61.5	33.7	14.7	222.7	168.0	54.7	24.4
1978: I	283.9	127.2	156.7	102.2	40.3	61.9	54.5	263.3	179.8	83.5	20.6
1978: II	274.1	144.1	130.0	82.8	53.7	29.1	47.2	260.8	199.9	61.0	13.2
1978: III	289.4	151.6	137.8	80.2	54.5	25.7	57.6	272.6	194.8	77.8	16.8

<sup>1</sup> Undistributed profits (after inventory valuation and capital consumption adjustments), capital consumption allowances, and foreign branch profits.<sup>2</sup> Stocks, bonds, and mortgages.<sup>3</sup> Bank loans, commercial paper, finance company loans, bankers' acceptances, and Government loans.<sup>4</sup> Plant and equipment, residential structures, inventory investment, and mineral rights from U.S. Government.

Source: Board of Governors of the Federal Reserve System.

TABLE B-86.—Current assets and liabilities of U.S. corporations, 1939-78  
[Billions of dollars]

End of year or quarter	Current assets						Current liabilities			Net working capital	Current ratio <sup>3</sup>
	Total	Cash <sup>1</sup>	U.S. Government securities <sup>2</sup>	Notes and accounts receivable	Inventories	Other current assets	Total	Notes and accounts payable	Other current liabilities		
All corporations <sup>4</sup>											
SEC series: <sup>5</sup>											
1939	54.5	10.8	2.2	22.1	18.0	1.4	30.0	21.9	8.1	24.5	1.817
1940	60.3	13.1	2.0	24.0	19.8	1.5	32.8	23.2	9.6	27.5	1.838
1941	72.9	13.9	4.0	28.0	25.6	1.4	40.7	26.4	14.3	32.3	1.791
1942	83.6	17.6	10.1	27.3	27.3	1.3	47.3	26.0	21.3	36.3	1.767
1943	93.8	21.6	16.4	26.9	27.6	1.3	51.6	26.3	25.3	42.1	1.818
1944	97.2	21.6	20.9	26.5	26.8	1.4	51.7	26.8	24.9	45.6	1.880
1945	97.4	21.7	21.1	25.9	26.3	2.4	45.8	25.7	20.1	51.6	2.127
1946	108.1	22.8	15.3	30.7	37.6	1.7	51.9	31.6	20.3	56.2	2.083
1947	123.6	25.0	14.1	38.3	44.6	1.6	61.5	37.6	23.9	62.1	2.010
1948	133.0	25.3	14.8	42.4	48.9	1.6	64.4	39.3	25.0	68.6	2.065
1949	133.1	26.5	16.8	43.0	45.3	1.4	60.7	37.5	23.3	72.4	2.193
1950	161.5	28.1	19.7	56.8	55.1	1.7	79.8	48.3	31.6	81.6	2.024
1951	179.1	30.0	20.7	61.5	64.9	2.1	92.6	54.9	37.8	86.5	1.934
1952	186.2	30.8	19.9	67.4	65.8	2.4	96.1	59.3	36.8	90.1	1.938
1953	190.6	31.1	21.5	68.5	67.2	2.4	98.9	59.5	39.4	91.8	1.927
1954	194.6	33.4	19.2	73.6	65.3	3.1	99.7	61.7	38.0	94.9	1.952
1955	224.0	34.6	23.5	88.9	72.8	4.2	121.0	76.1	45.0	103.0	1.851
1956	237.9	34.8	19.1	97.7	80.4	5.9	130.5	83.9	46.6	107.4	1.823
1957	244.7	34.9	18.6	102.2	82.2	6.7	133.1	86.6	46.5	111.6	1.838
1958	255.3	37.4	18.8	109.7	81.9	7.5	136.6	90.4	46.2	118.7	1.869
1959	277.3	36.3	22.8	120.6	88.4	9.1	153.1	101.0	52.0	124.2	1.811
1960	289.0	37.2	20.1	129.2	91.8	10.6	160.4	106.8	53.6	128.6	1.802
1961	306.8	41.1	20.0	139.2	95.2	11.4	171.2	114.6	56.6	135.6	1.792
Nonfinancial corporations <sup>6</sup>											
SEC series: <sup>5</sup>											
1961	254.7	34.8	16.5	97.9	95.0	10.5	123.7	84.4	39.3	131.0	2.059
1962	269.7	37.1	16.8	103.2	100.5	12.1	132.4	88.7	43.7	137.3	2.037
1963	288.2	39.8	16.7	110.5	106.8	14.4	145.5	97.0	48.5	142.7	1.981
1964	305.6	40.5	15.8	119.9	113.1	16.3	156.6	104.9	51.7	149.0	1.951
1965	336.0	42.8	14.4	134.1	126.6	18.1	178.8	121.5	57.3	157.2	1.879
1966	364.0	41.9	13.0	146.6	142.8	19.7	199.4	137.5	61.9	164.6	1.825
1967	386.2	45.5	10.3	155.3	153.1	22.0	211.3	147.1	64.2	174.9	1.828
1968	426.5	48.2	11.5	173.9	166.0	26.9	244.1	168.8	75.3	182.4	1.747
1969	473.6	47.9	10.6	197.0	186.4	31.6	287.8	199.2	88.6	185.7	1.646
1970	492.3	50.2	7.7	206.1	193.3	35.0	304.9	211.3	93.6	187.4	1.615
1971	529.6	53.3	11.0	221.1	200.4	43.8	326.0	220.5	105.5	203.6	1.625
1972	599.3	59.0	10.6	248.2	225.7	55.8	375.6	282.9	92.7	223.7	1.595
1973	697.8	66.3	12.8	288.5	263.9	66.4	450.9	340.3	110.7	246.9	1.548
1974	790.7	71.1	12.3	322.1	313.6	71.7	530.4	402.3	128.1	260.3	1.491
FTC-FRB series: <sup>7</sup>											
1974	734.6	73.0	11.3	265.5	318.9	65.9	451.8	272.3	179.5	282.8	1.626
1975	756.3	80.0	19.6	272.1	314.7	69.9	446.9	261.2	185.7	309.5	1.693
1976	823.1	86.8	26.0	292.4	341.4	76.4	487.5	273.2	214.2	335.6	1.688
1977	900.1	94.2	20.9	325.7	375.0	84.3	543.2	306.8	236.3	357.0	1.657
1977: I	842.0	80.8	26.8	304.1	352.1	78.3	502.6	280.2	222.4	339.5	1.675
II	856.4	83.1	22.1	312.8	358.8	79.6	509.5	286.8	222.7	346.9	1.681
III	880.3	83.4	21.5	326.9	367.5	81.0	528.9	297.8	231.1	351.4	1.664
IV	900.1	94.2	20.9	325.7	375.0	84.3	543.2	306.8	236.3	357.0	1.657
1978: I	924.2	88.5	20.9	338.3	389.7	86.8	570.4	317.2	253.2	353.8	1.620
II	953.6	90.9	19.7	356.8	399.1	87.0	590.6	331.4	259.2	363.0	1.615

<sup>1</sup> Includes time certificates of deposit.

<sup>2</sup> Includes Federal agency issues.

<sup>3</sup> Total current assets divided by total current liabilities.

<sup>4</sup> Excludes banks, savings and loan associations, and insurance companies.

<sup>5</sup> Based on data from "Statistics of Income," Department of the Treasury.

<sup>6</sup> Excludes banks, savings and loan associations, insurance companies, investment companies, finance companies (personal and commercial), real estate companies, and security and commodity brokers, dealers, and exchanges.

<sup>7</sup> Based on data from "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations," Federal Trade Commission. See "Federal Reserve Bulletin," July 1978, for details regarding the series.

Note.—SEC series not available after 1974.

Sources: Board of Governors of the Federal Reserve System, Federal Trade Commission, and Securities and Exchange Commission.

TABLE B-87.—State and municipal and corporate securities offered, 1934-78

[Millions of dollars]

Year or quarter	State and municipal securities offered for cash (principal amounts)	Corporate securities offered for cash								
		Total corporate offerings	Type of corporate security			Industry of corporate issuer				
			Common stock	Preferred stock	Bonds and notes	Manufacturing <sup>1</sup>	Electric, gas, and water <sup>2</sup>	Transportation <sup>3</sup>	Communication	Other
1934.....	939	397	19	6	372	67	133	176		21
1939.....	1,128	2,164	87	98	1,979	604	1,271	186		103
1940.....	1,238	2,677	108	183	2,386	992	1,203	324		159
1941.....	956	2,667	110	167	2,389	848	1,357	366		96
1942.....	524	1,062	34	112	917	539	472	48		4
1943.....	435	1,170	56	124	990	510	477	161		21
1944.....	661	3,202	163	369	2,670	1,061	1,422	609		109
1945.....	795	6,011	397	758	4,855	2,026	2,319	1,454		211
1946.....	1,157	6,900	891	1,127	4,882	3,701	2,158	711		329
1947.....	2,324	6,577	779	762	5,036	2,742	3,257	286		293
1948.....	2,690	7,078	614	492	5,973	2,226	2,187	755	902	1,008
1949.....	2,907	6,052	736	425	4,890	1,414	2,320	800	571	946
1950.....	3,532	6,362	811	631	4,920	1,200	2,649	813	399	1,300
1951.....	3,189	7,741	1,212	838	5,691	3,122	2,455	494	612	1,058
1952.....	4,401	9,534	1,369	564	7,601	4,039	2,675	992	760	1,068
1953.....	5,558	8,898	1,326	489	7,083	2,254	3,029	595	882	2,138
1954.....	6,969	9,516	1,213	816	7,488	2,268	3,713	778	720	2,037
1955.....	5,977	10,240	2,185	635	7,420	2,994	2,464	893	1,132	2,757
1956.....	5,446	10,939	2,301	636	8,002	3,647	2,529	724	1,419	2,619
1957.....	6,958	12,884	2,516	411	9,957	4,234	3,938	824	1,462	2,426
1958.....	7,449	11,558	1,334	571	9,653	3,515	3,804	824	1,424	1,991
1959.....	7,681	9,748	2,027	531	7,190	2,073	3,258	967	717	2,733
1960.....	7,230	10,154	1,664	409	8,081	2,152	2,851	718	1,050	3,383
1961.....	8,360	13,165	3,294	450	9,420	4,077	3,032	694	1,834	3,527
1962.....	8,558	10,705	1,314	422	8,969	3,249	2,825	567	1,303	2,761
1963.....	10,107	12,211	1,011	343	10,856	3,514	2,677	957	1,105	3,957
1964.....	10,544	13,957	2,679	412	10,865	3,046	2,760	982	2,189	4,980
1965.....	11,148	14,782	1,473	724	12,585	5,414	2,934	702	945	4,787
1966.....	11,089	17,385	1,901	580	14,904	7,056	3,666	1,494	2,003	3,167
1967.....	14,288	24,014	1,927	881	21,206	11,069	4,935	1,639	1,975	4,396
1968.....	16,374	21,261	3,885	636	16,740	6,958	5,293	1,564	1,775	5,671
1969.....	11,460	25,997	7,640	691	17,666	6,346	6,715	1,779	2,172	8,985
1970.....	17,762	37,451	7,037	1,390	29,023	10,647	11,009	1,253	5,291	9,252
1971.....	24,370	43,229	9,485	3,683	30,061	11,651	11,721	1,148	5,840	12,867
1972.....	22,941	39,705	10,707	3,371	25,628	6,398	11,314	860	4,836	16,298
1973.....	22,953	31,680	7,642	3,341	20,700	4,832	10,269	811	4,872	10,897
1974.....	22,824	37,729	3,979	2,253	31,494	10,408	12,837	1,005	3,930	9,551
1975.....	29,326	52,539	7,414	3,459	41,666	18,651	15,894	2,635	4,464	10,895
1976.....	33,845	52,290	8,304	2,803	41,182	15,496	14,414	3,626	3,562	15,190
1977.....	45,060	52,062	8,135	3,878	40,050	13,776	13,711	1,802	4,442	18,333
1977: I.....	10,533	12,636	1,866	840	9,930	3,030	3,048	388	1,419	4,753
II.....	13,353	13,021	2,167	707	10,148	3,439	4,126	405	1,060	3,990
III.....	10,891	11,408	1,026	1,189	9,194	3,252	2,626	502	643	4,388
IV.....	10,283	14,997	3,076	1,142	10,778	4,055	3,911	507	1,320	5,202
1978: I.....	10,316	9,988	1,524	457	8,007	2,218	2,367	224	844	4,335
II.....	12,757	12,107	1,707	1,211	9,189	2,898	3,747	677	384	4,398
III.....	11,994	10,887	1,876	341	8,670	2,534	3,012	471	1,120	3,750

<sup>1</sup> Prior to 1948, also includes extractive, radio broadcasting, airline companies, commercial, and miscellaneous company issues.

<sup>2</sup> Prior to 1948, also includes telephone, street railway, and bus company issues.

<sup>3</sup> Prior to 1948, includes railroad issues only.

Note.—Covers substantially all new issues of State, municipal, and corporate securities offered for cash sale in the United States in amounts over \$100,000 and with terms to maturity of more than 1 year; excludes notes issued exclusively to commercial banks, intercorporate transactions, and issues to be sold over an extended period, such as employee-purchase plans. Closed-end investment company issues are included beginning 1973.

Sources: Securities and Exchange Commission, "The Commercial and Financial Chronicle" and "The Bond Buyer."

TABLE B-88.—Common stock prices and yields, 1949-78

Year or quarter	Common stock prices <sup>1</sup>						Common stock yields (percent) <sup>4</sup>		
	New York Stock Exchange Indexes (December 31, 1965=50) <sup>2</sup>					Dow-Jones Industrial average <sup>3</sup>	Standard & Poor's composite index (1941-43=10) <sup>4</sup>	Dividend-price ratio <sup>5</sup>	Earnings-price ratio <sup>7</sup>
	Composite	Industrial	Transportation	Utility	Finance				
1949.....	9.02					179.48	15.23	6.59	15.48
1950.....	10.87					216.31	18.40	6.57	13.99
1951.....	13.08					257.64	22.34	6.13	11.82
1952.....	13.81					270.76	24.50	5.80	9.47
1953.....	13.67					275.97	24.73	5.80	10.26
1954.....	16.19					333.94	29.69	4.95	8.57
1955.....	21.54					442.72	40.49	4.08	7.95
1956.....	24.40					493.01	46.62	4.09	7.55
1957.....	23.67					475.71	44.38	4.35	7.89
1958.....	24.56					491.66	46.24	3.97	6.23
1959.....	30.73					632.12	57.38	3.23	5.78
1960.....	30.01					618.04	55.85	3.47	5.90
1961.....	35.37					691.55	66.27	2.98	4.62
1962.....	33.49					639.76	62.38	3.37	5.82
1963.....	37.51					714.81	69.87	3.17	5.50
1964.....	43.76					834.05	81.37	3.01	5.32
1965.....	47.39					910.88	88.17	3.00	5.59
1966.....	46.15	46.18	50.26	45.41	44.45	873.60	85.26	3.40	6.63
1967.....	50.77	51.97	53.51	45.43	49.82	879.12	91.93	3.20	5.73
1968.....	55.37	58.00	50.58	44.19	65.85	906.00	98.70	3.07	5.67
1969.....	54.67	57.44	46.96	42.80	70.49	876.72	97.84	3.24	6.08
1970.....	45.72	48.03	32.14	37.24	60.00	753.19	83.22	3.83	6.45
1971.....	54.22	57.92	44.35	39.53	70.38	884.76	98.29	3.14	5.41
1972.....	60.29	65.73	50.17	38.48	78.35	950.71	109.20	2.84	5.50
1973.....	57.42	63.08	37.74	37.69	70.12	923.88	107.43	3.06	7.12
1974.....	43.84	48.08	31.89	29.79	49.67	759.37	82.85	4.47	11.59
1975.....	45.73	50.52	31.10	31.50	47.14	802.49	86.16	4.31	9.15
1976.....	54.46	60.44	39.57	36.97	52.94	974.92	102.01	3.77	8.90
1977.....	53.69	57.86	41.09	40.92	55.25	894.63	98.20	4.62	10.79
1978.....	53.70	58.23	43.50	39.22	56.65	820.23	96.02	5.28	-----
1977: Jan.....	56.28	61.26	41.93	41.13	57.86	970.62	103.81	3.99	-----
Feb.....	54.93	59.65	40.59	40.86	55.65	941.77	100.96	4.21	-----
Mar.....	54.67	59.56	40.52	40.18	54.84	946.11	100.57	4.37	10.24
Apr.....	53.92	58.47	41.51	40.24	54.30	929.10	99.05	4.47	-----
May.....	53.96	58.13	43.25	41.14	54.80	926.31	98.76	4.57	-----
June.....	54.30	58.44	43.29	41.59	55.29	916.56	99.29	4.60	10.37
July.....	54.94	58.90	43.52	42.44	57.29	908.20	100.18	4.59	-----
Aug.....	53.51	57.30	41.04	41.50	56.52	872.26	97.75	4.72	-----
Sept.....	52.66	56.41	39.99	40.93	55.33	853.30	96.23	4.82	11.09
Oct.....	51.37	54.99	38.33	40.38	53.24	823.96	93.74	4.97	-----
Nov.....	51.87	55.62	39.30	40.33	54.04	828.51	94.28	5.02	-----
Dec.....	51.83	55.55	39.75	40.36	53.85	818.80	93.82	5.11	11.45
1978: Jan.....	49.89	53.45	39.15	39.09	50.91	781.09	90.25	5.32	-----
Feb.....	49.41	52.80	38.90	39.02	50.60	763.57	88.98	5.49	-----
Mar.....	49.50	52.77	38.95	39.26	51.44	756.37	88.82	5.62	12.25
Apr.....	51.75	55.48	41.19	39.69	55.04	794.66	92.71	5.42	-----
May.....	54.49	59.14	44.21	39.47	57.96	838.56	97.41	5.20	-----
June.....	54.83	59.63	44.19	39.41	58.31	840.26	97.66	5.19	11.79
July.....	54.61	59.35	44.74	39.28	57.97	831.72	97.19	5.25	-----
Aug.....	58.53	64.07	49.45	40.20	63.28	887.93	103.92	4.93	-----
Sept.....	58.58	64.23	50.19	39.82	63.22	878.64	103.86	4.97	11.36
Oct.....	56.40	61.60	46.70	39.44	60.42	857.69	100.58	5.11	-----
Nov.....	52.74	57.50	41.80	37.88	54.95	804.29	94.71	5.45	-----
Dec.....	53.69	58.72	42.49	38.09	55.68	807.94	96.11	5.39	-----

<sup>1</sup> Averages of daily closing prices, except New York Stock Exchange data through May 1964, are averages of weekly closing prices.

<sup>2</sup> Includes all the stocks (more than 1,500) listed on the New York Stock Exchange.

<sup>3</sup> Includes 30 stocks.

<sup>4</sup> Includes 500 stocks.

<sup>5</sup> Standard & Poor's series, based on 500 stocks in the composite index.

<sup>6</sup> Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures; annual data are averages of monthly figures.

<sup>7</sup> Ratio of quarterly earnings after taxes (seasonally adjusted annual rate) to price index for last day of quarter. Annual ratios are averages of quarterly ratios.

Note.—All data relate to stocks listed on the New York Stock Exchange.

Sources: New York Stock Exchange, Dow-Jones & Co., Inc., and Standard & Poor's Corporation.

TABLE B-89.—Business formation and business failures, 1929-78

Year or month	Index of net business formation (1967=100)	New business incorporations (number)	Business failure rate <sup>1</sup>	Business failures <sup>1</sup>					
				Number of failures			Amount of current liabilities (millions of dollars)		
				Total	Liability size class		Total	Liability size class	
					Under \$100,000	\$100,000 and over		Under \$100,000	\$100,000 and over
1929			103.9	22,909	22,165	744	483.3	261.5	221.8
1933 <sup>2</sup>			100.3	19,859	18,880	979	457.5	215.5	242.0
1939 <sup>3</sup>			69.6	14,768	14,541	227	182.5	132.9	49.7
1940			63.0	13,619	13,400	219	166.7	119.9	46.8
1941			54.4	11,848	11,625	163	136.1	100.7	35.4
1942			44.6	9,405	9,282	123	100.8	80.3	20.5
1943			16.4	3,221	3,155	66	45.3	30.2	15.1
1944			6.5	1,222	1,176	46	31.7	14.5	17.1
1945			4.2	809	759	50	30.2	11.4	18.8
1946		132,916	5.2	1,129	1,003	126	67.3	15.7	51.6
1947		112,897	14.3	3,474	3,103	371	204.6	63.7	140.9
1948	112.6	96,346	20.4	5,250	4,853	397	234.6	93.9	140.7
1949	87.8	85,640	34.4	9,246	8,708	538	308.1	161.4	146.7
1950	93.1	93,092	34.3	9,162	8,746	416	248.3	151.2	97.1
1951	93.3	83,778	30.7	8,058	7,626	432	259.5	131.6	128.0
1952	98.2	92,946	28.7	7,611	7,081	530	283.3	131.9	151.4
1953	94.4	102,706	33.2	8,862	8,075	787	394.2	167.5	226.6
1954	91.3	117,411	42.0	11,086	10,226	860	462.6	211.4	251.2
1955	99.1	139,915	41.6	10,969	10,113	856	449.4	206.4	243.0
1956	95.2	141,163	48.0	12,686	11,615	1,071	562.7	239.8	322.9
1957	90.4	137,112	51.7	13,739	12,547	1,192	615.3	267.1	348.2
1958	89.5	150,781	55.9	14,964	13,499	1,465	728.3	297.6	430.7
1959	96.8	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9
1960	92.4	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4
1961	88.3	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0
1962	90.7	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1
1963	93.3	186,404	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6
1964	97.2	197,724	53.2	13,501	11,346	2,155	1,329.2	313.6	1,015.6
1965	98.6	203,897	53.3	13,514	11,340	2,174	1,321.7	321.7	1,000.0
1966	98.2	200,010	51.6	13,061	10,833	2,228	1,385.7	321.5	1,064.1
1967	100.0	206,569	49.0	12,364	10,144	2,220	1,265.2	297.9	967.3
1968	109.8	233,635	38.6	9,336	7,829	1,807	941.0	241.1	699.9
1969	116.2	274,267	37.3	9,154	7,192	1,962	1,142.1	231.3	910.8
1970	108.0	264,209	43.8	10,748	8,019	2,729	1,887.8	269.3	1,618.4
1971	111.0	287,577	41.7	10,326	7,611	2,715	1,916.9	271.3	1,645.6
1972	117.9	316,601	38.3	9,566	7,040	2,526	2,000.2	258.8	1,741.5
1973	117.9	329,358	36.4	9,345	6,627	2,718	2,298.6	235.6	2,063.0
1974	112.4	319,149	38.4	9,915	6,733	3,182	3,053.1	256.9	2,796.3
1975	108.9	326,345	42.6	11,432	7,504	3,928	4,380.2	298.6	4,081.6
1976	117.6	375,766	34.8	9,628	6,176	3,452	3,011.3	257.8	2,753.4
1977	127.4	436,170	28.4	7,919	4,861	3,058	3,095.3	208.3	2,887.0
Seasonally adjusted									
1977: Jan	123.3	34,519	28.4	664	418	246	168.5	17.7	150.9
Feb	123.0	33,173	29.6	693	425	268	194.2	18.3	175.9
Mar	124.3	35,300	32.3	858	515	343	248.2	21.7	226.5
Apr	122.4	33,394	31.7	804	520	284	207.3	22.1	185.2
May	123.2	34,442	30.2	724	440	284	473.9	18.4	455.4
June	125.8	37,229	30.8	732	455	277	305.9	19.2	286.7
July	126.6	35,749	24.1	513	325	188	577.8	14.2	563.6
Aug	130.6	39,525	29.7	687	401	286	338.3	18.5	319.7
Sept	129.6	37,812	27.0	560	342	218	97.0	14.0	83.0
Oct	132.0	38,943	24.2	546	353	193	115.7	14.7	100.9
Nov	133.5	38,344	27.0	621	353	268	200.3	15.4	184.8
Dec	134.8	39,674	24.7	517	314	203	168.3	14.0	154.3
1978: Jan	135.1	36,547	21.6	504	316	188	168.3	14.3	154.0
Feb	135.0	39,253	24.0	559	319	240	205.0	14.1	190.9
Mar	131.8	37,602	24.6	666	388	278	324.4	18.2	306.2
Apr	131.9	38,498	24.1	594	335	259	203.0	15.5	187.5
May	132.2	38,320	23.4	583	337	246	160.4	14.7	145.7
June	134.2	39,796	21.9	519	301	218	178.8	12.3	166.5
July	134.7	39,403	22.0	459	244	215	231.8	10.6	221.2
Aug	133.8	42,605	29.8	675	347	328	206.4	15.9	190.5
Sept	133.6	41,827							
Oct	133.3	41,945							

<sup>1</sup> Commercial and industrial failures only. Excludes failures of banks and railroads and, beginning 1933, of real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc.

<sup>2</sup> Failure rate per 10,000 listed enterprises.

<sup>3</sup> Series revised; not strictly comparable with earlier data.

Sources: Department of Commerce (Bureau of Economic Analysis) and Dun & Bradstreet, Inc.

# AGRICULTURE

**TABLE B-90.—Income of farm people and farmers, 1929-78**  
(Quarterly data at seasonally adjusted annual rates)

Year or quarter	Personal income received by total farm population			Income received from farming <sup>3</sup>					Net income per farm after inventory adjustment <sup>4</sup>	
				Gross income before inventory adjustment		Production expenses	Net to farm operators			
	From all sources	From farm sources <sup>1</sup>	From non-farm sources <sup>2</sup>	Total <sup>4</sup>	Cash receipts from marketings		Before inventory adjustment	After inventory adjustment <sup>5</sup>	Current dollars	1967 dollars <sup>7</sup>
						Billions of dollars				
1929				13.9	11.3	7.7	6.3	6.2	945	
1933				7.1	5.3	4.4	2.7	2.6	379	
1939	7.4	4.8	2.6	10.6	7.9	6.3	4.3	4.4	685	1,646
1940	7.6	4.8	2.8	11.1	8.4	6.9	4.2	4.5	706	1,681
1941	10.1	6.8	3.3	13.9	11.1	7.8	6.1	6.5	1,031	2,338
1942	14.1	10.1	3.9	18.8	15.6	10.0	8.8	9.9	1,588	3,254
1943	16.5	12.1	4.4	23.4	19.6	11.6	11.8	11.7	1,927	3,720
1944	16.6	12.2	4.4	24.4	20.5	12.3	12.1	11.7	1,950	3,700
1945	17.2	12.8	4.4	25.8	21.7	13.1	12.8	12.3	2,063	3,827
1946	20.0	15.5	4.6	29.5	24.8	14.5	15.0	15.1	2,543	4,347
1947	21.1	15.8	5.3	34.1	29.6	17.0	17.1	15.4	2,615	3,909
1948	23.8	18.0	5.8	34.7	30.2	18.8	15.9	17.7	3,044	4,222
1949	19.5	13.3	6.2	31.6	27.8	18.0	13.6	12.8	2,233	3,127
1950	20.3	14.1	6.3	32.3	28.5	19.5	12.8	13.6	2,417	3,352
1951	22.7	16.1	6.5	37.1	32.9	22.3	14.8	15.9	2,936	3,774
1952	22.0	15.3	6.7	36.8	32.5	22.8	14.0	15.0	2,878	3,620
1953	19.7	13.3	6.4	35.1	31.0	21.5	13.6	13.0	2,604	3,251
1954	18.3	12.4	5.9	33.7	29.8	21.8	11.9	12.4	2,579	3,204
1955	17.5	11.3	6.2	33.3	29.5	22.2	11.1	11.3	2,429	3,029
1956	17.6	11.1	6.6	34.4	30.4	22.7	11.7	11.3	2,493	3,063
1957	17.5	10.8	6.6	34.2	29.7	23.7	10.5	11.1	2,536	3,008
1958	19.2	12.5	6.7	38.1	33.5	25.8	12.3	13.2	3,111	3,592
1959	17.5	10.4	7.1	37.9	33.6	27.2	10.7	10.7	2,615	2,995
1960	18.4	11.1	7.2	38.5	34.2	27.4	11.1	11.5	2,907	3,277
1961	19.0	11.4	7.6	40.2	35.2	28.6	11.6	12.0	3,126	3,489
1962	19.7	11.4	8.3	41.7	36.5	30.3	11.4	12.1	3,267	3,606
1963	20.0	11.0	9.0	42.7	37.5	31.6	11.1	11.8	3,295	3,593
1964	19.8	10.0	9.7	43.1	37.3	31.8	11.3	10.5	3,035	3,267
1965	22.6	12.0	10.6	45.5	39.4	33.7	11.9	12.9	3,843	4,067
1966	23.8	12.6	11.2	50.6	43.4	36.5	14.0	14.0	4,286	4,409
1967	22.9	11.1	11.7	49.9	42.8	38.2	11.7	12.3	3,903	3,903
1968	24.1	11.3	12.8	51.7	44.2	39.5	12.2	12.3	4,013	3,851
1969	26.9	12.9	13.9	56.3	48.2	42.1	14.2	14.3	4,764	4,339
1970	27.5	13.0	14.5	58.6	50.5	44.4	14.1	14.2	4,799	4,126
1971	28.8	13.5	15.3	60.6	52.9	47.4	13.2	14.6	5,042	4,157
1972	34.6	16.9	17.8	70.1	61.2	52.3	17.8	18.7	6,526	5,208
1973	48.9	29.2	19.7	95.5	87.1	65.6	29.9	33.3	11,813	8,875
1974	45.2	23.4	21.8	100.0	92.4	72.2	27.7	26.1	9,349	6,330
1975	44.5	21.9	22.7	96.9	88.2	75.9	21.1	24.5	8,845	5,487
1976	41.2	16.9	24.4	104.1	94.5	83.0	21.1	18.8	6,848	4,016
1977	43.0	18.3	24.7	108.1	96.1	88.0	20.1	20.5	7,592	4,183
1976: I				102.5	93.3	79.5	23.0	21.5	7,850	4,690
1976: II				108.4	98.9	85.0	23.4	19.9	7,270	4,290
1976: III				102.8	93.2	84.5	18.3	17.1	6,250	3,630
1976: IV				102.6	92.6	82.9	19.7	16.5	6,030	3,470
1977: I				108.1	97.6	87.5	20.6	19.6	7,240	4,090
1977: II				106.7	95.7	87.0	19.7	20.2	7,460	4,130
1977: III				102.7	91.3	86.0	16.7	16.8	6,210	3,390
1977: IV				114.8	99.6	91.4	23.4	25.5	9,420	5,080
1978: I				115.8	102.2	93.5	22.3	22.3	8,320	4,410
1978: II				122.5	109.0	96.0	26.5	24.5	9,140	4,730
1978: III				122.5	109.5	96.0	26.5	25.5	9,510	4,810

<sup>1</sup> Net income to farm operators after inventory adjustment, less net income of nonresident operators, plus wages and salaries and other labor income of farm resident workers, less contributions of farm resident operators and workers to social insurance.

<sup>2</sup> Estimated income of farm residents from nonfarm sources; based on survey benchmarks with extrapolations to current year.

<sup>3</sup> Includes government payments.

<sup>4</sup> Also includes government payments and nonmoney income and other farm income furnished by farms, not shown separately.

<sup>5</sup> Includes net value of physical change in inventory of crops and livestock valued at average prices for the year.

<sup>6</sup> The 1969 farm definition is used.

<sup>7</sup> Income in current dollars divided by the consumer price index (Department of Labor).

Source: Department of Agriculture, except as noted.

TABLE B-91.—Farm production indexes, 1929-78

[1967=100]

Year	Farm output <sup>1</sup>	Crops <sup>2</sup>									Livestock and products <sup>3</sup>			
		Total <sup>3</sup>	Feed grains	Hay and forage	Food grains	Vegetables	Fruits and nuts	Cotton	Tobacco	Oil crops	Total <sup>4</sup>	Meat animals	Dairy products	Poultry and eggs
1929...	53	62	48	71	52	64	74	205	76	11	53	52	75	33
1933...	51	55	44	62	36	62	75	180	69	8	57	58	79	32
1939...	58	64	51	68	48	69	95	163	96	25	59	59	81	35
1940...	60	67	52	76	52	72	91	173	74	29	60	60	83	36
1941...	62	68	56	75	60	73	97	148	64	29	64	63	87	39
1942...	70	76	64	82	63	78	96	177	72	40	71	72	91	45
1943...	69	71	59	80	54	84	83	158	71	41	77	81	90	52
1944...	71	75	62	79	67	80	96	169	99	36	73	73	91	52
1945...	70	73	60	81	70	82	87	125	101	36	73	69	94	54
1946...	71	77	65	77	72	91	104	120	118	34	71	68	93	51
1947...	69	73	50	74	85	80	99	164	107	39	70	67	92	50
1948...	76	83	72	74	81	84	91	206	101	47	68	66	89	49
1949...	74	79	63	73	70	82	95	221	100	45	72	69	91	54
1950...	74	76	64	78	65	83	96	138	103	46	75	73	92	57
1951...	76	78	59	81	64	78	98	209	119	47	78	79	90	59
1952...	79	81	63	79	83	79	95	209	115	46	78	79	91	60
1953...	79	81	61	81	76	82	96	227	105	47	79	78	95	61
1954...	80	79	64	81	67	81	97	188	114	49	82	81	97	64
1955...	82	82	68	86	63	84	93	203	112	53	84	85	98	63
1956...	82	82	68	82	66	89	97	184	111	60	84	83	100	69
1957...	81	80	74	89	62	86	88	151	85	58	83	80	100	70
1958...	87	89	80	89	91	89	96	157	88	69	84	81	99	74
1959...	88	89	84	85	73	87	98	200	91	64	88	87	98	76
1960...	91	93	87	90	87	89	94	196	99	68	87	85	100	76
1961...	91	91	78	90	80	94	98	196	105	77	91	88	102	82
1962...	92	92	79	93	74	92	98	205	118	78	92	90	103	82
1963...	96	96	86	93	77	92	96	211	119	81	95	95	102	84
1964...	95	93	75	94	86	89	97	209	113	81	97	97	104	87
1965...	98	99	88	98	88	96	100	205	94	95	95	92	104	90
1966...	95	95	89	97	88	97	98	130	96	97	97	96	101	96
1967...	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1968...	102	103	95	99	106	104	98	148	87	114	100	101	99	98
1969...	102	104	99	100	98	101	116	137	91	116	101	102	98	100
1970...	101	100	89	100	91	98	110	139	97	117	105	108	99	105
1971...	110	112	116	105	107	98	118	145	86	121	106	109	101	106
1972...	110	113	112	104	102	99	106	187	88	131	107	109	102	109
1973...	112	119	115	109	114	100	126	175	88	155	105	108	98	106
1974...	106	110	93	104	120	102	128	158	101	127	106	110	99	106
1975...	114	121	114	108	142	101	137	112	110	153	101	102	98	103
1976...	117	121	120	102	141	101	136	142	108	132	105	105	103	110
1977...	121	130	126	109	131	102	139	193	97	175	106	105	105	111
1978 P...	122	131	135	115	124	107	133	146	102	180	108	107	105	117

<sup>1</sup> Farm output measures the annual volume of net farm production available for eventual human use through sales from farms or consumption in farm households.

<sup>2</sup> Gross production.

<sup>3</sup> Includes sugar crops, hay seeds, pasture seeds, cover-crop seeds, and some miscellaneous crop production, not included in groups shown.

<sup>4</sup> Includes clipped wool, mohair, and beginning 1950 honey and beeswax, not included in groups shown.

Source: Department of Agriculture.



TABLE B-92.—Farm population, employment, and productivity, 1929-78

Year	Farm population (April 1) <sup>1</sup>		Farm employment (thousands) <sup>3</sup>			Farm output				Crop production per acre <sup>4</sup>
	Number (thousands)	As percent of total population <sup>2</sup>	Total	Family workers	Hired workers	Per unit of total input	Per hour of farm work			
							Total	Crops	Live-stock and products	
Index, 1967=100										
1929.....	30,580	25.1	12,763	9,360	3,403	52	16	16	26	56
1933.....	32,393	25.8	12,739	9,874	2,865	53	16	15	25	50
1939.....	30,840	23.5	11,338	8,611	2,727	59	19	20	27	60
1940.....	30,547	23.1	10,979	8,300	2,679	60	20	21	27	62
1941.....	30,118	22.6	10,669	8,017	2,652	62	21	23	28	63
1942.....	28,914	21.4	10,504	7,949	2,555	68	24	25	30	70
1943.....	26,186	19.2	10,446	8,010	2,436	66	24	24	31	64
1944.....	24,815	17.9	10,219	7,988	2,231	67	24	25	30	68
1945.....	24,420	17.5	10,000	7,881	2,119	68	26	27	31	67
1946.....	25,403	18.0	10,295	8,106	2,189	71	27	29	32	71
1947.....	25,829	17.9	10,382	8,115	2,267	68	28	29	33	67
1948.....	24,383	16.6	10,363	8,026	2,337	74	31	33	34	75
1949.....	24,194	16.2	9,964	7,712	2,252	71	32	33	35	70
1950.....	23,048	15.2	9,926	7,597	2,329	71	34	36	37	69
1951.....	21,890	14.2	9,546	7,310	2,236	71	35	35	39	70
1952.....	21,748	13.9	9,149	7,005	2,144	74	38	39	40	73
1953.....	19,874	12.5	8,864	6,775	2,089	75	39	40	41	72
1954.....	19,019	11.7	8,651	6,570	2,081	76	42	42	43	71
1955.....	19,078	11.5	8,381	6,345	2,036	78	44	45	46	74
1956.....	18,712	11.1	7,852	5,900	1,952	80	47	48	48	76
1957.....	17,656	10.3	7,600	5,660	1,940	80	51	53	50	77
1958.....	17,128	9.8	7,503	5,521	1,982	87	57	61	54	86
1959.....	16,592	9.4	7,342	5,390	1,952	87	59	61	58	85
1960.....	15,635	8.7	7,057	5,172	1,895	90	65	66	62	89
1961.....	14,803	8.1	6,919	5,025	1,890	91	67	68	66	92
1962.....	14,313	7.7	6,700	4,873	1,827	92	71	72	71	95
1963.....	13,367	7.1	6,518	4,738	1,780	96	77	77	77	97
1964.....	12,954	6.8	6,110	4,506	1,604	95	81	79	82	95
1965.....	12,363	6.4	5,610	4,128	1,482	100	89	90	86	100
1966.....	11,595	5.9	5,214	3,854	1,360	97	92	94	93	97
1967.....	10,875	5.5	4,903	3,650	1,253	100	100	100	100	100
1968.....	10,454	5.2	4,749	3,535	1,213	102	106	106	105	105
1969.....	10,307	5.1	4,596	3,419	1,176	103	110	108	112	106
1970.....	9,712	4.7	4,523	3,348	1,175	102	115	111	121	104
1971.....	9,425	4.6	4,436	3,275	1,161	110	128	126	128	112
1972.....	9,610	4.6	4,373	3,228	1,146	110	136	135	137	115
1973.....	9,472	4.5	4,337	3,169	1,168	111	130	138	144	116
1974.....	9,264	4.4	4,389	3,075	1,314	106	136	128	156	104
1975.....	8,864	4.2	4,342	3,026	1,317	115	152	142	160	112
1976.....	8,253	3.8	4,374	2,997	1,377	115	162	146	178	111
1977.....	7,806	3.6	4,152	2,856	1,296	118	173	157	189	116
1978 <sup>p</sup> .....	8,000	3.7	3,922	2,672	1,250	120	174	160	193	121

<sup>1</sup> Farm population as defined by Department of Agriculture and Department of Commerce, i.e., civilian population living on farms, regardless of occupation.

<sup>2</sup> Total population of United States as of July 1, including Armed Forces overseas.

<sup>3</sup> Includes persons doing farmwork on all farms. These data, published by the Department of Agriculture, Statistical Reporting Service, differ from those on agricultural employment by the Department of Labor (see Table B-29) because of differences in the method of approach, in concepts of employment, and in time of month for which the data are collected. See monthly report on "Farm Labor."

<sup>4</sup> Computed from variable weights for individual crops produced each year.

Sources: Department of Agriculture and Department of Commerce (Bureau of the Census).

TABLE B-93.—Indexes of prices received and prices paid by farmers and selected farm resource prices, 1929-78

[1967=100, except as noted]

Year or month	Prices received by farmers			Prices paid by farmers			Selected resource prices			
	All farm products	Crops	Live-stock and products	All items, interest, taxes, and wage rates	Family living items	Production items	Tractors and self-propelled machinery	Fertilizer	Average hourly wage rate, all hired farm workers <sup>1</sup>	Average farm real estate value per acre <sup>2</sup>
1929	59	60	58	47	48	51				27
1933	28	31	25	32	34	34				16
1939	38	36	39	36	37	42				19
1940	40	40	40	36	38	43				19
1941	49	48	50	39	40	45				19
1942	64	64	62	44	46	52				21
1943	77	83	72	50	52	57				23
1944	79	88	71	53	54	60				26
1945	83	90	77	56	57	61				29
1946	94	102	88	61	63	67				32
1947	110	117	105	70	74	78				36
1948	115	113	115	76	78	87			\$0.73	39
1949	100	100	99	73	75	83			.68	41
1950	103	103	102	75	76	86			.69	40
1951	121	118	122	82	83	95			.77	46
1952	115	119	111	84	84	95			.81	51
1953	102	107	97	81	84	89			.82	52
1954	98	108	90	81	84	89			.81	51
1955	93	103	85	81	84	87			.82	53
1956	92	104	82	81	85	87			.86	55
1957	94	100	89	84	88	90			.88	58
1958	100	99	99	86	89	92			.92	61
1959	96	98	93	87	89	93			.95	66
1960	95	99	92	88	90	92			.97	68
1961	96	101	91	88	90	93			.99	69
1962	98	103	93	90	91	94			1.01	73
1963	97	107	89	91	92	95			1.05	77
1964	95	106	86	92	93	94			1.08	82
1965	98	103	94	94	95	96	92	103	1.14	86
1966	106	106	106	99	98	100	96	102	1.23	93
1967	100	100	100	100	100	100	100	100	1.33	100
1968	102	100	104	103	104	100	104	94	1.44	107
1969	107	97	117	108	109	104	111	87	1.55	113
1970	110	100	118	112	114	108	116	88	1.64	117
1971	113	108	118	118	118	113	122	91	1.73	122
1972	125	114	136	125	123	121	128	94	1.84	132
1973	179	175	183	144	133	146	137	102	2.00	150
1974	192	224	165	164	151	166	161	167	2.25	187
1975	185	201	172	180	166	182	195	217	2.43	213
1976	186	197	177	191	176	193	217	185	2.66	242
1977	183	192	175	202	( <sup>3</sup> )	200	238	181	2.87	283
1978	209	203	216	219	( <sup>3</sup> )	216	259	180		308
1977: Jan.	183	198	170	198	( <sup>3</sup> )	196	224	177	2.96	
Feb.	186	201	174	200	( <sup>3</sup> )	199	224	177		283
Mar.	189	210	172	202	( <sup>3</sup> )	201	233	181		
Apr.	192	214	173	204	( <sup>3</sup> )	204	233	181	2.82	
May	192	211	177	204	( <sup>3</sup> )	205	233	183		
June	184	196	173	204	( <sup>3</sup> )	203	241	183		
July	180	181	179	203	( <sup>3</sup> )	201	241	183	2.77	
Aug.	174	172	177	201	( <sup>3</sup> )	198	241	183		
Sept.	174	170	177	201	( <sup>3</sup> )	197	245	183		
Oct.	177	178	176	201	( <sup>3</sup> )	198	245	182	2.99	
Nov.	178	184	174	202	( <sup>3</sup> )	199	245	182		296
Dec.	181	183	180	203	( <sup>3</sup> )	199	245	179		
1978: Jan.	186	188	185	209	( <sup>3</sup> )	203	245	179	3.18	
Feb.	193	190	196	211	( <sup>3</sup> )	206	245	179		308
Mar.	200	198	204	214	( <sup>3</sup> )	211	251	181		
Apr.	208	208	209	216	( <sup>3</sup> )	214	251	181	3.09	
May	215	212	217	219	( <sup>3</sup> )	217	251	181		
June	217	216	219	220	( <sup>3</sup> )	218	260	181		
July	215	212	217	220	( <sup>3</sup> )	218	260	181	2.93	
Aug.	210	202	217	220	( <sup>3</sup> )	217	260	181		
Sept.	215	203	226	223	( <sup>3</sup> )	220	272	181		
Oct.	217	200	232	224	( <sup>3</sup> )	222	272	179	3.18	
Nov.	215	200	228	224	( <sup>3</sup> )	223	272	179		332
Dec.	221	203	237	226	( <sup>3</sup> )	225	272	179		

<sup>1</sup> Without room or board.

<sup>2</sup> Average for 48 States. Annual data are for March 1 of each year through 1975 and for February 1 beginning 1976. Monthly data are for first of month.

<sup>3</sup> Series discontinued. Consumer price index (Department of Labor) substituted in calculating total prices paid.

Source: Department of Agriculture.

TABLE B-94.—Selected measures of farm resources and inputs, 1929-78

Year	Crops harvested (millions of acres) <sup>1</sup>	Total hours of farm work (billions)	Index numbers of inputs (1967=100)							
			Total	Farm labor	Farm real estate	Mechanical power and machinery	Agricultural chemicals <sup>2</sup>	Feed, seed, and livestock purchases <sup>3</sup>	Taxes and interest	Miscellaneous
1929.....	365	23.2	102	329	103	38	10	31	73	86
1933.....	340	22.6	96	321	97	32	6	28	75	82
1939.....	331	20.7	98	294	102	40	11	41	72	78
1940.....	341	20.5	100	293	103	42	13	42	72	78
1941.....	344	20.0	100	288	102	44	14	45	73	79
1942.....	348	20.6	103	296	100	51	15	48	73	76
1943.....	357	20.3	104	292	98	55	17	52	77	79
1944.....	362	20.7	105	289	98	57	20	52	79	82
1945.....	354	18.8	103	271	98	58	20	54	80	80
1946.....	352	18.1	101	260	102	57	21	53	81	81
1947.....	355	17.2	101	246	103	64	23	55	81	83
1948.....	356	16.8	103	240	103	72	25	56	79	87
1949.....	360	16.2	105	231	104	80	27	61	82	91
1950.....	345	15.1	104	217	105	84	29	63	82	87
1951.....	344	15.2	107	218	105	90	32	67	82	93
1952.....	349	14.5	107	208	105	94	35	69	85	93
1953.....	348	14.0	106	200	105	96	36	69	86	92
1954.....	346	13.3	105	192	105	96	37	71	85	90
1955.....	340	12.8	105	185	105	97	39	72	88	94
1956.....	324	12.0	103	174	102	98	41	75	87	90
1957.....	324	11.1	101	162	102	97	41	74	86	94
1958.....	324	10.5	100	156	100	97	43	79	87	98
1959.....	324	10.3	102	151	101	98	49	84	93	103
1960.....	324	9.8	101	145	100	97	49	84	94	105
1961.....	302	9.4	100	139	100	94	53	88	95	105
1962.....	295	9.0	100	133	100	94	58	90	96	108
1963.....	298	8.7	100	129	100	93	65	90	98	109
1964.....	298	8.2	100	122	100	93	71	92	99	113
1965.....	298	7.3	98	110	99	94	75	93	100	109
1966.....	294	6.9	98	103	99	96	85	97	100	104
1967.....	306	6.7	100	100	100	100	100	100	100	100
1968.....	300	6.4	100	97	99	101	105	97	101	106
1969.....	290	6.2	99	93	98	101	111	101	100	105
1970.....	293	5.9	100	89	101	100	115	104	100	109
1971.....	305	5.7	100	86	99	102	124	111	99	108
1972.....	294	5.4	100	82	98	101	131	113	100	115
1973.....	321	5.3	101	80	97	105	136	116	100	111
1974.....	328	5.2	100	78	95	109	140	107	101	110
1975.....	336	5.0	100	76	96	113	127	101	101	104
1976.....	337	4.8	102	73	97	115	145	110	101	115
1977.....	343	4.7	103	71	97	116	151	110	99	126
1978 <sup>p</sup> .....	336	4.7	102	71	97	117	150	111	100	110

<sup>1</sup> Acreage harvested plus acreages in fruits, tree nuts, and farm gardens.<sup>2</sup> Fertilizer, lime, and pesticides.<sup>3</sup> Nonfarm constant dollar value of feed, seed, and livestock purchases.

Source: Department of Agriculture.

TABLE E-95.—Balance sheet of the farming sector, 1929-79

[Billions of dollars]

Beginning of year	Assets									Claims				
	Total	Real estate	Live-stock <sup>1</sup>	Other physical assets			Financial assets			Total	Real estate debt	Other debt	Proprietors' equities	
				Machinery and motor vehicles	Crops <sup>2</sup>	Household equipment and furnishings	Deposits and currency	U.S. savings bonds	Investments in co-operatives					
1929		48.0	6.6	3.2							9.8			
1933		30.8	3.0	2.5							8.5			
1939		34.1	5.1	3.2							6.8			
1940	53.0	33.6	5.1	3.1	2.7	4.2	3.2	.3	.8	53.0	6.6	3.4	43.0	
1941	54.8	34.4	5.3	3.3	3.0	4.1	3.5	.3	.9	54.8	6.5	3.9	44.4	
1942	62.9	37.5	7.1	4.0	3.9	4.8	4.2	.5	.9	62.9	6.4	4.1	52.4	
1943	73.6	41.6	9.6	4.9	5.1	4.8	5.5	1.1	1.0	73.6	5.9	4.0	63.7	
1944	84.0	48.2	9.7	5.4	6.1	4.7	6.6	2.2	1.1	84.0	5.4	3.5	75.1	
1945	93.8	53.9	9.0	6.5	6.7	5.2	7.9	3.4	1.2	93.8	4.9	3.4	85.5	
1946	102.9	61.0	9.7	5.4	6.3	5.5	9.4	4.2	1.4	102.9	4.7	3.2	95.0	
1947	115.9	68.5	11.9	5.3	7.1	7.2	10.2	4.2	1.5	115.9	4.9	3.6	107.4	
1948	127.4	73.7	13.2	7.4	9.0	8.1	9.9	4.4	1.7	127.4	5.1	4.2	118.1	
1949	134.6	76.6	14.4	10.1	8.5	8.9	9.6	4.6	1.9	134.6	5.3	6.1	123.2	
1950	134.5	77.6	12.9	12.2	7.6	8.4	9.1	4.7	2.0	134.5	5.6	6.8	122.1	
1951	141.3	89.5	17.1	14.1	7.9	9.6	9.1	4.7	2.3	141.3	6.1	6.9	141.3	
1952	170.1	98.4	19.5	16.7	8.8	10.1	9.4	4.7	2.5	170.1	6.7	8.0	155.4	
1953	167.6	100.1	14.8	17.4	9.0	9.6	9.4	4.6	2.7	167.6	7.2	8.9	151.5	
1954	164.6	98.7	11.8	18.4	9.2	9.5	9.4	4.7	2.9	164.6	7.7	9.2	147.7	
1955	168.8	102.2	11.2	18.6	9.6	9.7	9.4	5.0	3.1	168.8	8.2	9.4	151.2	
1956	173.6	107.5	10.6	19.3	8.3	10.0	9.5	5.2	3.2	173.6	9.0	9.8	154.8	
1957	182.8	115.7	11.0	20.2	8.3	9.6	9.4	5.1	3.5	182.8	9.8	9.5	163.5	
1958	191.3	121.8	13.9	20.1	7.6	9.6	9.5	5.1	3.7	191.3	10.4	10.0	170.9	
1959	208.4	131.1	17.7	21.8	9.3	9.4	10.0	5.2	3.9	208.4	11.1	12.5	184.8	
1960	210.2	137.2	15.3	22.7	7.7	9.2	9.2	4.7	4.2	210.2	12.0	12.8	185.4	
1961	210.8	138.5	15.6	22.2	8.0	8.7	8.7	4.6	4.5	210.8	12.8	13.4	184.6	
1962	219.3	144.5	16.4	22.5	8.8	8.9	8.8	4.5	4.9	219.3	13.8	14.7	190.8	
1963	227.7	150.2	17.3	23.5	9.3	8.8	9.2	4.4	5.0	227.7	15.1	16.3	196.3	
1964	235.8	158.6	15.9	23.9	9.8	8.8	9.2	4.2	5.4	235.8	16.8	17.6	201.4	
1965	243.8	167.5	14.5	24.8	9.2	8.4	9.6	4.2	5.6	243.8	18.9	17.9	207.0	
1966	260.8	179.2	17.6	26.0	9.7	8.4	10.0	4.0	5.9	260.8	21.2	19.5	220.1	
1967	274.2	189.1	19.0	27.4	10.0	8.3	10.3	3.9	6.2	274.2	23.1	21.0	230.1	
1968	288.0	199.7	18.9	29.8	9.6	8.8	10.9	3.8	6.5	288.0	25.1	22.3	240.6	
1969	302.8	209.2	20.2	31.3	10.6	9.4	11.5	3.8	6.8	302.8	27.4	23.1	252.3	
1970	314.9	215.8	23.5	32.3	10.9	9.6	11.9	3.7	7.2	314.9	29.2	23.8	261.9	
1971	326.0	223.2	23.7	34.4	10.7	10.0	12.4	3.6	8.0	326.0	30.3	24.2	271.5	
1972	351.8	239.6	27.3	36.6	11.8	10.8	13.2	3.7	8.8	351.8	32.2	26.9	292.7	
1973	394.8	267.3	34.1	39.3	14.5	11.9	14.0	4.0	9.7	394.8	35.7	29.6	329.5	
1974	478.5	327.7	42.4	44.2	22.1	12.3	14.9	4.1	10.8	478.5	41.3	32.8	404.4	
1975	517.5	368.5	24.6	55.7	23.3	14.0	15.1	4.3	12.1	517.5	46.3	35.5	435.7	
1976	579.9	416.9	29.5	64.7	21.3	14.2	15.6	4.4	13.3	579.9	51.1	39.7	489.1	
1977	654.9	483.8	29.1	71.0	22.0	14.4	16.0	4.4	14.2	654.9	56.6	46.1	552.2	
1978	708.3	525.8	32.0	75.2	24.6	14.5	16.3	4.4	15.5	708.3	63.3	55.6	589.4	
1979 <sup>p</sup>	790.1	588.9		163.4			16.7	21.1			790.1	72.2	63.7	654.2

<sup>1</sup> Beginning with 1961, horses and mules are excluded.<sup>2</sup> Includes all crops held on farms and crops held off farms by farmers as security for Commodity Credit Corporation loans. The latter on January 1, 1979 totaled approximately \$2.1 billion.

Note.—Beginning 1960, data include Alaska and Hawaii.

Source: Department of Agriculture.

# INTERNATIONAL STATISTICS

## TABLE B-96.—Exchange rates, 1971-78

[Cents per unit of foreign currency, except as noted]

Year and month	Belgian franc	Canadian dollar	French franc	German mark	Italian lira	Japanese yen
	March 1973 rate	2.5377	100.333	22.191	35.548	17600
1971: Mar	2.0145	99.367	18.129	27.538	16063	27971
June	2.0109	97.913	18.092	28.474	16009	27979
Sept	2.0921	98.717	18.112	29.794	16292	29583
Dec	2.1986	100.067	18.549	30.593	16652	31249
1972: Mar	2.2757	100.152	19.835	31.545	17161	33054
June	2.2758	102.092	19.937	31.560	17142	33070
Sept	2.2742	101.730	19.977	31.318	17199	33209
Dec	2.2670	100.326	19.657	31.262	17146	33196
1973: Mar	2.5377	100.333	22.191	35.548	17600	38190
June	2.6643	100.160	23.472	38.786	16792	37808
Sept	2.7089	99.181	23.466	41.246	17691	37668
Dec	2.4726	100.058	21.757	37.629	15458	35692
1974: Mar	2.5040	102.877	20.742	38.211	15687	35454
June	2.6366	103.481	20.408	39.603	15379	35340
Sept	2.5364	101.384	20.831	37.580	15103	33439
Dec	2.7158	101.192	22.109	40.816	15179	33288
1975: Mar	2.9083	99.954	23.804	43.120	15842	34731
June	2.8603	97.426	24.971	42.726	15982	34077
Sept	2.5485	97.437	22.367	38.191	14740	33345
Dec	2.5311	98.627	22.428	38.144	14645	32715
1976: Mar	2.5480	101.431	21.657	39.064	12113	33276
June	2.5220	102.712	21.109	38.797	11780	33424
Sept	2.6046	102.557	20.334	40.169	11837	34800
Dec	2.7483	98.204	20.055	41.965	11521	33933
1977: Mar	2.7258	95.125	20.075	41.812	11276	35687
June	2.7713	94.549	20.240	42.453	11295	36652
Sept	2.7910	93.168	20.314	43.034	11318	37486
Dec	2.9608	91.132	20.844	46.499	11416	41491
1978: Mar	3.1589	88.823	21.256	49.181	11692	43148
June	3.0590	89.143	21.841	47.984	11634	46744
Sept	3.2207	85.739	22.909	50.778	12050	52656
Dec	3.3637	84.763	23.178	53.217	11863	51038

Year and month	Netherlands guilder	Swedish krona	Swiss franc	United Kingdom pound	United States dollar (March 1973=100)	
					Multilateral trade-weighted average	Bilateral trade-weighted average
March 1973 rate	34.834	22.582	31.084	247.24	100.0	100.0
1971: Mar	27.816	19.369	23.254	241.87	120.2	114.6
June	28.065	19.370	24.409	241.87	119.3	114.8
Sept	29.308	19.732	25.118	246.94	115.8	111.8
Dec	30.503	20.434	25.615	252.66	112.3	108.7
1972: Mar	31.384	20.956	25.974	261.81	108.4	106.0
June	31.296	21.101	26.320	256.91	108.2	105.2
Sept	30.969	21.146	26.403	244.10	109.1	105.8
Dec	30.962	21.080	26.526	234.48	110.1	106.9
1973: Mar	34.834	22.582	31.084	247.24	100.0	100.0
June	36.582	23.746	32.757	257.62	96.5	98.5
Sept	38.542	23.769	33.146	241.83	95.1	98.3
Dec	35.615	22.026	31.252	231.74	101.5	102.2
1974: Mar	36.354	21.915	32.490	234.06	101.6	100.9
June	37.757	22.885	33.449	239.02	100.0	99.9
Sept	36.870	22.333	33.371	231.65	102.9	103.0
Dec	39.331	23.897	38.442	232.94	98.6	101.0
1975: Mar	42.124	25.481	40.273	241.80	93.9	98.5
June	41.502	25.532	40.086	228.03	94.8	100.0
Sept	37.229	22.501	36.905	208.35	103.0	104.9
Dec	37.234	22.685	37.970	202.21	103.5	105.0
1976: Mar	37.149	22.702	38.980	194.28	105.1	104.6
June	36.524	22.475	40.484	176.40	107.1	105.2
Sept	38.390	22.998	40.431	172.72	105.7	104.0
Dec	40.240	24.051	40.823	167.84	105.3	105.8
1977: Mar	40.079	23.726	39.209	171.74	105.2	106.2
June	40.326	22.625	40.170	171.91	104.4	105.6
Sept	40.604	20.602	42.115	174.31	103.8	105.4
Dec	42.955	21.044	48.168	185.46	98.4	101.9
1978: Mar	45.994	21.693	52.693	190.55	94.8	100.3
June	44.716	21.650	53.046	183.72	94.7	99.2
Sept	46.733	22.592	63.765	195.95	89.5	96.0
Dec	49.120	22.808	59.703	198.61	88.5	96.3

Source: Board of Governors of the Federal Reserve System.

TABLE B-97.—U. S. international transactions, 1946-78

[Millions of dollars; quarterly data seasonally adjusted, except as noted]

Year or quarter	Merchandise <sup>1 2</sup>			Investment income <sup>3</sup>			Net military transactions	Net travel and transportation receipts	Other services, net <sup>3</sup>	Balance on goods and services <sup>1 4</sup>	Remittances, pensions, and other unilateral transfers <sup>1</sup>	Balance on current account
	Exports	Imports	Net balance	Receipts	Payments	Net						
1946.....	11,764	-5,067	6,697	772	-212	560	-493	733	310	7,807	-2,922	4,885
1947.....	16,097	-5,973	10,124	1,102	-245	857	-455	946	145	11,617	-2,625	8,992
1948.....	13,265	-7,557	5,708	1,921	-437	1,484	-799	374	175	6,942	-4,525	2,417
1949.....	12,213	-6,874	5,339	1,831	-476	1,355	-621	230	208	6,511	-5,638	873
1950.....	10,203	-9,081	1,122	2,068	-559	1,509	-576	-120	242	2,177	-4,017	-1,840
1951.....	14,243	-11,176	3,067	2,633	-583	2,050	-1,270	298	254	4,399	-3,515	884
1952.....	13,449	-10,838	2,611	2,751	-555	2,196	-2,054	83	309	3,145	-2,531	614
1953.....	12,412	-10,975	1,437	2,736	-624	2,112	-2,423	-238	307	1,195	-2,481	-1,286
1954.....	12,929	-10,353	2,576	2,929	-582	2,347	-2,460	-269	305	2,499	-2,280	219
1955.....	14,424	-11,527	2,897	3,406	-676	2,730	-2,701	-297	299	2,928	-2,498	430
1956.....	17,556	-12,803	4,753	3,837	-735	3,102	-2,788	-361	447	5,153	-2,423	2,730
1957.....	19,562	-13,291	6,271	4,180	-796	3,384	-2,841	-189	482	7,107	-2,345	4,762
1958.....	16,414	-12,952	3,462	3,790	-825	2,965	-3,135	-633	486	3,145	-2,361	784
1959.....	16,458	-15,310	1,148	4,132	-1,061	3,071	-2,805	-821	573	1,166	-2,448	-1,282
1960.....	19,650	-14,758	4,892	4,616	-1,237	3,379	-2,752	-964	579	5,132	-2,308	2,824
1961.....	20,108	-15,537	4,571	4,998	-1,245	3,753	-2,596	-978	594	6,345	-2,524	3,821
1962.....	20,781	-16,260	4,521	5,619	-1,324	4,295	-2,449	-1,152	809	6,026	-2,638	3,388
1963.....	22,272	-17,048	5,224	6,157	-1,561	4,596	-2,304	-1,309	960	7,168	-2,754	4,414
1964.....	25,501	-18,700	6,801	6,823	-1,784	5,039	-2,133	-1,146	1,041	9,603	-2,781	6,822
1965.....	26,461	-21,510	4,951	7,441	-2,088	5,353	-2,122	-1,280	1,387	8,289	-2,854	5,435
1966.....	29,310	-25,493	3,817	7,531	-2,481	5,050	-2,935	-1,331	1,365	5,966	-2,932	3,034
1967.....	30,666	-26,866	3,800	8,024	-2,747	5,277	-3,226	-1,750	1,612	5,712	-3,125	2,587
1968.....	33,626	-32,991	635	9,377	-3,378	5,999	-3,143	-1,548	1,630	3,573	-2,952	621
1969.....	36,414	-35,807	607	10,920	-4,869	6,051	-3,328	-1,763	1,833	3,401	-2,994	406
1970.....	42,469	-39,866	2,603	11,751	-5,516	6,235	-3,354	-2,023	2,190	5,654	-3,294	2,360
1971.....	43,319	-45,579	-2,260	12,688	-5,436	7,252	-2,893	-2,315	2,509	2,294	-3,701	-1,407
1972.....	49,381	-55,797	-6,416	14,694	-6,544	8,150	-3,621	-3,028	2,789	-2,125	-3,854	-5,979
1973.....	71,410	-70,499	911	21,697	-9,655	12,042	-2,287	-3,086	3,185	10,766	-3,881	6,885
1974.....	98,306	-103,649	-5,343	27,541	-12,084	15,457	-2,080	-3,105	3,975	8,905	-7,186	1,719
1975.....	107,088	-98,041	9,047	25,359	-12,564	12,795	-876	-2,522	4,617	23,060	-4,615	18,445
1976.....	114,694	-124,047	-9,353	29,244	-13,311	15,933	312	-2,245	4,714	9,361	-5,022	4,339
1977.....	120,576	-151,706	-31,130	32,100	-14,593	17,507	1,334	-3,044	4,749	-10,585	-4,708	-15,292
1976: I.....	27,001	-28,352	-1,351	7,027	-3,405	3,622	-64	-627	1,151	2,731	-1,028	1,703
II.....	28,380	-29,963	-1,583	7,369	-3,332	4,037	-30	-399	1,156	3,181	-1,040	2,141
III.....	29,602	-32,418	-2,816	7,428	-3,293	4,135	237	-515	1,186	2,227	-1,908	319
IV.....	29,711	-33,314	-3,603	7,420	-3,281	4,139	169	-704	1,222	1,223	-1,047	176
1977: I.....	29,477	-36,502	-7,025	7,796	-3,197	4,599	568	-907	1,136	-1,630	-1,126	-2,756
II.....	30,629	-37,263	-6,634	8,088	-3,601	4,487	295	-759	1,171	-1,440	-1,243	-2,683
III.....	31,009	-38,277	-7,268	8,220	-3,610	4,610	467	-677	1,260	-1,609	-1,277	-2,886
IV.....	29,461	-39,664	-10,203	7,997	-4,185	3,812	5	-701	1,183	-5,903	-1,064	-6,967
1978: I.....	30,664	-41,865	-11,201	9,381	-4,503	4,878	210	-823	1,361	-5,576	-1,282	-6,858
II.....	35,067	-42,869	-7,802	10,003	-5,420	4,583	592	-626	1,468	-1,785	-1,317	-3,102
III.....	36,930	-44,975	-8,045	9,946	-5,396	4,550	177	-802	1,563	-2,557	-1,267	-3,824

<sup>1</sup> Excludes military grants.<sup>2</sup> Adjusted from Census data for differences in valuation, coverage, and timing.<sup>3</sup> Fees and royalties from U.S. direct investments abroad or from foreign direct investments in the United States are excluded from investment income and included in other services, net.<sup>4</sup> In concept, the sum of balance on current account and allocations of special drawing rights is equal to net foreign investment in the national income and product accounts, although the two may differ because of revisions, special handling of certain items, etc.

(See next page for continuation of table.)

TABLE B-97.—U.S. international transactions, 1946-78—Continued

[Millions of dollars; quarterly data seasonally adjusted, except as noted]

Year or quarter	U.S. assets abroad, net [increase/capital outflow (-)]				Foreign assets in the U.S., net [increase/capital inflow (+)]				Statistical discrepancy		
	Total	U.S. official reserve assets <sup>a</sup>	Other U.S. Government assets	U.S. private assets	Total	Foreign official assets		Other foreign assets	Allocations of special drawing rights (SDR)	Total (sum of the items with sign reversed)	Of which: Seasonal adjustment discrepancy
						Total	Assets of foreign official reserve agencies				
1946		-623									
1947		-3,315									
1948		-1,736									
1949		-266									
1950		1,758									
1951		-33									
1952		-415									
1953		1,256									
1954		480									
1955		182									
1956		-869									
1957		-1,165									
1958		2,292									
1959		1,035									
1960	-4,099	2,145	-1,100	-5,144	2,294	1,473	1,258	821		-1,019	
1961	-5,538	606	-910	-5,234	2,705	765	741	1,939		-988	
1962	-4,177	1,533	-1,085	-4,624	1,911	1,270	1,118	641		-1,122	
1963	-7,271	377	-1,662	-5,986	3,217	1,986	1,558	1,231		-360	
1964	-9,559	171	-1,680	-8,049	3,644	1,661	1,363	1,983		-907	
1965	-5,718	1,222	-1,605	-5,335	740	132	67	607		-457	
1966	-7,321	568	-1,543	-6,345	3,659	-674	-787	4,333		628	
1967	-9,759	82	-2,423	-7,387	7,378	3,450	3,367	3,928		-206	
1968	-10,987	-880	-2,274	-7,833	9,927	-776	-761	10,703		439	
1969	-11,593	-1,187	-2,200	-8,206	12,701	-1,301	-1,552	14,002		-1,515	
1970	-9,340	2,477	-1,589	-10,228	6,357	6,907	7,362	-550	867	-244	
1971	-12,475	2,348	-1,884	-12,939	22,987	26,895	27,405	-3,907	717	-9,822	
1972	-14,461	32	-1,568	-12,925	21,696	10,705	10,322	10,991	710	-1,966	
1973	-22,823	209	-2,644	-20,388	18,663	6,299	5,145	12,364		-2,725	
1974	-34,712	-1,434	366	-33,643	34,677	10,981	10,257	23,696		-1,684	
1975	-39,444	-607	-3,470	-35,368	15,550	6,907	5,259	8,643		5,449	
1976	-50,608	-2,530	-4,213	-43,865	36,969	18,073	13,080	18,897		9,300	
1977	-34,650	-231	-3,679	-30,740	50,869	37,124	35,480	13,746		-927	
1976: I	-12,365	-773	-762	-10,830	7,590	3,819	2,323	3,771		3,073	688
II	-11,740	-1,578	-932	-9,230	7,914	4,017	3,351	3,897		1,685	215
III	-10,269	-407	-1,340	-8,522	8,932	3,070	1,320	5,862		1,018	-2,636
IV	-16,235	228	-1,180	-15,283	12,534	7,166	6,086	5,367		3,525	1,734
1977: I	-1,334	-388	-949	3	2,490	5,451	4,946	-2,962		1,600	131
II	-12,003	6	-795	-11,214	14,064	7,884	7,467	6,180		622	-179
III	-6,615	151	-1,098	-5,668	14,251	8,246	7,914	6,005		-4,751	-2,229
IV	-14,700		-838	-13,862	20,065	15,543	15,153	4,522		1,602	2,276
1978: I	-15,036	246	-896	-14,386	18,095	15,760	14,956	2,336		3,798	160
II	-6,134	329	-1,176	-5,287	406	-5,685	-5,373	6,090		8,830	-1
III p.	-11,006	180	-1,494	-9,692	14,612	4,904	4,554	9,708		218	-2,411

<sup>a</sup> Includes extraordinary U.S. Government transactions with India.<sup>b</sup> Consists of gold, special drawing rights, convertible currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

Note.—Quarterly data for changes in U.S. official reserve assets, U.S. private assets abroad, and foreign assets in the United States are not seasonally adjusted.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-98.—U.S. merchandise exports and imports by principal end-use categories, 1965-78

[Millions of dollars; quarterly data seasonally adjusted]

Year or quarter	Exports					Imports				
	Total	Agricultural	Nonagricultural			Total	Petroleum and products	Non-petroleum		
			Total	Capital goods	Other goods			Total	Industrial supplies	Other goods
1965 .....	26,461	6,305	20,156	8,052	12,104	21,510	2,034	19,476	9,123	10,353
1966 .....	29,310	6,949	22,361	8,907	13,454	25,493	2,078	23,415	10,235	13,180
1967 .....	30,666	6,453	24,213	9,934	14,279	26,866	2,091	24,775	9,956	14,819
1968 .....	33,626	6,297	27,329	11,111	16,218	32,991	2,384	30,607	12,027	18,580
1969 .....	36,414	6,096	30,318	12,369	17,949	35,807	2,649	33,158	11,798	21,360
1970 .....	42,469	7,374	35,095	14,659	20,436	39,866	2,930	36,936	12,467	24,469
1971 .....	43,319	7,831	35,488	15,372	20,116	45,579	3,650	41,929	13,824	28,105
1972 .....	49,381	9,513	39,868	16,914	22,954	55,797	4,650	51,147	16,349	34,798
1973 .....	71,410	17,978	53,432	21,999	31,433	70,499	8,415	62,084	19,725	42,359
1974 .....	98,306	22,412	75,894	30,887	45,007	103,649	26,589	77,060	27,975	49,085
1975 .....	107,088	22,242	84,846	36,659	48,187	98,041	27,017	71,024	24,211	46,813
1976 .....	114,694	23,381	91,313	39,065	52,248	124,047	34,573	89,474	30,000	59,474
1977 .....	120,576	24,336	96,240	39,807	56,433	151,706	44,980	106,726	36,070	70,656
1977: I .....	29,477	6,219	23,258	9,584	13,674	36,502	11,574	24,928	8,095	16,833
II .....	30,629	6,480	24,149	9,852	14,297	37,263	11,536	25,727	9,142	16,585
III .....	31,009	5,974	25,035	10,286	14,749	38,277	11,306	26,971	9,182	17,789
IV .....	29,461	5,663	23,798	10,085	13,713	39,664	10,564	29,100	9,651	19,449
1978: I .....	30,664	6,505	24,159	9,969	14,190	41,865	9,945	31,920	10,710	21,210
II .....	35,067	7,994	27,073	11,062	16,011	42,869	10,807	32,062	11,170	20,892
III .....	36,930	7,922	29,008	12,465	16,543	44,975	10,823	34,152	10,916	23,236

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.



TABLE B-99.—U.S. merchandise exports and imports by area, 1972-78

(Millions of dollars)

Item	1972	1973	1974	1975	1976	1977	1978 <sup>1</sup>
Exports.....	49,381	71,410	98,306	107,088	114,694	120,576	136,881
Developed countries.....	34,564	48,529	64,487	66,496	72,339	76,712	84,427
Canada.....	13,109	16,710	21,842	23,537	26,336	28,293	30,059
Japan.....	4,963	8,356	10,724	9,567	10,196	10,566	12,157
Western Europe.....	14,950	21,216	28,164	29,884	31,887	34,076	38,261
Australia, New Zealand, and South Africa.....	1,542	2,247	3,757	3,508	3,920	3,777	3,949
Developing countries.....	13,917	20,834	32,082	37,343	38,254	40,952	48,540
OPEC <sup>2</sup> .....	2,551	3,414	6,219	9,956	11,561	12,878	14,779
Other <sup>3</sup> .....	11,366	17,420	25,863	27,387	26,693	28,074	33,761
Eastern Europe.....	900	2,047	1,737	3,249	4,101	2,912	4,467
Imports.....	55,797	70,499	103,649	98,041	124,047	151,706	172,945
Developed countries.....	40,643	48,985	61,092	55,973	67,488	79,247	97,572
Canada.....	14,493	17,694	22,392	21,710	26,475	29,664	32,875
Japan.....	9,076	9,665	12,414	11,257	15,531	18,565	24,395
Western Europe.....	15,661	19,774	24,267	20,764	23,003	28,226	36,120
Australia, New Zealand, and South Africa.....	1,413	1,852	2,019	2,242	2,479	2,792	4,183
Developing countries.....	14,791	20,913	41,580	41,334	55,375	70,678	73,737
OPEC <sup>2</sup> .....	2,974	5,097	17,234	18,897	27,409	35,778	33,163
Other <sup>3</sup> .....	11,817	15,816	24,346	22,437	27,966	34,900	40,575
Eastern Europe.....	363	601	977	734	875	1,127	1,441

<sup>1</sup> First 3 quarters at seasonally adjusted annual rate; preliminary. Detail will not add to totals because of seasonal adjustment discrepancy and rounding.

<sup>2</sup> Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela.

<sup>3</sup> Latin American Republics, other Western Hemisphere, and other countries in Asia and Africa, less petroleum exporting countries and the International Monetary Fund.

<sup>4</sup> Includes imports of nonmonetary gold from International Monetary Fund, not in area detail.

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-100.—*International investment position of the United States at year-end, 1970-77*

[Billions of dollars]

Type of investment	1970	1972	1974	1975	1976	1977
Net international position of the United States.....	58.6	37.1	58.3	73.9	80.7	70.0
U.S. assets abroad.....	165.5	199.0	255.7	295.1	346.4	381.3
U.S. official reserve assets.....	14.5	13.2	15.9	16.2	18.7	19.3
Gold.....	11.1	10.5	11.7	11.6	11.6	11.7
Special drawing rights (SDR).....	.9	2.0	2.4	2.3	2.4	2.6
Reserve position in the International Monetary Fund (IMF).....	1.9	.5	1.9	2.2	4.4	4.9
Foreign currency reserves.....	.6	.2	.0	.1	.3	.0
Other U.S. Government assets.....	32.1	36.1	38.4	41.8	46.0	49.6
U.S. loans and other long-term assets.....	29.7	34.1	36.3	39.8	44.1	47.8
U.S. short-term assets other than reserves.....	2.5	2.0	2.1	2.0	1.9	1.8
U.S. private assets.....	118.8	149.7	201.5	237.1	281.7	312.4
Direct investments abroad (book value).....	75.5	89.9	110.1	124.1	136.4	148.8
Foreign securities.....	21.0	27.6	28.2	34.9	44.1	49.3
Claims on foreigners reported by U.S. banks, not included elsewhere.....	13.8	20.7	46.2	59.8	81.1	92.6
Claims on unaffiliated foreigners reported by U.S. nonbanks.....	8.5	11.4	17.0	18.3	20.1	21.8
Foreign assets in the United States.....	106.8	161.8	197.4	221.2	265.7	311.3
Foreign official assets.....	26.1	63.2	80.3	87.6	106.6	143.1
U.S. Government securities <sup>1</sup> .....	17.7	52.9	57.7	63.3	73.6	106.0
Other U.S. Government liabilities.....	1.7	1.6	3.5	5.1	10.1	11.8
Liabilities reported by U.S. banks, not included elsewhere.....	6.7	8.5	18.4	16.3	17.2	18.0
Other official assets.....	.0	.2	.6	2.9	5.6	7.2
Other foreign assets.....	80.7	98.7	117.1	133.6	159.1	168.2
Direct investments in the United States (book value).....	13.3	14.9	25.1	27.7	30.8	34.1
Liabilities reported by U.S. banks, not included elsewhere.....	22.7	21.2	41.8	42.5	53.5	60.2
U.S. Treasury securities.....	1.2	1.2	1.7	4.2	7.0	7.6
Other U.S. securities <sup>2</sup> .....	34.7	50.7	34.9	45.3	54.8	53.1
Liabilities to unaffiliated foreigners reported by U.S. nonbanks.....	8.8	10.7	13.6	13.9	13.0	13.3

<sup>1</sup> Includes Treasury and agency issues of securities.<sup>2</sup> Corporate and other bonds and corporate stocks.

Note.—Gold is valued at SDR35 per ounce, throughout. The SDR value is converted to dollars at \$1/SDR before December 1971, at \$1.08571/SDR from December 1971 through January 1973, at \$1.20635/SDR from February 1973 through June 1974, and as measured by the basket valuation of the SDR beginning July 1974.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-101.—International reserves, 1952, 1962, and 1974-78

[Millions of dollars; end of period]

Area and country	1952	1962	1974	1975	1976	1977	1978
							November
All countries.....	149,187	62,659	219,799	226,852	257,402	317,847	347,874
Industrialized countries <sup>2</sup> .....	36,773	49,254	119,908	121,880	131,849	169,356	198,808
United States.....	24,714	17,220	16,058	15,883	18,320	19,392	18,605
Canada.....	1,944	2,551	5,825	5,326	5,843	4,608	4,487
Japan.....	1,101	2,021	13,519	12,815	16,605	23,261	32,730
Austria.....	116	1,081	3,430	4,439	4,410	4,244	5,345
Belgium.....	1,133	1,753	5,345	5,797	5,206	5,761	5,820
France.....	686	4,049	8,852	12,593	9,728	10,194	13,319
Germany.....	960	6,957	32,398	31,034	34,801	39,737	52,301
Italy.....	722	4,068	6,941	4,774	6,654	11,629	14,123
Netherlands.....	950	1,944	6,957	7,109	7,387	8,065	6,930
Scandinavian countries (Denmark, Norway, and Sweden).....	817	1,362	4,600	6,191	5,636	7,539	9,955
Switzerland.....	1,667	2,919	9,011	10,428	12,993	13,830	18,381
United Kingdom.....	1,956	3,308	6,939	5,459	4,230	21,057	16,770
Other Europe.....	1,559	2,966	15,138	13,046	13,734	15,668	21,296
Australia, New Zealand, and South Africa.....	1,509	2,066	6,068	4,900	4,602	3,657	4,018
Oil exporting countries.....	1,699	2,030	46,995	56,533	65,233	75,495	59,326
Iran.....	177	211	8,383	8,897	8,833	12,266	-----
Nigeria.....	500	289	5,626	5,609	5,203	4,259	1,619
Saudi Arabia <sup>3</sup> .....	-----	268	14,285	23,319	27,025	30,034	19,761
Venezuela.....	443	583	6,513	8,861	8,578	8,214	6,526
Other <sup>4</sup> .....	579	679	12,188	9,847	15,594	20,722	-----
Other less developed areas.....	7,187	6,343	31,691	30,496	41,983	53,670	64,427
Other Western Hemisphere.....	2,086	1,700	11,905	10,021	15,215	20,296	26,716
Other Middle East.....	826	992	4,754	5,186	5,778	7,472	8,547
Other Asia.....	3,479	2,663	12,055	12,513	17,912	22,141	25,390
Other Africa.....	796	988	2,977	2,777	3,078	3,763	3,776

<sup>1</sup> Includes Cuba.<sup>2</sup> Includes Luxembourg.<sup>3</sup> Data beginning April 1978 exclude the foreign exchange cover against the note issue.<sup>4</sup> Algeria, Indonesia, Iraq, Kuwait, Libya, Oman, Qatar, and United Arab Emirates.

Note.—International reserves is comprised of monetary authorities' holdings of gold, special drawing rights (SDR), reserve positions in the International Monetary Fund, and foreign exchange. Data exclude U.S.S.R., other Eastern European countries, Mainland China, and Cuba (after 1960).

Source: International Monetary Fund, "International Financial Statistics."

TABLE B-102.—Summary of major U.S. Government net foreign assistance, July 1, 1945 to December 31, 1977

[Millions of dollars]<sup>1</sup>

Type and geographic distribution	Yearly average or calendar year				
	1945-49 <sup>2</sup>	1950-54	1955-59	1960-64	1965-69
Total, net.....	5,540	5,059	4,772	4,664	5,899
Investment in 6 international financial institutions <sup>3</sup> .....	141	-----	7	124	81
Under assistance programs, net.....	5,399	5,059	4,764	4,540	5,818
Net new military grants.....	325	2,462	2,438	1,594	2,190
Gross new grants.....	340	2,494	2,451	1,629	2,196
Less: Reverse grants and returns.....	15	32	14	35	5
Other grants, credits, and other assistance (through net accumulation of foreign currency claims), net.....	5,074	2,597	2,327	2,946	3,628
Net new economic and technical aid grants <sup>4</sup> .....	3,312	2,406	1,710	1,850	1,776
Gross new grants.....	3,486	2,512	1,759	1,872	1,780
Less: Reverse grants and returns.....	174	106	48	22	4
Net new credits <sup>4,5</sup> .....	1,762	148	210	871	1,950
New credits.....	1,986	544	827	1,843	3,082
Less: Principal collections.....	224	396	617	972	1,132
Other assistance (through net accumulation of foreign currency claims) <sup>6</sup> .....	-----	42	407	225	-98
Currency claims acquired.....	-----	51	965	1,230	814
Sales of farm products.....	-----	51	963	1,186	691
Second-stage operations <sup>7</sup> .....	-----	-----	2	44	122
Less: Currencies disbursed.....	-----	9	558	1,005	912
Economic grants and credits to purchasing country.....	-----	7	413	807	716
Other uses.....	-----	2	145	198	196
<b>Geographic distribution of net nonmilitary assistance</b>					
Developing countries, <sup>8</sup> net total.....	904	1,032	2,211	3,316	3,611
Net new economic and technical aid grants.....	752	772	1,470	1,817	1,765
Net new credits.....	152	240	386	1,310	1,926
Other assistance (through net accumulation of foreign currency claims).....	-----	20	355	189	-80
Developed countries, <sup>8</sup> net total.....	4,170	1,564	116	-371	17
Net new economic and technical aid grants.....	2,560	1,634	240	32	11
Net new credits.....	1,610	-92	-176	-439	24
Other assistance (through net accumulation of foreign currency claims).....	-----	22	52	36	-18

<sup>1</sup> Negative figures (—) occur when the total of grant returns, principal repayments, and/or foreign currencies disbursed by the Government exceeds new grants and new credits utilized and/or acquisitions of foreign currencies through new sales of farm products.

<sup>2</sup> July 1, 1945, through December 31, 1949. Yearly average is for 4½ years.

<sup>3</sup> Includes paid-in capital subscriptions and contributions to the special funds of the African Development Fund, Asian Development Bank, Inter-American Development Bank, International Bank for Reconstruction and Development, International Development Association, and International Finance Corporation.

<sup>4</sup> Net new grants are not adjusted for settlements of postwar relief and other grants under agreements, and net new credits exclude prior grants converted into credits. Repayments on these settlements are included in net new credits.

<sup>5</sup> Outstanding credits on December 31, 1977, totaled \$41,610 million, representing net credits extended since organization of Export-Import Bank, February 12, 1934, less chargeoffs and net adjustments due to exchange rates (\$1,537 million), and excluding World War I debts. The amount repayable in dollars at U.S. Government option was \$39,018 million; the remainder was repayable in foreign currencies, commodities, or services, at the option of the borrowers.

(See next page for continuation of table.)

TABLE B-102.—*Summary of major U.S. Government net foreign assistance, July 1, 1945 to December 31, 1977—Continued*

[Millions of dollars]<sup>1</sup>

Type and geographic distribution	Yearly average or calendar year			
	1970-74	1975	1976	1977 <sup>2</sup>
Total, net.....	7,146	8,671	7,930	6,723
Investment in 6 international financial institutions <sup>3</sup> .....	332	654	1,102	870
Under assistance programs, net.....	6,814	8,017	6,828	5,853
Net new military grants.....	3,310	2,891	1,339	757
Gross new grants.....	3,314	2,895	1,342	760
Less: Reverse grants and returns.....	5	4	3	3
Other grants, credits, and other assistance (through net accumulation of foreign currency claims), net.....	3,504	5,126	5,488	5,096
Net new economic and technical aid grants <sup>4</sup> .....	2,486	2,247	2,266	2,275
Gross new grants.....	2,534	2,249	2,272	2,275
Less: Reverse grants and returns.....	48	2	6	
Net new credits <sup>4,5</sup> .....	1,190	2,849	3,275	2,860
New credits.....	3,836	5,293	5,837	5,546
Less: Principal collections.....	2,646	2,444	2,563	2,686
Other assistance (through net accumulation of foreign currency claims) <sup>6</sup> .....	-171	30	-53	-39
Currency claims acquired.....	742	189	129	175
Sales of farm products.....	106	5	(*)	(*)
Second-stage operations <sup>7</sup> .....	635	184	129	175
Less: Currencies disbursed.....	913	159	182	214
Economic grants and credits to purchasing country.....	709	21	42	16
Other uses.....	204	138	140	198
<b>Geographic distribution of net nonmilitary assistance</b>				
<b>Developing countries,<sup>8</sup> net total.....</b>	<b>3,614</b>	<b>5,017</b>	<b>5,329</b>	<b>5,284</b>
Net new economic and technical aid grants.....	2,529	2,248	2,266	2,273
Net new credits.....	1,234	2,711	3,093	3,017
Other assistance (through net accumulation of foreign currency claims).....	-149	58	-30	-6
<b>Developed countries,<sup>8</sup> net total.....</b>	<b>-110</b>	<b>109</b>	<b>158</b>	<b>-188</b>
Net new economic and technical aid grants.....	-44	-1	(*)	2
Net new credits.....	-44	138	181	-157
Other assistance (through net accumulation of foreign currency claims).....	-22	-28	-23	-33

<sup>1</sup> Equivalent value of currencies still available to be used, including some funds advanced from foreign governments and after loss by exchange rate fluctuations (\$1,962 million), was \$555 million on December 31, 1977.

<sup>2</sup> Includes foreign currencies acquired from triangular trade operations and principal and interest collections on credits, originally extended under Public Law 83-480, which—since enactment of Public Law 87-128—are available for the same purposes as Public Law 83-480 currencies.

<sup>3</sup> Developed countries include Australia, Canada, Japan, New Zealand, Republic of South Africa, and all countries in Europe except Cyprus, Gibraltar, Greece, Malta, Portugal, Spain, Turkey, and Yugoslavia. Developing countries include all other countries. This classification is on the basis of the standard list of less developed countries used by the Development Assistance Committee of the Organization for Economic Cooperation and Development.

<sup>4</sup> Less than plus or minus \$500,000.

Source: Department of Commerce, Bureau of Economic Analysis, based on information made available by operating agencies.

TABLE B-103.—World trade: Exports and imports, 1965, 1970, and 1974-78

[Billions of U.S. dollars]

Area and country	1965	1970	1974	1975	1976	1977	1978 <sup>1</sup>
	Exports, f.a.s. <sup>2</sup>						
Developed countries <sup>3</sup> .....	129.7	225.9	547.9	583.3	647.3	734.8	853.4
United States.....	27.5	43.2	98.5	107.6	115.0	121.2	140.2
Canada.....	8.5	16.7	34.5	34.1	40.5	43.4	47.5
Japan.....	8.5	19.3	55.6	55.8	67.3	81.1	99.9
European Community <sup>4</sup> .....	64.8	113.0	276.9	298.4	328.8	382.0	444.0
France.....	10.2	18.1	46.3	53.1	57.2	65.0	79.5
West Germany.....	17.9	34.2	89.3	90.2	102.2	118.1	142.1
Italy.....	7.2	13.2	30.5	34.8	37.3	45.0	52.5
United Kingdom.....	13.8	19.6	39.4	44.5	46.7	58.2	71.2
Other developed countries.....	20.4	33.6	82.4	87.4	95.7	107.1	121.8
Developing countries.....	35.2	54.3	216.8	203.7	248.6	283.3	296.1
OPEC <sup>5</sup> .....	10.7	17.6	120.5	111.5	135.3	147.6	145.0
Other.....	24.5	36.7	96.3	92.2	113.3	135.7	151.1
Communist countries <sup>6</sup> .....	23.2	34.7	75.5	90.4	99.1	115.8	133.3
U.S.S.R.....	8.2	12.8	27.4	33.4	37.3	45.2	52.9
Eastern Europe.....	11.8	18.2	37.6	45.3	49.5	56.9	63.8
China.....	2.0	2.1	6.7	7.2	7.3	7.9	9.9
TOTAL.....	188.1	314.9	840.2	877.4	995.0	1,133.9	1,282.8
	Imports, c.i.f. <sup>7</sup>						
Developed countries <sup>3</sup> .....	136.7	235.3	608.6	610.9	701.5	793.3	889.2
United States.....	23.2	42.4	108.0	103.4	129.6	157.6	184.0
Canada.....	8.7	14.3	34.4	36.2	40.3	42.1	45.8
Japan.....	8.2	18.9	62.1	57.9	64.9	71.3	80.2
European Community <sup>4</sup> .....	69.3	116.9	295.9	301.9	345.6	389.7	440.9
France.....	10.4	19.1	52.9	54.0	64.4	70.5	80.7
West Germany.....	17.6	29.9	69.6	74.9	88.4	101.5	121.2
Italy.....	7.4	15.0	41.1	38.4	43.4	47.6	52.4
United Kingdom.....	16.1	22.0	55.0	54.2	56.6	64.6	77.8
Other developed countries.....	27.3	43.0	108.2	111.5	121.2	132.7	138.2
Developing countries.....	37.0	56.6	163.3	189.5	207.2	249.1	291.3
OPEC <sup>5</sup> .....	6.5	10.0	33.4	52.7	64.1	87.5	104.1
Other.....	30.5	46.6	129.9	136.8	143.1	161.6	187.2
Communist countries <sup>6</sup> .....	22.6	34.2	79.2	100.8	105.1	115.3	133.5
U.S.S.R.....	8.1	11.7	24.9	37.1	38.2	40.9	49.0
Eastern Europe.....	11.6	18.5	42.3	51.3	55.6	61.7	67.7
China.....	1.8	2.2	7.4	7.4	6.0	6.9	10.1
TOTAL.....	196.3	326.1	851.1	901.1	1,013.8	1,157.7	1,314.0

<sup>1</sup> Preliminary estimates.<sup>2</sup> Free-alongside-ship value.<sup>3</sup> Includes the OECD countries, South Africa, and non-OECD Europe.<sup>4</sup> Includes Belgium-Luxembourg, Denmark, Ireland, and the Netherlands, not shown separately.<sup>5</sup> Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.<sup>6</sup> Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.<sup>7</sup> Cost, insurance, and freight value.

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B-104.—World trade balance and current account balances, 1965, 1970, and 1974-78

(Billions of U.S. dollars)

Area and country	1965	1970	1974	1975	1976	1977	1978 <sup>1</sup>
<b>World trade balance<sup>2</sup></b>							
Developed countries <sup>3</sup> .....	-6.9	-9.6	-60.7	-27.6	-54.2	-58.5	-35.8
United States.....	4.3	.8	-9.5	4.2	-14.6	-36.3	-43.8
Canada.....	-2	2.5	.1	-2.1	.2	1.3	1.7
Japan.....	.3	.4	-6.5	-2.1	2.4	9.8	19.7
European Community <sup>4</sup> .....	-4.5	-3.9	-19.0	-3.5	-16.8	-7.7	3.1
France.....	-2	-1.0	-6.7	-8	-7.2	-5.5	-1.3
West Germany.....	.3	4.3	19.7	15.2	13.7	16.6	20.9
Italy.....	-2	-1.8	-10.6	-3.6	-6.2	-2.5	.2
United Kingdom.....	-2.3	-2.4	-15.6	-9.6	-9.9	-6.4	-6.6
Other developed countries.....	-6.8	-9.4	-25.8	-24.1	-25.5	-25.7	-16.4
Developing countries.....	-1.8	-2.3	53.4	14.3	41.3	34.2	4.8
OPEC <sup>5</sup> .....	4.2	7.6	87.0	58.9	71.2	60.1	40.9
Other.....	-6.0	-9.9	-33.6	-44.6	-29.9	-25.9	-36.1
Communist countries <sup>6</sup> .....	.5	.5	-3.7	-10.4	-6.0	.5	-.2
U.S.S.R.....	.1	1.1	2.5	-3.7	-.9	4.3	3.9
Eastern Europe.....	.2	-.4	-4.7	-6.0	-6.1	-4.8	-3.9
China.....	.2	-2	-7	-2	1.3	1.0	-.2
TOTAL <sup>7</sup> .....	-8.2	-11.4	-11.0	-23.7	-18.9	-23.8	-31.2
<b>Current account balances<sup>8</sup></b>							
OECD.....	3.8	6.7	-25.3	0.3	-19.0	-27.5	0.5
United States.....	5.4	2.4	1.7	18.4	4.3	-15.3	-17.0
Canada.....	-1.1	1.1	-1.5	-4.7	-3.8	-3.9	-4.0
Japan.....	.9	2.0	-4.7	-.7	3.7	10.9	20.0
European Community <sup>4</sup> .....	.9	3.2	-12.4	.4	-6.6	.8	9.8
France.....	.4	.1	-6.0	-.1	-6.1	-3.3	2.0
West Germany.....	-1.6	.9	9.8	4.0	3.8	3.7	6.0
Italy.....	2.2	1.1	-8.0	-.8	-2.8	2.3	5.5
United Kingdom.....	-.1	1.8	-8.6	-4.1	-2.0	.5	-.5
Other.....	-.1	1.8	-8.6	-4.1	-2.0	.5	-.5
Developing countries.....	.....	-8.5	34.8	-11.2	11.0	7.5	-23.0
OPEC <sup>5</sup> .....	.....	-5	59.3	27.3	37.0	31.5	11.0
Other.....	.....	-8.0	-24.5	-38.5	-26.0	-24.0	-34.0
Other <sup>10</sup> .....	.....	-2.8	-9.8	-18.5	-12.8	-10.0	-10.8
TOTAL.....	.....	-4.5	-.3	-29.5	-20.8	-30.0	-33.3

<sup>1</sup> Preliminary estimates.<sup>2</sup> Exports f.a.s. (free alongside ship) less imports c.i.f. (cost, insurance, and freight).<sup>3</sup> Includes the OECD countries, South Africa, and non-OECD Europe.<sup>4</sup> Includes Belgium-Luxembourg, Denmark, Ireland, and the Netherlands, not shown separately.<sup>5</sup> Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Saudi Arabia, United Arab Emirates, and Venezuela.<sup>6</sup> Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.<sup>7</sup> Asymmetries arise in global payments aggregations because of discrepancies in coverage, classification, timing, and valuation in the recording of transactions by the countries involved.<sup>8</sup> OECD basis.<sup>9</sup> Consists of countries in footnote 4 plus Bahrain and Qatar.<sup>10</sup> Includes Communist countries and non-OECD developed countries.

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B-105.—Consumer prices and hourly compensation, major industrial countries, 1960-78

[1967=100]

Year or quarter	United States	Canada	Japan	France	West Germany	Italy	United Kingdom
Consumer prices							
1960.....	88.7	85.9	67.7	78.8	82.8	74.1	78.9
1961.....	89.6	86.7	71.3	81.4	84.7	75.7	81.6
1962.....	90.6	87.7	76.1	85.3	87.3	79.2	85.1
1963.....	91.7	89.3	81.9	89.4	89.8	85.1	86.8
1964.....	92.9	90.9	85.0	92.5	92.0	90.1	89.6
1965.....	94.5	93.1	91.5	94.8	94.9	94.2	93.9
1966.....	97.2	95.6	96.2	97.2	98.3	96.4	97.6
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.2	104.1	105.3	104.5	101.5	101.4	104.7
1969.....	109.8	108.8	110.8	111.3	103.4	104.1	110.4
1970.....	116.3	112.4	119.3	117.1	107.1	109.2	117.4
1971.....	121.3	115.6	126.5	123.5	112.7	114.4	128.5
1972.....	125.3	121.2	132.3	131.1	119.0	121.0	137.7
1973.....	133.1	130.3	147.9	140.7	127.2	134.0	150.2
1974.....	147.7	144.5	184.0	160.0	136.1	159.7	174.3
1975.....	161.2	160.1	205.8	178.9	144.2	186.8	216.5
1976.....	170.5	172.1	224.9	196.1	150.7	218.1	252.4
1977.....	181.5	185.9	243.0	214.5	156.6	255.2	292.4
1977: I.....	176.9	179.7	237.3	205.6	154.8	242.9	279.7
II.....	180.7	183.9	243.7	211.9	156.9	252.1	292.1
III.....	183.3	188.0	244.4	216.9	157.3	258.5	296.8
IV.....	185.3	192.0	246.5	221.1	157.6	267.2	301.1
1978: I.....	188.5	195.6	247.5	224.6	159.6	274.1	306.2
II.....	193.4	200.3	252.6	230.9	161.1	282.6	314.6
III.....	197.9	205.4	254.3	237.1	161.0	289.3	320.0
Hourly compensation <sup>1</sup>							
1960.....	77.1	80.3	43.4	56.0	51.8	46.8	65.9
1961.....	79.5	78.9	50.3	61.7	60.5	51.8	70.8
1962.....	82.6	77.0	57.5	67.9	68.8	61.1	74.6
1963.....	85.2	79.0	64.1	75.0	73.6	72.3	77.9
1964.....	88.9	82.0	72.0	80.7	79.5	80.4	83.2
1965.....	91.0	86.2	81.1	86.9	85.7	86.0	91.2
1966.....	95.3	93.0	89.2	92.5	94.3	89.8	98.7
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	107.1	107.4	116.9	112.6	105.9	106.8	93.3
1969.....	113.9	115.5	139.3	111.6	117.3	121.1	100.6
1970.....	121.7	128.2	165.9	117.2	145.9	145.0	115.1
1971.....	129.5	142.6	197.3	131.3	173.4	169.7	133.4
1972.....	136.6	156.8	259.2	159.9	211.4	206.0	153.3
1973.....	146.4	170.6	353.7	208.1	289.3	261.7	167.7
1974.....	161.1	201.7	431.2	229.6	342.5	291.6	204.5
1975.....	180.1	222.1	497.2	304.7	406.2	374.7	247.8
1976.....	195.1	261.3	538.3	312.5	420.1	352.6	237.8
1977.....	212.2	268.4	650.5	348.6	497.5	391.0	252.9

<sup>1</sup> Hourly compensation in manufacturing, U.S. dollar basis. Data relate to all employed persons (wage and salary earners and the self-employed) in the United States and Canada and to all employees (wage and salary earners) in the other countries. For France and United Kingdom compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Source: Department of Commerce (Bureau of International Economic Policy and Research) and Department of Labor (Bureau of Labor Statistics).



TABLE B-106.—Industrial production and unemployment rate, major industrial countries, 1960-78

[Quarterly data seasonally adjusted]

Year or quarter	United States	Canada	Japan	European Community <sup>1</sup>	France	West Germany	Italy	United Kingdom
Industrial production (1967=100) <sup>2</sup>								
1960	66.2	63.0	43.0	74.7	71	77.6	60.0	84.0
1961	66.7	65.6	51.3	78.1	75	82.0	65.7	84.0
1962	72.2	71.1	55.4	81.3	79	86.4	71.9	84.8
1963	76.5	75.7	61.7	84.8	83	89.4	77.9	88.4
1964	81.7	82.6	71.4	91.0	90	96.6	79.1	95.0
1965	89.8	89.6	74.2	94.7	93	102.1	83.0	97.7
1966	97.8	96.3	83.9	98.4	98	103.0	92.3	99.2
1967	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0
1968	106.3	106.4	115.2	107.4	104	109.2	106.4	106.8
1969	111.1	113.7	133.4	117.6	114	123.1	110.5	110.3
1970	107.8	115.3	151.7	123.3	120	131.1	117.6	110.9
1971	109.6	121.5	155.8	126.1	128	133.6	117.6	110.6
1972	119.7	130.7	167.2	131.7	135	138.7	122.7	113.2
1973	129.8	143.0	190.5	141.4	145	147.7	134.6	123.0
1974	129.3	147.5	183.1	142.3	148	145.1	140.6	120.0
1975	117.8	139.6	163.9	132.8	139	137.1	127.6	114.3
1976	129.8	146.7	182.0	142.5	149	149.1	143.5	117.4
1977	137.1	152.6	189.5	145.0	152	152.7	145.1	123.1
1978 <sup>3</sup>	145.1							
1977: I	133.6	151.4	189.2	149	153	153	154.5	123.2
II	137.0	151.7	188.9	147	152	151	143.6	123.0
III	138.4	152.7	188.7	144	151	152	142.5	123.6
IV	139.3	154.8	191.2	144	149	153	139.5	122.3
1978: I	139.6	155.8	196.7	146	152	153	146.0	124.1
II	144.0	157.8	200.2	146	155	153	144.6	128.0
III	147.0	160.4	201.6		154	157	145.2	128.3
IV <sup>4</sup>	149.5							
Unemployment rate (percent) <sup>3</sup>								
1960	5.5	7.0	1.7		1.8	1.1	3.8	2.2
1961	6.7	7.1	1.5		1.6	.6	3.2	2.0
1962	5.5	5.9	1.3		1.5	.6	2.8	2.8
1963	5.7	5.5	1.3		1.3	.5	2.4	3.4
1964	5.2	4.7	1.2		1.5	.4	2.6	2.5
1965	4.5	3.9	1.2		1.6	.3	3.5	2.2
1966	3.8	3.4	1.4		1.9	.3	3.8	2.3
1967	3.8	3.8	1.3		2.0	1.3	3.4	3.4
1968	3.6	4.5	1.2		2.6	1.4	3.4	3.3
1969	3.5	4.4	1.1		2.4	.9	3.3	3.0
1970	4.9	5.7	1.2		2.6	.8	3.1	3.1
1971	5.9	6.2	1.3		2.8	.8	3.1	3.7
1972	5.6	6.2	1.4		2.9	.8	3.6	4.1
1973	4.9	5.6	1.3		2.7	.8	3.4	2.9
1974	5.6	5.4	1.4		3.0	1.7	2.8	2.9
1975	8.5	6.9	1.9		4.3	3.6	3.2	4.1
1976	7.7	7.1	2.0		4.7	3.6	3.6	5.5
1977	7.0	8.1	2.0		5.1	3.6	3.4	6.2
1978 <sup>3</sup>	6.0	8.4	2.3		5.5	3.4	3.5	6.1
1977: I	7.5	7.9	1.9		4.9	3.5	3.4	6.0
II	7.2	8.1	2.1		5.1	3.5	3.4	6.0
III	6.9	8.2	2.1		5.3	3.6	3.5	6.3
IV	6.6	8.4	2.1		4.9	3.5	3.4	6.4
1978: I	6.2	8.4	2.1		5.0	3.5	3.5	6.3
II	6.0	8.6	2.3		5.1	3.4	3.5	6.2
III	6.0	8.5	2.3		6.0	3.4	3.6	6.1
IV <sup>4</sup>	5.8	8.2				3.4	3.6	5.9

<sup>1</sup> Consists of Belgium-Luxembourg, Denmark, France, Ireland, Italy, Netherlands, United Kingdom, and West Germany.<sup>2</sup> All data exclude construction.<sup>3</sup> Unemployment rates adjusted to U.S. concepts. Data for United Kingdom exclude Northern Ireland.<sup>4</sup> 11-month average, seasonally adjusted.

Sources: Department of Commerce (Bureau of International Economic Policy and Research) and Department of Labor (Bureau of Labor Statistics).

TABLE B-107.—Growth rates in real gross national product, 1960-78

[Percent change]							U.S. dollar value in 1977 (billions) <sup>2</sup>
Area and country	1960-73 annual average	1974	1975	1976	1977	1978 <sup>1</sup>	
OECD countries .....	4.8	0.4	-0.6	5.2	3.7	3.5	4,917.8
United States .....	3.9	-1.4	-1.3	5.7	4.9	3.9	1,887.2
Canada .....	5.4	3.5	1.2	5.8	2.7	3.5	197.6
Japan .....	10.5	-1.0	2.4	6.0	5.2	5.8	690.5
European Community <sup>3</sup> .....	4.7	1.7	-1.8	5.0	2.3	2.8	1,573.0
France .....	5.7	2.6	-.1	5.6	3.0	3.0	380.7
West Germany .....	4.8	.5	-2.6	5.6	2.6	3.0	516.3
Italy .....	5.2	3.9	-3.5	5.6	1.7	2.0	196.0
United Kingdom .....	3.2	-1.6	-1.6	2.6	1.6	3.0	245.2
Other OECD <sup>4</sup> .....	5.4	3.6	.0	3.5	1.8	2.3	569.5
Communist countries <sup>5</sup> .....	<sup>6</sup> 5.3	4.6	3.7	3.4	4.6	-----	1,870.0
U.S.S.R. ....	<sup>6</sup> 5.0	3.8	1.9	4.3	3.3	3.2	1,047.9
Eastern Europe .....	<sup>6</sup> 4.1	4.7	4.1	4.3	4.0	-----	348.0
China .....	<sup>6</sup> 6.2	3.7	6.9	.1	9.0	10.5	372.0
Less developed countries .....	-----	-----	-----	-----	-----	-----	1,130.0
OPEC .....	<sup>7</sup> 9.0	8.0	.1	12.9	6.3	-----	-----
Other .....	<sup>7</sup> 6.1	5.3	4.1	4.8	4.9	-----	-----
TOTAL .....	-----	-----	-----	-----	-----	-----	<sup>8</sup> 7,960.0

<sup>1</sup> Preliminary estimates.

<sup>2</sup> Estimates based on conversion at average rates of exchange for 1977, except for those of the Communist countries, which were converted at U.S. purchasing power equivalents.

<sup>3</sup> Includes Belgium-Luxembourg, Denmark, Ireland, and the Netherlands, not shown separately.

<sup>4</sup> Growth rates are for OECD countries other than the Big Seven (United States, Canada, Japan, France, West Germany, Italy, and the United Kingdom).

<sup>5</sup> Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

<sup>6</sup> 1961-73 annual average.

<sup>7</sup> 1967-73 annual average.

<sup>8</sup> Sum of OECD countries, Communist countries, and less developed countries plus a residual of \$42.2 billion attributable to non-OECD developed countries.

Note.—For Italy and United Kingdom, data relate to real gross domestic product. For France, data relate to gross domestic product excluding nonmarket activity such as compensation of employees in the government sector.

Sources: Department of Commerce, International Monetary Fund, Organization for Economic Cooperation and Development (OECD), and Council of Economic Advisers.

NATIONAL WILDERNESS PRESERVATION SYSTEM  
14TH ANNUAL REPORT

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MESSAGE

FROM

**THE PRESIDENT OF THE UNITED STATES**

TRANSMITTING

THE ANNUAL REPORT ON THE STATUS OF THE NATIONAL  
WILDERNESS PRESERVATION SYSTEM FOR CALENDAR YEAR  
1977, PURSUANT TO SECTION 7 OF PUBLIC LAW 88-577



FEBRUARY 8, 1979.—Message and accompanying papers referred to the  
Committee on Interior and Insular Affairs and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1979



*To the Congress of the United States:*

I am transmitting herewith the Fourteenth Annual Report on the Status of the National Wilderness Preservation System. This information has been compiled by the Secretaries of Agriculture and the Interior for lands under their respective jurisdiction and covers calendar year 1977.

JIMMY CARTER.

THE WHITE HOUSE, *February 6, 1979.*

(iii)



U.S. DEPARTMENT OF THE INTERIOR,  
OFFICE OF THE SECRETARY,  
Washington, D.C.

THE PRESIDENT,  
*The White House,*  
*Washington, D.C.*

DEAR MR. PRESIDENT: Pursuant to the Wilderness Act P.L. 88-577 (78 Stat. 890, 891), we are pleased to submit to you, for transmission to the Congress, our Fourteenth Annual Report on the Status of the National Wilderness Preservation System, covering calendar year 1977.

Sincerely,

CECIL D. ANDRUS,  
*Secretary of the Interior.*  
BOB BERGLAND,  
*Secretary of Agriculture.*

Enclosure.

FOURTEENTH ANNUAL REPORT ON THE STATUS OF THE NATIONAL  
WILDERNESS PRESERVATION SYSTEM

*Review of roadless areas in the National Park System*

Section 3(c) of the Wilderness Act directed the Secretary of the Interior to review every roadless area of 5,000 contiguous acres or more within units of the National Park System under his jurisdiction on September 3, 1964. Certain Acts which established new units of the National Park System since September 3, 1964, have also provided for wilderness reviews in accordance with procedures contained in the Wilderness Act. After his review, the Secretary reports to the President as to the suitability or unsuitability of each area for preservation as part of the wilderness system and the President sends his recommendation to the Congress.

A total of 68 National Park System units are to be reviewed under the provisions of the Wilderness Act of September 3, 1964, and subsequent Acts of the Congress. Recommendations for 58 of these units have now been submitted to the Congress. On September 15, 1977, the Secretary of the Interior presented to the Congress the Administration's wilderness recommendations for Denali National Park (Mt. McKinley), Glacier Bay and Katmai National Monuments in Alaska and for lands proposed for addition to them. Additionally, the Secretary presented wilderness recommendations for four new proposed Alaska areas; Gates of the Arctic Wilderness National Park, Kenai Fjords National Park, Lake Clark National Park, and the Wrangell-St. Elias National Park. Wilderness reviews of eleven recently created or enlarged National Park System units are to be completed by various times through 1979.

*Congressional action*

Prior to 1977, the following 48 areas of the National Park System were favorably recommended by the Secretary of the Interior and transmitted to the Congress for inclusion in the National Wilderness Preservation System:

- Arches National Monument, Utah (now National Park).
- Assateague Island National Seashore, Maryland, Virginia.
- Badlands National Monument, South Dakota.
- Bandelier National Monument, New Mexico.
- Big Bend National Park, Texas.
- Black Canyon of the Gunnison National Monument, Colorado.
- Bryce Canyon National Park, Utah.
- Capitol Reef National Monument, Utah (now National Park).
- Carlsbad Caverns National Park, New Mexico.
- Cedar Breaks National Monument, Utah.
- Chiricahua National Monument, Arizona.
- Colorado National Monument, Colorado.
- Crater Lake National Park, Oregon.
- Craters of the Moon National Monument, Idaho.
- Cumberland Gap National Historical Park, Kentucky, Virginia, Tennessee.
- Death Valley National Monument, California, Nevada.
- Dinosaur National Monument, Colorado, Utah.
- Everglades National Park, Florida.
- Glacier National Park, Montana.
- Grand Canyon Complex, Arizona.
- Grand Teton National Park, Wyoming.
- Great Sand Dunes National Monument, Colorado.
- Great Smoky Mountains National Park, North Carolina, Tennessee.
- Guadalupe Mountains National Park, Texas.
- Haleakala National Park, Hawaii.
- Hawaii Volcanoes National Park, Hawaii.
- Isle Royale National Park, Michigan.
- Joshua Tree National Monument, California.
- Katmai National Monument, Alaska.
- Kings Canyon National Park, California.
- Lassen Volcanic National Park, California.
- Lava Beds National Monument, California.
- Mesa Verde National Park, Colorado.
- Mount Rainier National Park, Washington.
- North Cascades Complex (includes North Cascades National Park and Lake Chelan and Ross Lake National Recreation Areas), Washington.
- Olympic National Park, Washington.
- Organ Pipe Cactus National Monument, Arizona.
- Petrified Forest National Park, Arizona.
- Pinnacles National Monument, California.
- Point Reyes National Seashore, California.
- Rocky Mountain National Park, Colorado.
- Sequoia National Park, California.
- Saguaro National Monument, Arizona.
- Shenandoah National Park, Virginia.



Theodore Roosevelt National Memorial Park, North Dakota.  
 Yellowstone National Park, Idaho, Montana, Wyoming.  
 Yosemite National Park, California.  
 Zion National Park, Utah.

Also prior to 1977, wilderness reviews found the lands within Chaco Canyon, White Sands and Wupatki National Monuments, Padre Island National Seashore and Mammoth Cave National Park non-suitable for wilderness designation at the present time. The Congress was also advised that wilderness recommendations for Lake Mead National Recreation Area would be made following a study of power needs by the Bureau of Reclamation.

The Congress has designated the following 17 areas as wilderness. These wilderness areas take their name from the National Park System unit in which they are located. Other lands within some of these units have been designated as potential wilderness additions. The Congress provided that all lands which represent potential wilderness additions, upon publication in the Federal Register of a notice by the Secretary of the Interior that all uses thereon prohibited by the Wilderness Act have ceased, shall thereby be designated wilderness.

Wilderness name and State	Wilderness acreage	Potential wilderness acreage
Petrified Forest, Ariz.....	50,260	-----
Saguaro, Ariz.....	71,400	-----
Chiricahua, National Monument, Ariz.....	9,440	2
Lassen Volcanic, Calif.....	78,982	-----
Lava Beds, Calif.....	28,460	-----
Joshua Tree, Calif.....	429,690	37,550
Pinnacles, Calif.....	12,952	990
Point Reyes, Calif.....	25,370	8,003
Black Canyon of the Gunnison, Colo.....	11,180	-----
Great Sand Dunes, Colo.....	33,450	670
Mesa Verde, Colo.....	8,100	-----
Haleakala, Hawaii.....	19,270	5,500
Craters of the Moon, Idaho.....	43,243	-----
Isle Royale, Mich.....	131,880	231
Bandelier, N. Mex.....	23,267	-----
Badlands, S. Dak.....	64,250	-----
Shenandoah, Va.....	79,019	560
<b>Totals.....</b>	<b>1,120,213</b>	<b>53,506</b>

Bills were introduced into the 95th Congress to designate wilderness within the following units of the National Park System:

Assateague Island National Seashore, Virginia, Maryland.  
 Bryce Canyon National Park, Utah  
 Carlsbad Caverns National Park, New Mexico.  
 Cedar Breaks National Monument, Arizona.  
 Colorado National Monument, Colorado.  
 Cumberland Gap National Historical Park, Virginia, Kentucky,  
 and Tennessee.  
 Crater Lake National Park, Oregon.  
 Death Valley National Monument, California, Nevada.  
 Dinosaur National Monument, Colorado, Utah.  
 Everglades National Park, Florida.  
 Glacier National Park, Montana.  
 Grand Teton National Park, Wyoming.  
 Great Sand Dunes National Monument, Colorado.  
 Great Smoky Mountains National Park, North Carolina,  
 Tennessee.

Guadalupe Mountains National Park, Texas.  
 Hawaii Volcanoes National Park, Hawaii.  
 Katmai National Monument, Alaska.  
 Kings Canyon National Park, California.  
 Mount Rainier National Park, Washington.  
 North Cascades Complex, Washington.  
 Olympic National Park, Washington.  
 Organ Pipe Cactus National Monument, Arizona.  
 Rocky Mountain National Park, Colorado.  
 Sequoia National Park, California.  
 Theodore Roosevelt National Memorial Park, North Dakota.  
 Yellowstone National Park, Idaho, Montana, and Wyoming.  
 Yosemite National Park, California.  
 Zion National Park, Utah.

Hearings were held by the Subcommittee on National Parks and Insular Affairs, House Committee on Interior and Insular Affairs, on wilderness proposals for all, except Assateague Island National Seashore, in the above list, and for the Grand Canyon National Park and Gulf Islands National Seashore.

#### *Departmental action*

Preliminary wilderness studies and public hearings have been completed for the following units:

Cumberland Island National Seashore, Georgia.  
 Glen Canyon National Recreation Area, Arizona, Utah.  
 Grand Canyon National Park, Arizona.  
 Gulf Islands National Seashore, Florida, Mississippi.  
 Sleeping Bear Dunes National Lakeshore, Georgia.

This brought to 64 the number of units for which public hearings have been held since enactment of the Wilderness Act.

#### *Field studies*

Studies of roadless areas leading to the development of preliminary wilderness study reports are continuing as integral parts of general management plan studies. The general management plan, giving direction to all resource management, visitor use, and development programs for each park, provides a firm base for the wilderness report.

#### *Additions to study programs*

Sixteen wilderness studies were required by separate Acts authorizing new or enlarged park units. Wilderness studies for 5 of these have been completed and those remaining are to be completed by various times through November 1979; these include:

Big Cypress National Preserve, Florida (Public Law 93-440).  
 Big Thicket National Preserve, Texas (Public Law 93-439).  
 Canaveral National Seashore, Florida (Public Law 93-626).  
 Cape Lookout National Seashore, North Carolina (Public Law 93-477).  
 Congaree Swamp National Monument, South Carolina (Public Law 94-545).  
 Cumberland Island National Seashore, Georgia (Public Law 92-536).  
 Glen Canyon National Recreation Area, Arizona (Public Law 92-593).  
 Grand Canyon National Park, Utah (Public Law 93-620).

Gulf Islands National Seashore, Florida, Mississippi (Public Law 91-660).

Sleeping Bear Dunes National Lakeshore, Michigan (Public Law 91-479).

Voyageurs National Park, Minnesota (Public Law 91-661).

This brings to 68 the units of the National Park System subject to study pursuant to the Wilderness Act.

FOURTEENTH ANNUAL REVIEW OF UNITS OF THE NATIONAL WILDLIFE REFUGE FOR POTENTIAL WILDERNESS AREAS

The Wilderness Act, Public Law 88-577 (78 Stat. 890), provided the authority and indicated the procedure by which lands in the National Wildlife Refuge System that met the necessary requirements could be considered for inclusion in the National Wilderness Preservation System. This law directed the study and review, within 10 years after September 3, 1964, of every roadless area of 5,000 contiguous acres or more and every roadless island, regardless of size, within the National Wildlife Refuge System to determine the suitability or non-suitability of each such area for inclusion in the National Wilderness Preservation System.

A total of 113 units, comprising approximately 29 million acres in the National Wildlife Refuge System were identified as requiring review under the provisions of the Wilderness Act.

*Congressional action*

Prior to 1977, favorable wilderness recommendations within the following 92 units of the National Wildlife Refuge System were transmitted to the Congress: (Those areas italicized and capitalized are established wilderness areas and the list includes Congressional action through December 31, 1977.)

1. *AGASSIZ NWR,<sup>1</sup> MINNESOTA.*
2. Aleutian Islands NWA<sup>2 3 4</sup> (Aleutian Islands NWR), Alaska
3. Unimak NWA<sup>3</sup> (Aleutian Islands NWR, Alaska).
4. Anaho Island NWR, Nevada
5. Back Bay NWR, Virginia.
6. *BERING SEA NWR, ALASKA.*
7. *BIG LAKE NWR, ARKANSAS.*
8. *SALT CREEK NWA (BITTER LAKE NWR, NEW MEXICO).*
9. *BLACKBEARD ISLAND NWR, GEORGIA.*
10. *BOGOSLOF NWR, ALASKA*
11. Bombay Hook NWR, Delaware.
12. *BOSQUE DEL APACHE NWR, NEW MEXICO.*
13. *BRETON NWR, LOUISIANA.*
14. *BRIGANTINE NWR, NEW JERSEY.*
15. Cabeza Prieta NWR, Arizona.
16. *CAPE ROMAIN NWR, SOUTH CAROLINA.*
17. Cedar Island NWR, North Carolina.
18. *CEDAR KEYS NWR, FLORIDA.*
19. *CHAMISSO NWR, ALASKA.*

<sup>1</sup> NWR—National Wildlife Refuge.

<sup>2</sup> NWA—National Wilderness Area.

<sup>3</sup> Action deferred pending native land selections under the Alaska Native Claims Settlement Act.

<sup>4</sup> Submitted for proposed wilderness status by Secretary in testimony proposing amendments to H. R. 39.

20. Charles M. Russell NW Range, Montana.<sup>5</sup>
21. Charles Sheldon Antelope Range, Nevada.<sup>5</sup>
22. CHASE LAKE NWR, NORTH DAKOTA.
23. CHASSAHOVITZKA NWR, FLORIDA.<sup>6</sup>
24. Assateague Island NWR<sup>7</sup> (Chincoteague NWR, Virginia).
25. CRAB OCHILARD NWR, ILLINOIS.
26. Crescent Lake NWR, Nebraska.
27. COPALIS MWR, WASHINGTON (Unit of Washington Islands NWA)
28. Desert National Wildlife Range, Nevada.<sup>5</sup>
29. FARALLON NWR, CALIFORNIA.
30. FLATTERY ROCKS NWR, WASHINGTON (Unit of Washington Islands NWA).
31. FORRESTER ISLAND NWR, ALASKA.
32. FORT NIobrARA NWR, NEBRASKA.
33. GRAVEL ISLAND NWR, WISCONSIN (Unit of Wisconsin Islands NWA).
34. GREAT SWAMP NWR, NEW JERSEY
35. GREAT WHITE HERON NWR, FLORIDA (Unit of Florida Keys NWA).
36. GREEN BAY NWR, WISCONSIN (Unit of Wisconsin Islands NWA).
37. Hart Mountain National Antelope Refuge, Oregon.
38. Havasu NWR, Arizona/California.
39. Hawaiian Islands NWR, Hawaii.
40. HAZY ISLANDS NWR, ALASKA.
41. HURON NWR, MICHIGAN.
42. Imperial NWR, Arizona/California.
43. ISLAND BAY NWR, FLORIDA.
44. Izembek NWR, Alaska.<sup>5</sup>
45. J. N. "DING" DARLING NWR, FLORIDA.
46. Kenai National Moose Range, Alaska.<sup>4 6</sup>
47. KEY WEST NWR, FLORIDA (Unit of Florida Keys NWA).
48. Kofa Game Range, Arizona.<sup>5</sup>
49. LACASSINE NWR, LOUISIANA.
50. LAKE WOODRUFF NWR, FLORIDA.<sup>6</sup>
51. LOSTWOOD NWR, NORTH DAKOTA.
52. Malheur NWR, Oregon.
53. Mattamuskeet NWR, North Carolina.
54. MEDICINE LAKE NWR, MONTANA.
55. MICHIGAN ISLANDS NWR, MICHIGAN.
56. Mille Lacs NWR, Minnesota.
57. Missisquoi NWR, Vermont.
58. MINGO NWR, MISSOURI.
59. MONOMOY NWR, MASSACHUSETTS.
60. MOOSEHORN NWR—EDMUNDS UNIT, MAINE.
61. MOOSEHORN NWR—BARING UNIT, MAINE.
62. NATIONAL KEY DEER NWR, FLORIDA (Unit of Florida Keys NWA).

<sup>4</sup> Action deferred pending native land selections under the Alaskan Native Claims Settlement Act.

<sup>5</sup> Submitted for proposed wilderness status by Secretary in testimony proposing amendments to H. R. -39.

<sup>6</sup> Deferral of action requested pending completion of mineral surveys by USGS and Bureau of Mines.

<sup>7</sup> Private inholdings to be acquired and automatically become wilderness upon acquisition (Chassahowitzka—946 acres and Lake Woodruff—10 acres).

Joint proposal by FWS and NPS.

63. Noxubee NWR, Mississippi.
64. Nunivak NWR, Alaska.<sup>3</sup>
65. *OKEFENOKEE NWR, GEORGIA.*
66. *OREGON ISLANDS NWR, OREGON* (21 acres established).
67. Oregon Islands NWR, Oregon (Proposed addition—454 acres).
68. Parker River NWR, Massachusetts.
69. *PASSAGE KEY NWR, FLORIDA.*
70. Pea Island NWR, North Carolina.
71. *PELICAN ISLAND NWR, FLORIDA.*
72. *QUILLAYUTE NEEDLES NWR, WASHINGTON* (Unit of Washington Islands NWA).
73. *RED ROCK LAKES NWR, MONTANA.*
74. Rice Lake NWR, Minnesota.
75. *SAINT LAZARIA NWR, ALASKA.*
76. *SAINT MARKS NWR, FLORIDA.*
77. *SAN JUAN ISLANDS NWR, WASHINGTON.*
78. Santee NWR, South Carolina.
79. *SEMIDI NWR, ALASKA.*<sup>4</sup>
80. *SENEY NWR, MICHIGAN.*
81. Sheldon National Antelope Refuge, Nevada.
82. *SIMEONOF NWR, ALASKA.*
83. *SWANQUARTER NWR, NORTH CAROLINA.*
84. *TAMARAC NWR, MINNESOTA.*
85. *THREE ARCH ROCKS NWR, OREGON.*
86. *TUXEDNI NWR, ALASKA.*
87. *U L BEND NWR, MONTANA.*
88. Valentine NWR, Nebraska.
89. *WEST SISTER ISLAND NWR, OHIO.*
90. White River NWR, Arkansas.
91. *WICHITA MOUNTAINS WILDLIFE REFUGE, OKLAHOMA.*
92. *WOLF ISLAND NWR, GEORGIA.*

Of the 92 units previously submitted to the Congress, 58 units, totaling approximately 730,000 acres have been designated for inclusion in the National Wilderness Preservation System by Public Law 90-532 of September 28, 1968, Public Law 91-504 of October 23, 1970, Public Law 92-364 of August 7, 1972, Public Law 93-429 of October 1, 1974, Public Law 93-550 of December 26, 1974, Public Law 93-632 of January 2, 1975, and Public Law 94-557 of October 19, 1976. Of the 92 units previously submitted to the Congress, 34 are pending final action.

Lands within the following 17 national wildlife refuges were found, by the Secretary of the Interior, to be unsuitable for wilderness designation, and the Department recommended that no further action be taken:

1. Bear River Migratory Bird Refuge, Utah.
2. Blackwater NWR, Maryland.
3. Bowdoin NWR, Montana.
4. Deer Flat NWR, Idaho.
5. Horicon NWR, Wisconsin.

<sup>3</sup> Action deferred pending native land selections under the Alaska Native Claims Settlement Act.

<sup>4</sup> Submitted for proposed wilderness status by Secretary in testimony proposing amendments to H.R. 39.

6. Jones Island NWR, Washington.\*
7. Klamath Forest NWR, Oregon.
8. Laguna Atascosa NWR, Texas.
9. Little Pend Oreille NWR, Washington.
10. Martin NWR, Maryland.
11. National Bison Range, Montana.
12. National Elk Refuge, Wyoming.
13. Salt Plains NWR, Oklahoma.
14. Savannah NWR, South Carolina/Georgia.
15. Smith Island NWR, Washington.
16. Turnbull NWR, Washington.
17. Upper Mississippi River Wild Life and Fish Refuge, Iowa, Illinois, Minnesota, Wisconsin.<sup>1</sup>

No wilderness recommendations or designations were made during 1977.

#### *Departmental action*

Departmental action on all identified areas requiring review under provisions of the Wilderness Act have been completed except as follows:

Five proposed areas as have action deferred pending completion of mineral surveys.

Three proposed areas have action deferred pending native selections under ANSCA.

Four Alaska areas are yet to be submitted due to pending native selections under ANSCA. They are:

1. Arctic National Wildlife Range, Alaska.<sup>2</sup>
2. Clarence Rhode National Wildlife Range, Alaska.
3. Hazen Bay NWR, Alaska.
4. Kodiak NWR, Alaska.

One area, Upper Mississippi River Wild Life and Fish Refuge is being deferred pending completion of the Great River Environmental Action Team (GREAT) study scheduled for 1981.

#### FOURTEENTH ANNUAL REPORT OF THE SECRETARY OF AGRICULTURE ON THE STATUS OF NATIONAL FOREST UNITS OF THE NATIONAL WILDERNESS PRESERVATION SYSTEM

#### *Wilderness status*

As of December 31, 1977, there were 92 National Forest units in the National Wilderness Preservation System (NWPS) administered by the Forest Service, USDA. The 92 wildernesses totaled 12,593,818 net acres, or about 6.7 percent of all National Forest System lands.

Congress did not designate any wilderness within the National Forests in 1977. Acreage differences from that reported on December 31, 1976, are due to final compilation of acres for some areas and private land acquisition.

\*NOTE: Public land Order 5515 dated August 27, 1975, consolidated these NWR's along with 2 others; San Juan NWR, previously submitted and Matia Island NWR to form the San Juan NWR.

<sup>1</sup> Determined unsuitable, but restudy requested by former Administration delayed pending completion of the Great River Environmental Action Team (GREAT) study.

<sup>2</sup> Submitted for proposed wilderness status by Secretary in testimony proposing amendments to H.R. 39.

There are presently 17 National Forest wilderness proposals (3,507,500 acres) awaiting congressional consideration. These proposals resulted from National Forest Primitive Area reviews mandated by the Wilderness Act of 1964 (Public Law 88-577) and were submitted by previous administrations.

#### *Primitive area status*

As of December 31, 1977, there were 17 National Forest Primitive Areas totaling about 3,103,808 acres.

For clarification purposes, it should be noted that 6,130 acres of the Emigrant Basin Primitive Area (CA) and 6,497 acres of the Glacier Primitive Area (WY) have neither been designated as wilderness nor declassified as primitive area. Adjacent areas have been designated as the Emigrant Wilderness and the Fitzpatrick Wilderness.

#### *Wilderness study area status*

As of December 31, 1977, there were 42 National Forest areas (2,499,148 acres) designated by Congress for wilderness study. Due to various reporting dates, the areas are in various phases of the study and recommendation process.

#### *Summary data*

The following enclosed tables summarize the National Forest Wildernesses, Primitive Areas, and Congressional Wilderness Study Areas as of December 31, 1977:

Table 1. Wildernesses added to the NWPS since 1964.

Table 2. Wilderness proposals pending congressional consideration.

Table 3. Congressionally mandated wilderness study areas.

Table 4. Wilderness summary by State.

Table 5. Listing of National Forest Units in the NWPS.

Table 6. Primitive Area summary by State.

Table 7. Listing of National Forest Primitive Areas.

TABLE 1.—NATIONAL FOREST UNITS ADDED TO THE NATIONAL WILDERNESS PRESERVATION SYSTEM BY CONGRESS SINCE 1964

[As of December 31, 1977]

Name and State	National Forest(s)	Public Law	Year	National Forest Acres
San Rafael, Calif.	Los Padres	90-271	1968	148,973
San Gabriel, Calif.	Angeles	90-318	1968	36,215
Pasayten, Wash.	Mount Baker-Snoqualmie Okanogan	90-544	1968	505,524
Mount Jefferson, Oreg.	Willamette, Mount Hood, Deschutes	90-548	1968	100,208 <sup>1</sup>
Ventana, Calif.	Los Padres	91-58	1969	95,770
Desolation, Calif.	Eldorado	91-82	1969	63,475
Mount Baldy, Ariz.	Apache	91-504	1970	6,975
Pine Mountain, Ariz.	Prescott, Tonto	92-230	1972	20,061
Sycamore Canyon, Ariz.	Coconino, Prescott, Kaibab	92-241	1972	47,757
Scapegoat, Mont.	Helena, Lolo, Lewis and Clark	92-395	1972	239,256
Sawtooth, Idaho	Sawtooth	92-400	1972	217,367
Washakie, Wyo.	Shoshone	92-476	1972	208,000
Eagle Cap Addition, Oreg.	Wallowa-Whitman	92-521	1972	72,420
Sipsey, Ala.	Bankhead	93-622	1975	12,646
Caney Creek, Ark.	Ouachita	93-622	1975	14,344
Upper Buffalo, Ark.	Ozark	93-622	1975	10,183
Bradwell Bay, Fla.	Apalachicola	93-622	1975	23,432
Beaver Creek, Ky.	Daniel Boone	93-622	1975	4,753
Presidential Range-Dry River, N.H.	White Mountain	93-622	1975	20,000
Joyce Kilmer-Slickrock, N.C., Tenn.	Nantahala, Cherokee	93-622	1975	14,033
Ellicott Rock, N.C., S.C., Ga.	Nantahala, Sumter, Chattahoochee	93-622	1975	3,332
Gee Creek, Tenn.	Cherokee	93-622	1975	2,433
Bristol Cliffs, Vt.	Green Mountain	93-622	1975	(4,495)
Do	do	94-268	1976	1 <sup>3</sup> ,775
Lye Brook, Vt.	do	93-622	1975	13,253
James River Face, Va.	Jefferson	93-622	1975	8,703
Dolly Sods, W. Va.	Monongahela	93-622	1975	10,215
Otter Creek, W. Va.	do	93-622	1975	20,000
Rainbow Lake, Wis.	Chequamegon	93-622	1975	6,593
Cohutta, Ga., Tenn.	Chattahoochee, Cherokee	93-622	1975	33,998
Agua Tibia, Calif.	Cleveland	93-632	1975	15,974
Emigrant, Calif.	Stanislaus	93-632	1975	104,311
Weminuche, Colo.	San Juan, Rio Grande	93-632	1975	397,169
Mission Mtns., Mont.	Flathead	93-632	1975	73,877
Flat Tops, Colo.	White River, Routt	94-146	1975	2 <sup>2</sup> 235,035
Hells Canyon, Idaho, Oreg.	Wallowa-Whitman, Nezperce, Payette	94-199	1975	2 <sup>2</sup> 192,700
Alpine Lakes, Wash.	Mt. Baker-Snoqualmie, Wenatchee	94-357	1976	2 <sup>2</sup> 305,233
Eagles Nest, Colo.	Arapaho-Roosevelt, White River	94-352	1976	2 <sup>2</sup> 133,618
Fitzpatrick, Wyo.	Shoshone	94-557	1976	2 <sup>2</sup> (197,600)
Do	do	94-567	1976	1 <sup>2</sup> 191,103
Kaiser, Calif.	Sierra	94-557	1976	2 <sup>2</sup> 22,500
Hercules-Glades, Mo.	Mark Twain	94-557	1976	2 <sup>2</sup> 12,314
Grand total (as of December 31, 1977)				2 <sup>2</sup> 3,647,593

<sup>1</sup> Revised.<sup>2</sup> Estimated acreage pending final map compilation.



TABLE 2.—NATIONAL FOREST WILDERNESS PROPOSALS AWAITING CONGRESSIONAL ACTION (AS OF DEC. 31, 1977)

Name and State	National forest(s)	Approximate acres
Blue Range, Ariz., N. Mex	Apache	177,000
Monarch, Calif. <sup>1</sup>	Sequoia, Sierra	31,000
Trinity Alps, Calif. <sup>2</sup>	Klamath, Six Rivers, Shasta-Trinity	268,000
Courthouse Mountain, Big Blue, Mount Sneffels, Colo. <sup>3</sup>	Uncompahgre	61,000
Mount Wilson, Delores Peak, Colo. <sup>4</sup>	San Juan, Uncompahgre	19,000
Idaho, Idaho	Boise, Challis, Payette, Salmon	891,000
Salmon River, Idaho <sup>5</sup>	Bitterroot, Nezperce, Salmon	252,000
Beartooth, Mont. <sup>6</sup>	Custer, Gallatin	886,500
Spanish Peaks, Mont.	Gallatin	63,000
Gila Addition, N. Mex. <sup>7</sup>	Gila	116,000
Aldo Leopold, N. Mex.	do	188,000
High Uintah, Utah	Ashley, Wasatch	323,000
Cloud Peak, Wyo	Big Horn	150,000
Popo Agie, Wyo	Shoshone	82,000
<b>Total</b>		<b>3,507,500</b>

<sup>1</sup> High Sierra Primitive Area.<sup>2</sup> Salmon-Trinity Alps Primitive Area.<sup>3</sup> Uncompahgre Primitive Area.<sup>4</sup> Wilson Mountains Primitive Area.<sup>5</sup> Salmon River Breaks Primitive Area.<sup>6</sup> Absaroka and Beartooth Primitive Areas.<sup>7</sup> Gila Primitive Area.

TABLE 3.—WILDERNESS STUDY AREAS DESIGNATED BY CONGRESS (AS OF DEC. 31, 1977)

Name and State	National forest(s)	Public Law	Acreage
Sawtooth, Idaho	Sawtooth	92-400	507,054
Du Noir, Wyo	Shoshone	92-476	30,000
Lower Minam, Oreg	Wallowa-Whitman	92-521	32,000
Indian Peaks, Colo	Arapaho-Roosevelt	92-528	71,000
Belle Starr Cave, Ariz	Ouachita	93-622	5,700
Dry Creek, Ariz	do	93-622	5,500
Richland Creek, Ariz	Ozark	93-622	2,100
Sopchoppy River, Fla	Apalachicola	93-622	1,100
Rock River Canyon, Mich	Hiawatha	93-622	5,400
Sturgeon River, Mich	Ottawa	93-622	13,200
Craggy Mountain, N.C	Pisgah	93-622	1,100
Wambaw Swamp, S.C	Francis Marion	93-622	1,500
Mill Creek, Va	Jefferson	93-622	4,000
Mountain Lake, Va	do	93-622	8,400
Peters Mountain, Va	do	93-622	5,000
Ramsey's Draft, Va	George Washington	93-622	6,700
Flynn Lake, Wis	Chequamegon	93-622	6,300
Round Lake, Wis	do	93-622	4,200
Cranberry, W. Va	Monongahela	93-622	36,300
Big Frog, Tenn	Cherokee	93-622	4,500
Citico Creek, Tenn	do	93-622	14,000
Hells Canyon, Oreg. (3 areas)	Wallowa-Whitman, Nezperce, Payette	94-199	110,800
Sheep Mountain, Calif	Angeles, San Bernardino	94-557	52,000
Snow Mountain, Calif	Mendocino	94-557	37,000
Bell Mountain, Mo	Mark Twain	94-557	8,530
Paddy Creek, Mo	do	94-557	6,888
Piney Creek, Mo	do	94-557	8,430
Rockpile Mountain, Mo	do	94-557	4,170
Great Bear, Mont	Flathead, Lewis and Clark	94-557	393,000
Elkhorn, Mont	Helena	94-557	77,346
Rincon, Ariz	Coronado	94-567	62,930
West Pioneer, Mont	Beaverhead	95-150	151,000
Taylor-Hilgard, Mont	Beaverhead and Gallatin	95-150	289,000
Bluejoint, Mont	Bitterroot	95-150	61,000
Sapphire, Mont	Bitterroot and Deerledge	95-150	94,000
Mount Henry, Mont	Kootenai	95-150	21,000
Ten Lakes, Mont	do	95-150	34,000
M. Fk. Judith, Mont	Lewis and Clark	95-150	81,000
Big Snowies, Mont	do	95-150	91,000
Hyalite-Porcupine-Buffalo Horn, Mont	Gallatin	95-150	151,000
<b>Total</b>			<b>2,499,148</b>

TABLE 4.—SUMMARY OF NATIONAL FOREST UNITS OF THE NATIONAL WILDERNESS PRESERVATION SYSTEM  
 (AS OF DEC. 31, 1977)

State	Number of units	Net area acres (Federal)
Alabama.....	1	12,646
Arizona.....	8	495,679
Arkansas.....	2	24,527
California <sup>2</sup> .....	20	1,725,729
Colorado <sup>2</sup> .....	8	1,045,926
Florida.....	1	23,432
Georgia <sup>1</sup> .....	2	32,384
Idaho <sup>1,2</sup> .....	3	1,284,584
Kentucky.....	1	4,753
Minnesota.....	1	748,927
Missouri <sup>2</sup> .....	1	12,314
Montana <sup>1</sup> .....	7	1,792,130
Nevada.....	1	64,667
New Hampshire.....	2	25,552
New Mexico.....	5	676,258
North Carolina <sup>1</sup> .....	4	31,468
Oregon <sup>2</sup> .....	11	951,082
South Carolina <sup>1</sup> .....	1	2,809
Tennessee <sup>1</sup> .....	3	8,120
Vermont.....	2	17,028
Virginia.....	1	8,703
Washington <sup>2</sup> .....	5	1,390,030
West Virginia.....	2	30,215
Wisconsin.....	1	6,593
Wyoming <sup>2</sup> .....	5	2,178,262
Grand total (as of Dec. 31, 1977).....	<sup>a</sup> 92	12,593,818

<sup>1</sup> Includes units located in an adjacent State; total acres adjusted.

<sup>2</sup> Some acreages estimated pending completion of final mapping.

<sup>3</sup> Individual States show number of units in each State even though part of unit may be in another State.

Note: This column is not mathematical, e.g., the units by States will not add up to 92.

TABLE 5.—NATIONAL FOREST AREAS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM, DEC. 31, 1977

Name and National Forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
ALABAMA			
Sipsey: Bankhead.....	Montgomery.....	12,726	12,646
ARIZONA			
Chiricahua: Coronado.....	Tucson.....	18,000	18,000
Galiuro: Coronado.....	do.....	52,717	52,717
Mazatzal: Tonto.....	Phoenix.....	205,346	205,202
Mount Baldy: Apache.....	Springerville.....	6,975	6,975
Pine Mountain:			
Prescott.....	Prescott.....	8,611	8,611
Tonto.....	Phoenix.....	11,450	11,450
Subtotal.....		20,061	20,061
Sierra Ancha: Tonto.....	Phoenix.....	20,850	20,850
Superstition: Tonto.....	do.....	124,140	124,117
Sycamore Canyon:			
Coconino.....	Flagstaff.....	21,000	20,995
Prescott.....	Prescott.....	19,637	19,637
Kaibab.....	Williams.....	7,125	7,125
Subtotal.....		47,762	47,757
State total.....		495,851	495,679
ARKANSAS			
Caney Creek: Ouachita.....	Hot Springs.....	14,344	14,344
Upper Buffalo: Ozark.....	Russellville.....	10,542	10,183
State total.....		24,886	24,527

See footnotes at end of table.

TABLE 5.—NATIONAL FOREST AREAS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM, DEC. 31, 1977—Continued

Name and National Forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
<b>CALIFORNIA</b>			
Agua Tibia: Cleveland	San Diego	15,934	15,934
Caribou: Lassen	Susanville	18,825	18,825
Cucamonga: San Bernardino	San Bernardino	8,500	8,500
Desolation: Eldorado	Placerville	63,475	63,475
Dome Land: Sequoia	Porterville	62,695	62,375
Emigrant: Stanislaus	Sonora	105,345	104,311
<b>Hoover:</b>			
Inyo	Bishop	9,000	8,979
Toiyabe	Reno, Nev.	38,937	38,937
Subtotal		47,937	47,916
<b>John Muir:</b>			
Inyo	Bishop	232,412	223,208
Sierra	Fresno	259,743	259,543
Subtotal		483,155	482,751
<b>Kaiser: Sierra</b>			
	Fresno	22,500	22,500
<b>Marble Mountain: Klamath</b>			
	Yreka	214,390	213,630
<b>Minarets:</b>			
Inyo	Bishop	59,380	59,378
Sierra	Fresno	42,660	42,660
Subtotal		102,040	102,038
<b>Mokelumne:</b>			
Eldorado	Placerville	40,220	40,220
Stanislaus	Sonora	9,945	9,945
Subtotal		50,165	50,165
San Gabriel: Angeles	Pasadena	36,215	36,215
San Geronimo: San Bernardino	San Bernardino	35,255	35,165
San Jacinto: San Bernardino	do	21,951	20,559
San Rafael: Los Padres	Santa Barbara	149,170	148,978
South Warner: Modoc	Alturas	68,540	68,457
Thousand Lakes: Lassen	Susanville	16,335	16,335
Ventana: Los Padres	Santa Barbara	98,065	95,770
<b>Yolla Bolly-Middle Eel:</b>			
Mendocino	Willows	74,395	74,275
Shasta-Trinity	Redding	38,635	37,555
Subtotal		113,030	111,830
State total		1,733,522	1,725,729
<b>COLORADO</b>			
<b>Eagles Nest:</b>			
Arapaho-Roosevelt	Fort Collins	82,810	82,673
White River	Glenwood Springs	51,105	50,945
Subtotal		133,915	133,618
<b>Flat Tops:</b>			
Routt	Steamboat Springs	38,870	38,870
White River	Glenwood Springs	196,360	196,165
Subtotal		235,230	235,035
<b>La Garita:</b>			
Gunnison	Gunnison	24,322	24,322
Rio Grande	Monte Vista	24,164	24,164
Subtotal		48,486	48,486
Maroon Bells-Snowmass: White River	Glenwood Springs	71,329	71,060
Mount Zirkel: Routt	Steamboat Springs	72,472	72,472
Rawah: Arapaho-Roosevelt	Fort Collins	27,464	26,674

See footnotes at end of table.

TABLE 5.—NATIONAL FOREST AREAS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM, DEC. 31, 1977—Continued

Name and National Forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
COLORADO—Continued			
Weminuche:			
Rio Grande.....	Monte Vista.....	125,615	125,585
San Juan.....	Durango.....	275,785	271,584
Subtotal.....		401,400	397,169
West Elk: Gunnison.....	Gunnison.....	61,412	61,412
State total.....		1,051,708	1,045,926
FLORIDA			
Bradwell Bay: Apalachicola.....	Tallahassee.....	23,432	23,432
GEORGIA			
Cohutta: <sup>1</sup> Chattahoochee.....	Gainesville.....	32,307	32,203
Ellicott Rock: <sup>2</sup> Chattahoochee.....	do.....	181	181
State total.....		32,488	32,384
IDAHO			
Hells Canyon: <sup>3</sup>			
Nezperce.....	Grangeville.....	59,900	59,900
Payette.....	McCall.....	24,200	23,900
Subtotal.....		84,100	83,800
Sawtooth:			
Sawtooth.....	Twin Falls.....	55,294	55,294
Boise.....	Boise.....	149,942	149,942
Challis.....	Challis.....	12,131	12,131
Subtotal.....		217,367	217,367
Selway-Bitterroot: <sup>4</sup>			
Bitterroot.....	Hamilton, Mont.....	164,774	164,721
Clearwater.....	Orofino.....	259,165	259,165
Nezperce.....	Grangeville.....	559,699	559,531
Subtotal.....		983,638	983,417
State total.....		1,285,105	1,284,584
KENTUCKY			
Beaver Creek: Daniel Boone.....	Winchester.....	4,791	4,753
MINNESOTA			
Boundary Waters Canoe Area: Superior.....	Duluth.....	1,031,871	748,927
MISSOURI			
Hercules-Glades: Mark Twain.....	Rolla.....	12,315	12,314
MONTANA			
Anaconda-Pintler:			
Beaverhead.....	Dillon.....	72,537	72,537
Deerlodge.....	Butte.....	44,817	44,175
Bitterroot.....	Hamilton.....	41,162	14,162
Subtotal.....		158,516	157,874
Bob Marshall:			
Flathead.....	Kalispell.....	709,356	709,356
Lewis and Clark.....	Great Falls.....	240,000	240,000
Subtotal.....		949,356	949,356
Cabinet Mountains:			
Kaniksi.....	Sandpoint, Idaho.....	44,320	44,320
Kootenai.....	Libby.....	49,952	49,952
Subtotal.....		94,272	94,272
Gates of the Mountain: Helena.....	Helena.....	28,562	28,562
Mission Mountains: Flathead.....	Kalispell.....	73,877	73,877

See footnotes at end of table.

TABLE 5.—NATIONAL FOREST AREAS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM, DEC. 31, 1977—Continued

Name and National Forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
<b>MONTANA—Continued</b>			
<b>Scapegoat:</b>			
Helena.....	Helena.....	80,697	80,697
Lewis and Clark.....	Great Falls.....	84,407	84,407
Lolo.....	Missoula.....	74,832	74,192
Subtotal.....		239,936	239,296
<b>Selway-Bitterroot:<sup>5</sup></b>			
Bitterroot.....	Hamilton.....	241,676	241,336
Lolo.....	Missoula.....	9,767	7,557
Subtotal.....		251,443	248,893
State total.....		1,795,962	1,792,130
<b>NEVADA</b>			
Jarbridge: Humboldt.....	Elko.....	64,827	64,667
<b>NEW HAMPSHIRE</b>			
Great Gulf: White Mountain.....	Laconia.....	5,552	5,552
Presidential Range-Dry River: White Mountain.....	do.....	20,000	20,000
State total.....		25,552	25,552
<b>NEW MEXICO</b>			
Gila: Gila.....	Silver City.....	429,738	429,546
<b>Pecos:</b>			
Carson.....	Taos.....	24,735	24,735
Santa Fe.....	Santa Fe.....	143,597	143,597
Subtotal.....		168,332	168,332
San Pedro Parks: Santa Fe.....	Santa Fe.....	41,132	41,132
Wheeler Peak: Carson.....	Taos.....	6,029	6,027
White Mountain: Lincoln.....	Alamogordo.....	31,283	31,221
State total.....		676,514	676,258
<b>NORTH CAROLINA</b>			
Ellicott Rock: <sup>4</sup> Nantahala.....	Asheville.....	342	342
Joyce Kilmer-Slickrock: <sup>7</sup> Nantahala.....	do.....	10,201	10,201
Linville Gorge: Pisgah.....	do.....	7,575	7,575
Shining Rock: Pisgah.....	do.....	13,350	13,350
State total.....		31,468	31,468
<b>OREGON</b>			
<b>Diamond Peak:</b>			
Deschutes.....	Bend.....	20,437	20,437
Willamette.....	Eugene.....	16,200	16,200
Subtotal.....		36,637	36,637
Eagle Cap: Wallowa-Whitman.....	Baker.....	293,775	293,476
Gearhart Mountain: Fremont.....	Lakeview.....	18,709	18,709
Hells Canyon: <sup>8</sup> Wallowa-Whitman.....	Baker.....	109,740	108,900
Kalmiopsis: Siskiyou.....	Grants Pass.....	76,900	76,900
Mountain Lakes: Winema.....	Klamath Falls.....	23,071	23,071
Mount Hood: Mount Hood.....	Portland.....	14,160	14,160
Mount Jefferson:			
Willamette.....	Eugene.....	63,681	63,681
Deschutes.....	Bend.....	32,734	32,734
Mount Hood.....	Portland.....	3,793	3,793
Subtotal.....		100,208	100,208
Mount Washington:			
Deschutes.....	Bend.....	8,086	8,086
Willamette.....	Eugene.....	38,030	38,030
Subtotal.....		46,116	46,116
Strawberry Mountain: Malheur.....	John Day.....	33,653	33,003

See footnotes at end of table.

TABLE 5.—NATIONAL FOREST AREAS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM, DEC. 31, 1977—Continued

Name and National Forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
OREGON—Continued			
Three Sisters:			
Willamette.....	Eugene.....	136, 833	136, 833
Deschutes.....	Bend.....	63, 069	63, 069
Subtotal.....		199, 902	199, 902
State total.....		952, 871	951, 082
SOUTH CAROLINA			
Ellicott Rock: <sup>8</sup> Sumter.....	Columbia.....	2, 809	2, 809
TENNESSEE			
Cohutta: <sup>9</sup> Cherokee.....	Cleveland.....	1, 795	1, 795
Gee Creek: Cherokee.....	do.....	2, 493	2, 493
Joyce Kilmer-Slickrock: <sup>10</sup> Cherokee.....	do.....	3, 832	3, 832
State total.....		8, 120	8, 120
VERMONT			
Bristol Cliffs: Green Mountain.....	Rutland.....	3, 775	3, 775
Lye Brook: Green Mountain.....	do.....	14, 600	13, 253
State total.....		18, 375	17, 028
VIRGINIA			
James River Face: Jefferson.....	Roanoke.....	8, 703	8, 703
WASHINGTON			
Alpine Lakes:			
Mount Baker-Snoqualmie.....	Seattle.....	122, 263	122, 061
Wenatchee.....	Wenatchee.....	184, 672	183, 172
Subtotal.....		306, 935	305, 233
Glacier Peak:			
Mount Baker-Snoqualmie.....	Seattle.....	227, 531	227, 459
Wenatchee.....	Wenatchee.....	236, 910	236, 778
Subtotal.....		464, 441	464, 237
Goat Rocks:			
Gifford Pinchot.....	Vancouver.....	59, 740	59, 740
Mount Baker-Snoqualmie.....	Seattle.....	22, 940	22, 940
Subtotal.....		82, 680	82, 680
Mount Adams: Gifford Pinchot.....	Vancouver.....	42, 411	32, 356
Pasayten:			
Mount Baker-Snoqualmie.....	Seattle.....	107, 039	107, 039
Okanogan.....	Okanogan.....	398, 485	398, 485
Subtotal.....		505, 524	505, 524
State total.....		1, 401, 991	1, 390, 030
WEST VIRGINIA			
Dolly Sods: Monongahela.....	Elkins.....	10, 215	10, 215
Otter Creek: Monongahela.....	do.....	20, 000	20, 000
State total.....		30, 215	30, 215
WISCONSIN			
Rainbow Lake: Chequamegon.....	Park Falls.....	6, 593	6, 593

See footnotes at end of table.

TABLE 5.—NATIONAL FOREST AREAS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM, DEC. 31, 1977—Continued

Name and National Forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
<b>WYOMING</b>			
Bridger: Bridger-Teton.....	Jackson.....	392, 160	392, 160
Fitzpatrick: Shoshone.....	Cody.....	191, 103	191, 103
North Absaroka: Shoshone.....	do.....	351, 104	351, 104
Teton: Teton.....	Jackson.....	557, 311	557, 311
Washakie: Shoshone.....	Cody.....	687, 132	686, 584
State total.....		2, 178, 810	2, 178, 262
Grand total all areas (as of Dec. 31, 1977).....		12, 911, 505	12, 593, 818

<sup>1</sup> Also in Tennessee.

<sup>2</sup> Also in North Carolina and South Carolina.

<sup>3</sup> Also in Oregon.

<sup>4</sup> Also in Montana.

<sup>5</sup> Also in Idaho.

<sup>6</sup> Also in Georgia and South Carolina.

<sup>7</sup> Also in Tennessee.

<sup>8</sup> Also in Georgia and North Carolina.

<sup>9</sup> Also in Georgia.

<sup>10</sup> Also in North Carolina.

NATIONAL FOREST WILDERNESSES IN MULTIPLE STATES

Wilderness/State	National Forest	Acres	
		Gross	Net (Federal)
<b>Cohutta:</b>			
Georgia.....	Chattahoochee.....	32, 307	32, 203
Tennessee.....	Cherokee.....	1, 795	1, 795
Total.....		34, 102	33, 998
<b>Ellicott Rock:</b>			
Georgia.....	Chattahoochee.....	181	181
North Carolina.....	Nantahala.....	342	342
South Carolina.....	Sumter.....	2, 809	2, 809
Total.....		3, 332	3, 332
<b>Hells Canyon:</b>			
Idaho.....	Nezperce.....	56, 900	59, 900
	Payette.....	24, 200	23, 900
Oregon.....	Wallowa-Whitman.....	109, 740	108, 900
Total.....		193, 840	192, 700
<b>Joyce Kilmer-Slickrock:</b>			
North Carolina.....	Nantahala.....	10, 201	10, 201
Tennessee.....	Cherokee.....	3, 832	3, 832
Total.....		14, 033	14, 033
<b>Selway-Bitterroot:</b>			
Idaho.....	Bitterroot.....	164, 774	164, 721
	Clearwater.....	295, 165	259, 165
	Nezperce.....	559, 699	559, 531
Montana.....	Bitterroot.....	241, 676	241, 336
	Lolo.....	9, 767	7, 557
Total.....		1, 235, 081	1, 232, 310

TABLE 6.—SUMMARY OF NATIONAL FOREST PRIMITIVE AREAS (AS OF DEC. 31, 1977)

State	Number units	Net area acres (Federal)
Arizona <sup>1</sup> .....	1	173,762
California.....	3	276,862
Colorado.....	2	83,419
Idaho.....	2	1,439,871
Montana.....	3	340,345
New Mexico <sup>1</sup> .....	3	338,318
Utah.....	1	236,509
Wyoming.....	3	214,722
Grand total (as of Dec. 31, 1977).....	17	3,103,808

<sup>1</sup> Blue Range Primitive Area in Arizona and New Mexico.

TABLE 7  
NATIONAL FOREST PRIMITIVE AREAS  
AS OF DEC. 31, 1977

Name and national forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
ARIZONA			
Blue Range: <sup>1</sup> Apache.....	Springerville.....	175,112	173,762
CALIFORNIA			
Emigrant Basin: Stanislaus.....	Sonora.....	6,151	6,130
High Sierra:			
Sequoia.....	Porterville.....	9,710	9,710
Sierra.....	Fresno.....	1,946	1,946
Subtotal.....		11,656	11,656
Salmon Trinity Alps:			
Klamath.....	Yreka.....	34,556	31,931
Shasta-Trinity.....	Redding.....	252,781	227,145
Subtotal.....		287,337	259,076
State total.....		305,144	276,862
COLORADO			
Uncompahgre: Uncompahgre.....	Delta.....	69,253	53,252
Wilson Mountains:			
San Juan.....	Durango.....	9,690	9,551
Uncompahgre.....	Delta.....	21,235	20,616
Subtotal.....		30,925	30,167
State total.....		100,178	83,419
IDAHO			
Idaho:			
Boise.....	Boise.....	226,778	223,996
Challis.....	Challis.....	74,670	74,275
Payette.....	McCall.....	689,712	685,496
Salmon.....	Salmon.....	241,584	240,422
Subtotal.....		1,232,744	1,224,190
Salmon River Breaks:			
Bitterroot.....	Hamilton, Mont.....	122,420	122,420
Nezperce.....	Grangeville.....	93,605	93,261
Subtotal.....		216,025	215,681
State total.....		1,448,769	1,439,871

See footnotes at end of table.



TABLE 7—Continued  
 NATIONAL FOREST PRIMITIVE AREAS  
 AS OF DEC. 31, 1977

Name and national forest	Forest headquarters	Area (acres) as of Dec. 31, 1977	
		Gross	Net (Federal)
<b>MONTANA</b>			
Absaroka: Gallatin .....	Bozeman .....	63,308	63,308
Beartooth:			
Custer .....	Billings .....	169,013	169,013
Gallatin .....	Bozeman .....	57,588	57,588
Subtotal .....		226,601	226,601
Spanish Peaks: Gallatin .....	Bozeman .....	50,616	50,436
State total .....		340,525	340,345
<b>NEW MEXICO</b>			
Gila: Gila .....	Silver City .....	132,788	132,364
Black Range: Gila .....	do .....	169,984	169,356
Blue Range: <sup>2</sup> Apache .....	Springerville, Ariz. ....	36,598	36,598
State total .....		339,370	338,318
<b>UTAH</b>			
High Uintas:			
Ashley .....	Vernal .....	162,586	162,586
Wasatch .....	Salt Lake City .....	73,923	73,923
State total .....		236,509	236,509
<b>WYOMING</b>			
Cloud Peak: Bighorn .....	Sheridan .....	136,905	136,905
Glacier: Shoshone .....	Cody .....	6,497	6,497
Papo Agie: Shoshone .....	do .....	71,320	71,320
State total .....		214,722	214,722
Grand total all areas (as of December 31, 1977) .....		3,160,329	3,103,808
<b>NATIONAL FOREST PRIMITIVE AREA IN MULTIPLE STATES</b>			
Blue Range:			
Arizona (Apache) .....		175,112	173,762
New Mexico (Apache) .....		36,598	36,598
Total .....		211,710	210,360

<sup>1</sup> Also in New Mexico.

<sup>2</sup> Also in Arizona.



ESTABLISHMENT OF A  
DEPARTMENT OF EDUCATION

---

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

A DRAFT OF PROPOSED LEGISLATION TO ESTABLISH A  
DEPARTMENT OF EDUCATION, AND FOR OTHER PURPOSES



FEBRUARY 13, 1979.—Message and accompanying papers referred to the  
Committee on Government Operations and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

39-011

WASHINGTON : 1979



*To the Congress of the United States:*

I am sending to the Congress today my proposal to establish a Department of Education.

There is a compelling need for the increased national attention a separate Cabinet department will bring to education issues. Our Nation's pluralistic education system, considered the most competent and open in the world, faces many problems and challenges: a decline in public confidence in the quality of education; unacceptably high rates of high school dropouts and of young people who lack basic educational tools and specific skills for productive employment; and increasing demands for retraining and learning opportunities.

The primary responsibility for education in our Nation lies with State and local government. The Federal government has a limited, but critical responsibility to help public and private institutions meet these challenges: to ensure equal educational opportunities; to increase access to postsecondary education by low and middle income students; to generate research and provide information to help our educational systems meet the special needs; prepare students for employment; and encourage improvements in the quality of our education. The achievement of each of these goals will be enhanced by a new Department of Education.

Through our legislative and budget initiatives of the past two years, this Administration has given high priority to meeting these educational commitments. My budget for FY 1980 provides for \$13.3 billion in education outlays, about a 45 percent increase above the level when I came into office. Last year, we established a legislative framework, the Middle Income Student Assistance program, to help solve one of our major education problems—the growing cost of a college education. The establishment of a Cabinet Department of Education will reflect the continued high priority my Administration places on education.

A Department of Education will bring our Nation's educational challenges and the Federal government's role in meeting them to the forefront of domestic policy discussion. Such discussion is vital to an activity that directly affects 60 million students, teachers and educational employees and constitutes a \$120 billion public and private enterprise.

Establishing a separate Department will create, for the first time, a Cabinet-level advocate for education with direct access to the President, the Congress, and the public.

Second, it will give Federal education programs the full-time, high-level leadership and management that they cannot receive in a structure so large and complex as the Department of Health, Education, and Welfare. This will allow the Federal government to fulfill its responsibilities in education more effectively. It will eliminate duplication in the administrative and staff support activities within the Office of the HEW Secretary and the Education Division. It will allow im-

proved financial management and more efficient administration of education programs. Separation of the education functions from HEW will also promote improved management of its closely-related health and welfare responsibilities.

Third, it will provide greater accountability. Submerged beneath HEW's dominant functions of health and welfare, Federal education programs lack full-time accountability at the Cabinet level. With a separate Department of Education, one Cabinet member will report directly to the President and be accountable to the Congress and the American people for the conduct of Federal education policies.

Fourth, it will provide simpler, more reliable, and more responsive support to states, localities, public and private institutions, giving them a direct line of Cabinet-level contact with the Federal government.

Fifth, the new Department will allow better coordination of education programs with related Federal activities, such as employment programs and research. It will also allow high-level consideration of the impact of other Federal policies, such as tax and energy, on education institutions and students.

Under the proposal I am submitting today, the Department of Education will include more than 150 programs and 16,200 employees. With a budget of more than \$13 billion, this Department will be larger than five other Departments including Energy, Commerce, Justice, Interior and State.

In addition to the 140 programs in the Education Division of the Department of Health, Education, and Welfare, the new Department of Education will handle educational activities now carried out by several other departments. These include: the U.S. Department of Agriculture School, certain science education programs of the National Science Foundation, the overseas dependents' schools of the Department of Defense, the college housing loan program of the Department of Housing and Urban Development, the Law Enforcement Education and the Law Enforcement Internship Program of the Department of Justice, and the Migrant Education programs of the Department of Labor.

The proposed legislation establishes within the Department of Education separate Offices for Civil Rights, Elementary and Secondary Education, Postsecondary Education and Educational Research and Improvement, each headed by an Assistant Secretary. It establishes an office to administer functions related to the education of overseas dependents of Department of Defense personnel, an Inspector General, and a 20-member Intergovernmental Advisory Council on Education, appointed by the President, to promote better relations with the various levels of government and private institutions.

I urge the Senate and the House of Representatives to act promptly on this important proposal.

JIMMY CARTER.

THE WHITE HOUSE, *February 13, 1979.*

A BILL TO establish a Department of Education, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Department of Education Organization Act".

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#### DEFINITIONS

SEC. 2. (a) As used in this Act, unless otherwise provided or indicated by the context, the term "Department" means the Department of Education or any component thereof; the term "Secretary" means the Secretary of Education; and the term "Under Secretary" means the Under Secretary of Education.

(b) As used in this Act, the term "function" includes any duty, obligation, power, authority, responsibility, right, privilege or activity.

(c) As used in this Act, unless otherwise provided or indicated by the context, the term "State" includes the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands and the Trust Territory of the Pacific Islands.

(d) As used in this Act, unless otherwise provided or indicated by the context, the words "private" and "private educational" refer to independent, nonpublic and private institutions of elementary, secondary, higher and postsecondary education.

(e) As used in this Act, unless otherwise provided or indicated by the context, the terms "office" and "unit" include any office, institute, council, unit, organizational entity or component thereof.

#### TITLE I—FINDINGS AND PURPOSES

##### FINDINGS

SEC. 101. The Congress of the United States finds that:

(a) education is fundamental to the development of individual citizens and the progress of the Nation as a whole;

(b) there is a continuous need to ensure equal access for all Americans to educational opportunities of a high quality;

(c) the primary responsibility for education resides with States, localities and private institutions;



(d) the American people benefit from a diversity of educational settings, including public and private schools, libraries, museums and other institutions, the workplace, the community and the home;

(e) the current structure of the executive branch fails to recognize the importance of education and does not allow sufficient Presidential and public consideration of education issues;

(f) there is a need for improvement in the management of Federal education programs to support more effectively State, local and private institutions in carrying out their educational responsibilities;

(g) there is a need for improved coordination of Federal education and related programs; and

(h) there is no single, full-time, Federal education official directly accountable to the President, the Congress and the people.

#### PURPOSES

SEC. 102. The Congress therefore declares that the establishment of a Department of Education is in the public interest and will promote the general welfare of the United States. Establishment of this Department will help ensure that education issues receive proper treatment at the Federal level and will enable the Federal Government to coordinate its education activities more effectively. The major purposes of the Department are:

(a) to strengthen the Federal commitment to ensuring access to equal educational opportunity for every American;

(b) to support more effectively States, localities and public and private institutions in carrying out their responsibilities for education;

(c) to promote improvements in the quality and usefulness of education through federally supported research, evaluation and the sharing of information;

(d) to improve the management and efficiency of Federal education activities;

(e) to increase the accountability of Federal education programs to the President, the Congress and the public;

(f) to encourage the involvement of the public, parents and students in Federal education programs; and

(g) to improve the coordination of Federal education programs.

#### PROHIBITION AGAINST FEDERAL CONTROL OF EDUCATION

SEC. 103. No provision of law relating to a program administered by the Secretary or by any other officer or agency of the executive branch of the Federal Government shall be construed to authorize the Secretary or any such officer or agency to exercise any direction, supervision or control over the curriculum, program of instruction, administration or personnel of any educational institution, school or school system; over any accrediting agency or association; or over the election of library resources, textbooks or other instructional material by any educational institution or school system, except to the extent authorized by law.

## TITLE II—ESTABLISHMENT OF THE DEPARTMENT

## ESTABLISHMENT

SEC. 201. (a) There is hereby established an executive department to be known as the Department of Education. There shall be at the head of the Department a Secretary of Education, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level I of the executive schedule under section 5312 of title 5 of the United States Code. The Department shall be administered, in accordance with the provisions of this Act, under the supervision and direction of the Secretary.

(b) There shall be in the Department an Under Secretary, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level III of the executive schedule under section 5314 of title 5 of the United States Code. The Under Secretary shall act for and exercise the functions of the Secretary during the absence or disability of the Secretary or in the event the office of Secretary becomes vacant. The Secretary shall designate the order in which other officials shall act for and perform the functions of the Secretary during the absence or disability of both the Secretary and Under Secretary or in the event of vacancies in both of those offices. The Under Secretary shall also be responsible for intergovernmental relations in the Department.

## PRINCIPAL OFFICERS

SEC. 202. (a) There shall be in the Department six Assistant Secretaries reporting directly to the Secretary, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level IV of the executive schedule under section 5315 of title 5 of the United States Code. An Assistant Secretary shall head each of the Offices created by sections 203, 204, 205, and 206 of this Act.

(b) In addition, there shall be in the Department six officers reporting directly to the Secretary, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level V of the executive schedule under section 5316 of title 5 of the United States Code.

(c) The officers created by this section shall perform, in accordance with applicable law, such of the functions delegated to or vested in the Secretary or in the Department as the Secretary shall from time to time prescribe (in accordance with the provisions of this Act), including, but not limited to, the following functions:

- (1) congressional relations functions;
  - (2) public information functions;
  - (3) management and budget functions;
  - (4) planning, evaluation and policy development functions;
- and
- (5) encouraging and monitoring involvement of parents, students and the public in departmental programs.
- (d) Except as otherwise provided by this Act,

(1) when the name of a person to serve as an officer created by either subsection (a) or subsection (b) is submitted to the Senate for confirmation, the President shall designate the particular functions that person shall exercise upon taking office; and

(2) notwithstanding the provisions of paragraph (1) of this subsection, the Secretary may from time to time allocate or reallocate functions of the Department among the subordinates of the Secretary and name and rename the titles of the offices they hold.

#### OFFICE FOR CIVIL RIGHTS

SEC. 203. (a) There shall be established in the Department an Office for Civil Rights headed by an Assistant Secretary for Civil Rights who shall be one of the Assistant Secretaries created by section 202(a) of this Act.

(b) Notwithstanding the provisions of section 422 of this Act, the Secretary shall delegate to such Assistant Secretary all functions, other than administrative and support functions, vested in the Secretary by section 301(a)(3) of this Act.

(c) The Assistant Secretary for Civil Rights shall make annual reports to the Secretary and to the Congress summarizing the compliance and enforcement activities of the Office for Civil Rights and identifying significant civil rights or compliance problems as to which such Office has made a recommendation for corrective action or as to which, in the judgment of the Assistant Secretary, adequate progress is not being made.

(d) Notwithstanding any other provision of law, the reports required by or under this section shall be transmitted to the Secretary and the Congress by the Assistant Secretary for Civil Rights without further clearance or approval. The Assistant Secretary shall provide copies of the reports required under subsection (c) to the Secretary sufficiently in advance of their submission to Congress to provide a reasonable opportunity for comments of the Secretary to be appended to the reports when submitted to Congress.

(e) In addition to the authority otherwise provided by this section, the Assistant Secretary for Civil Rights, in carrying out the provisions of this section, is authorized—

(1) to collect or coordinate collection of data necessary to ensure compliance with civil rights laws within its jurisdiction;

(2) to select, appoint and employ such officers and employees, including staff attorneys; as may be necessary to carry out the functions of the Office, subject to provisions governing appointments in the competitive service and the provisions of chapter 51 and subchapter III of chapter 53 of title 5 of the United States Code, relating to classification and General Schedule pay rates; and

(3) notwithstanding any other provision of this Act, to obtain services as authorized by section 3109 of title 5 of the United States Code at daily rates not to exceed the equivalent rates prescribed for grade GS-18 of the General Schedule by section 5332 of such title.

## OFFICE OF POSTSECONDARY EDUCATION

SEC. 204. There shall be in the Department an Office of Postsecondary Education headed by one of the Assistant Secretaries created by section 202(a) of this Act. The Assistant Secretary shall administer such functions affecting postsecondary education, both public and private, as the Secretary shall delegate to the Office and shall serve as the principal advisor to the Secretary on matters affecting public and private postsecondary education.

## OFFICE OF ELEMENTARY AND SECONDARY EDUCATION

SEC. 205. There shall be in the Department an Office of Elementary and Secondary Education headed by one of the Assistant Secretaries created by section 202(a) of this Act. The Assistant Secretary shall administer such functions affecting elementary and secondary education, both public and private, as the Secretary shall delegate to the Office.

## OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

SEC. 206. There shall be in the Department an Office of Educational Research and Improvement headed by one of the Assistant Secretaries created by section 202(a) of this Act. The Assistant Secretary shall administer such functions and programs of the Department concerning research, development, demonstration, dissemination, evaluation and assessment activities as the Secretary shall delegate to the Office.

## FUNCTIONS RELATING TO EDUCATION OF OVERSEAS MILITARY DEPENDENTS

SEC. 207. There shall be in the Department an office to administer functions relating to the education of overseas dependents of personnel of the Department of Defense the director of which shall be one of the officers created by section 202 of this Act.

## GENERAL COUNSEL

SEC. 208. There shall be in the Department a General Counsel, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level IV of the executive schedule under section 5315 of title 5 of the United States Code.

## OFFICE OF INSPECTOR GENERAL

SEC. 209. (a) Section 2(1) of the Inspector General Act of 1978 is amended by adding "the Department of Education," after "the Department of Commerce."

(b) Sections 11(1) and (2) of such Act are amended by adding "Education," after the word "Commerce,".

## EXECUTIVE LEVEL POSITIONS

SEC. 210. The number of executive level positions published pursuant to section 5311(b)(1) of title 5 of the United States Code is hereby increased by 14.

## INTERGOVERNMENTAL ADVISORY COUNCIL ON EDUCATION

SEC. 211. (a) There is hereby established an advisory committee to be known as the Intergovernmental Advisory Council on Education (hereinafter referred to as the "Council").

(b) The Council shall—

(1) provide a forum for representatives of Federal, State and local governments and public and private educational entities to discuss educational issues;

(2) make recommendations for the improvement of Federal education programs;

(3) promote better intergovernmental relations; and

(4) submit a report, biennially or as frequently as the Council deems it necessary, to the President and the Secretary reviewing the impact of Federal education activities upon State and local governments and public and private educational institutions, including an assessment of compliance with section 103 of this Act and of any change in the Federal role in education, and assessing both the extent to which Federal objectives are achieved and any adverse consequences of Federal actions.

(c) (1) The Council shall have twenty members, appointed by the President as follows:

(A) six elected State and local officials with general government responsibilities;

(B) five representatives of public and private elementary and secondary education, including board members, administrators and teachers;

(C) five representatives of public and private postsecondary education, including board members, administrators and professors; and

(D) four members of the public, including parents of students and students.

(2) The Under Secretary shall be an *ex officio* member of the Council.

(3) Each member shall have a term of four years: *Provided*, that no member serving pursuant to subparagraph (1) (A) of this subsection may serve on the Council beyond the period that such member holds an office qualifying such member for appointment under such subparagraph: *Provided further*, that the President shall divide the initial appointments to the Council into four groups of five members each for initial terms of one, two, three and four years.

(4) The President shall from time to time designate one member to chair the Council.

(d) The Council shall nominate and the Secretary shall appoint an executive director for the Council.

(e) The Secretary shall furnish such staff, services and support as shall be necessary for the operation of the Council.

## INTERDEPARTMENTAL EDUCATION COORDINATING COMMITTEE

SEC. 212. (a) There is hereby established an Interdepartmental Education Coordinating Committee (hereinafter referred to in this Act as the "Committee").

(b) The Committee shall study and make recommendations for assuring effective coordination of Federal programs, policies and administrative practices affecting education, including—

(1) consistent administration and development of policies and practices among Federal agencies in the conduct of related programs;

(2) full and effective communication among Federal agencies to avoid unnecessary duplication of activities and repetitive collection of data;

(3) full and effective cooperation with the Secretary on such studies and analyses as are necessary to carry out the purposes of this Act; and

(4) coordination of related programs to assure that recipients of Federal assistance are efficiently and responsively served.

(c) The Committee shall be composed of the Secretary, who shall be the Chair, and representatives from those Federal agencies, commissions and boards that the President may from time to time deem appropriate with regard to the matters under consideration.

(d) The Director of the Office of Management and Budget, the Chairman of the Council of Economic Advisers, the Director of the Office of Science and Technology Policy and the Executive Director of the Domestic Policy Staff may each designate a staff member to attend meetings of the Committee.

(e) The Secretary may establish subcommittees of the Committee to facilitate coordination in important areas of Federal activity.

(f) The Secretary and each Federal agency represented on the Committee under the provisions of subsection (c) of this section shall furnish necessary assistance to the Committee.

### TITLE III—TRANSFERS

#### TRANSFERS FROM THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

SEC. 301. (a) There are hereby transferred to and vested in the Secretary—

(1) all functions, programs and offices vested in the Assistant Secretary for Education (or in the Office of such Assistant Secretary) or in the Education Division of the Department of Health, Education, and Welfare, or in any officer or component thereof;

(2) all functions, programs and offices vested in the Secretary of Health, Education, and Welfare or the Department of Health, Education, and Welfare:

(A) under the General Education Provisions Act;

(B) under the Elementary and Secondary Education Act of 1965;

(C) under the Emergency School Aid Act;

(D) under the Higher Education Act of 1965;

(E) under the Education Amendments of 1978;

(F) under the Act of August 30, 1890 (7 U.S.C. 321-328);

(G) under the Environmental Education Act;

(H) under the National Defense Education Act of 1958;

(I) under the Education of the Handicapped Act;

(J) under part B of title V of the Economic Opportunity Act of 1965;

(K) under subparts I and II of part C of title VII and part B of title VIII of the Public Health Service Act;

(L) under the National Commission on Libraries and Information Science Act;

(M) under the Vocational Education Act of 1963;

(N) relating to Gallaudet College, Howard University, the American Printing House for the Blind and the National Technical Institute for the Deaf;

(O) under the Model Secondary School for the Deaf Act;

(P) relating to the telecommunications demonstration program under subpart A of part IV of title III of the Communications Act of 1934;

(Q) under section 2030(k) of the Federal Property and Administrative Services Act of 1949; and

(R) under the Alcohol and Drug Abuse Education Act;

(3) all functions of the Department of Health, Education, and Welfare or the Secretary of Health, Education, and Welfare delegated to or vested in the Office for Civil Rights of such Department relating to functions transferred by this section;

(4) any advisory committee and authority for any advisory committee established by statute in or under the Department of Health, Education, and Welfare or the Secretary of Health, Education, and Welfare, giving advice or making recommendations that primarily concern education: *Provided that*, the Secretary may terminate or combine one or more of such advisory committees;

(5) the Institute of Museum Services in the Department of Health, Education, and Welfare and all functions vested in such Institute;

(6) the Advisory Council on Education Statistics and all functions vested in such Council; and

(7) the Federal Education Data Acquisition Council and all functions vested in such Council.

(b) There are hereby transferred to the Inspector General of the Department that portion of the Office of Inspector General of the Department of Health, Education, and Welfare that relates to functions transferred to the Secretary by this Act.

#### TRANSFERS FROM THE DEPARTMENT OF LABOR

SEC. 302. (a) There are hereby transferred to and vested in the Secretary all functions of the Secretary of Labor or the Department of Labor under section 303(c)(2) of the Comprehensive Employment and Training Act of 1973.

(b) The Secretary is authorized to conduct the functions transferred by subsection (a).

(c) Section 303(c)(3) of the Comprehensive Employment and Training Act is redesignated as subsection (d) and amended to read as follows:

“(d) For the purposes of carrying out subsection (b) and (c) of this section, the Secretary shall reserve from funds available for this title an amount equal to not less than  $4\frac{5}{8}$  percent of the amount allocated pursuant to section 202(a).”.

#### TRANSFERS FROM THE DEPARTMENT OF DEFENSE

SEC. 303. (a) Notwithstanding the provisions of section 601 of this Act, there shall be transferred to and vested in the Secretary, at such time and in such manner as the President may designate, but not later than three years after the effective date of this Act, all functions and offices vested in the Secretary of Defense or the Department of Defense by the Defense Dependents' Education Act of 1978.

(b) Notwithstanding the provisions of section 422 of this Act, the Secretary shall delegate to the director of the office created by section 207 of this Act all functions, other than administrative and support functions, vested in the Secretary by subsection (a) of this section.

(c) Not later than one year after the effective date of this Act, the Secretary, after consultation with the Secretary of Defense, shall transmit to the Congress a plan for effecting the transfer of functions under this section and administering those functions. In designing this plan, the Secretary shall also consult with representatives of sponsors of students enrolled in overseas dependents' schools and of professional employee organizations and administrators of such schools.

#### TRANSFERS FROM THE NATIONAL SCIENCE FOUNDATION

SEC. 304. (a) There are hereby transferred to and vested in the Secretary all programs relating to science education of the National Science Foundation or its Director established prior to the effective date of this Act pursuant to section 3(a)(1) of the National Science Foundation Act of 1950, except such programs, as determined by the Director of the Office of Management and Budget (after consultation with the Director of the Office of Science and Technology Policy), that relate to (1) fellowships and traineeships integral to the support of scientific research and development, (2) ethical, value and science policy issues, or (3) communicating information to practitioners of science and technology and to nonscientists. Except as provided in section 301(a)(1) of this Act, no mission-oriented research functions or programs of the National Science Foundation nor of any other Federal agency shall be transferred by this Act.

(b) The Secretary is authorized to conduct the programs transferred by subsection (a). In conducting such programs, the Secretary shall consult, as appropriate, with the Director of the National Science Foundation.

(c) Nothing in this section is intended to repeal or limit the authority of the National Science Foundation or the Director of the National Science Foundation under section 3(a)(1) of the National Science Foundation Act of 1950 to initiate and conduct programs not established prior to the effective date of this Act.

#### TRANSFERS FROM THE DEPARTMENT OF JUSTICE

SEC. 305. There are hereby transferred to and vested in the Secretary all functions vested in the Attorney General, the Department of Jus-



tice or the Administrator of the Law Enforcement Assistance Administration (or any successor agency thereto) with regard to the student loan and grant programs known as the law enforcement education program and the law enforcement intern program authorized by subsections (b), (c) and (f) of section 406 of the Omnibus Crime Control and Safe Streets Act of 1968.

#### TRANSFERS FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

SEC. 306. There are hereby transferred to and vested in the Secretary all functions relating to college housing loans vested in the Secretary of Housing and Urban Development or the Department of Housing and Urban Development by title IV of the Housing Act of 1950.

#### EFFECT OF TRANSFERS

SEC. 307. The transfer of a function, program or office from an officer or to the Secretary or to the Department includes any aspect of such function, program or office vested in a subordinate of such officer or in a component of such agency.

### TITLE IV—ADMINISTRATIVE PROVISIONS

#### PART A—PERSONNEL PROVISIONS

##### OFFICERS AND EMPLOYEES

SEC. 401. (a) The Secretary is authorized to appoint and fix the compensation of such officers and employees, including attorneys, as may be necessary to carry out the functions of the Secretary and the Department. Except as otherwise provided by law, such officers and employees shall be appointed in accordance with the civil service laws and their compensation fixed in accordance with title 5 of the United States Code.

(b) (1) Notwithstanding the second sentence of section 5108(a) of title 5 of the United States Code, the Secretary may place at grade levels GS-16, GS-17, and GS-18 a number of positions in such grades equal to the number assigned and employed on the day preceding the effective date of this Act in connection with functions transferred under this Act.

(2) Notwithstanding the second sentence of section 3104 of title 5 of the United States Code, the Secretary may establish within the Office created by section 206 of this Act all scientific, professional and technical positions outside the General Schedule assigned and employed on the day preceding the effective date of this Act in connection with functions, offices and programs transferred under this Act.

(3) Appointments under this subsection may be made without regard to the provisions of sections 3104 and 3324 of title 5 of the United States Code, if the individual appointed in such position is an individual who is transferred in connection with a transfer of functions, offices or programs under this Act and, immediately before the effective date of this Act, holds a position and duties comparable to those of the position to which appointed thereunder.

(4) Except as provided in subsection (c), the authority of the Secretary under this subsection to appoint personnel without regard to

sections 3104, 3324 and 5108(a) of title 5 of the United States Code shall cease with respect to any position when the person first appointed to fill such position leaves such position.

(5) For purposes of section 414(a)(3)(A) of the Civil Service Reform Act of 1978, an individual appointed under this subsection shall be deemed to occupy the same position as he or she occupied on the day before the effective date of this Act.

(c) The Secretary may appoint, without regard to the provisions of title 5 of the United States Code governing appointment in the competitive service, up to 112 scientific, technical or professional employees of the Office created by Section 206 of this Act and may compensate employees so appointed without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates. The rate of basic compensation for such employees shall not be equal to or in excess of the rate of pay currently paid for GS-16 of the General Schedule of section 5332 of title 5 of the United States Code.

(d) Subject to section 3134 of title 5 of the United States Code, but notwithstanding any other provision of law, the Director of the Office of Personnel Management shall establish positions within the Senator Executive Service for 15 limited term appointees. The Secretary shall appoint individuals to such positions as provided by Section 3394 of title 5 of the United States Code. Such positions shall expire on the latter of three years after the effective date of this Act or three years after the initial appointment to each position.

(e) Notwithstanding the transfer of functions effected by section 303 of this Act (and the consequent transfer of personnel), personnel performing such functions shall have commissary and post exchange privileges in facilities of the Armed Forces.

#### EXPERTS AND CONSULTANTS

SEC. 402. The Secretary may obtain services as authorized by section 3109 of title 5 of the United States Code at rates not to exceed the daily rate prescribed for grade GS-18 of the General Schedule under section 5332 of such title for persons in Government service employed intermittently.

### PART B—GENERAL PROVISIONS

#### GENERAL AUTHORITY

SEC. 421. In carrying out the functions or conducting offices or programs transferred by this Act, the Secretary, or any officer or employee of the Department, may exercise any authority or part thereof available by law (including appropriations Acts) with respect to such function, office or program to the official or agency from which such function, office or program is transferred.

#### DELEGATION

SEC. 422. Except as otherwise expressly provided in this Act, the Secretary may delegate any function, office or program vested in the Secretary to such officers and employees of the Department as the

Secretary may designate and may authorize such successive redelegations of such function, office or program within the Department as the Secretary may deem to be necessary or appropriate.

#### REORGANIZATION

SEC. 423. The Secretary is authorized to establish, alter, consolidate or discontinue such organizational units or components within the Department as the Secretary may deem to be necessary or appropriate. Such authority shall not extend to the abolition of organizational units or components established by this Act, or to the transfer of functions, offices or programs vested by this Act in such organizational unit or component.

#### RULES

SEC. 424. The Secretary is authorized to prescribe such rules and regulations as the Secretary may deem necessary or appropriate to administer and manage the functions, offices and programs vested in the Secretary or the Department in accordance with chapter 5 of title 5 of the United States Code.

#### CONTRACTS

SEC. 425. Subject to the provisions of the Federal Property and Administration Services Act of 1949, the Secretary is authorized to make, enter into and perform such contracts, grants, leases, cooperative agreements or other similar transactions with Federal or other public agencies (including State and local governments) and private organizations and persons, and to make such payments, by way of advance or reimbursement, as the Secretary may deem necessary or appropriate to carry out functions and programs vested in the Secretary or the Department.

#### REGIONAL AND FIELD OFFICES

SEC. 426. The Secretary is authorized to establish, alter, discontinue or maintain such regional or other field offices as the Secretary may deem to be necessary or appropriate to perform functions and programs vested in the Secretary or the Department.

#### ACQUISITION AND MAINTENANCE OF PROPERTY

SEC. 427. (a) The Secretary is authorized to acquire (by purchase, lease, condemnation, or otherwise), construct, improve, repair, operate, and maintain schools and related facilities (but only to the extent that operation of schools and related facilities by the Department is authorized by this Act), laboratories, research and testing sites and facilities, quarters and related accommodations for employees and dependents of employees of the Department, personal property, or any interest therein, as the Secretary deems necessary; and to provide by contract or otherwise for eating facilities and other necessary facilities for the health and welfare of employees of the Department at its installations and purchase and maintain equipment therefor.

(b) The authority available to the Secretary of Health, Education, and Welfare under section 524 of the Education Amendments of 1976 shall also be available to the Secretary.

(c) The authority granted by subsection (a) of this section shall be available only with respect to facilities of a special purpose nature that cannot readily be reassigned from similar Federal activities and are not otherwise available for assignment to the Department by the Administrator of General Services.

#### FACILITIES AT REMOTE LOCATIONS

SEC. 428. (a) The Secretary is authorized to provide, construct, or maintain, as necessary and when not otherwise available, the following for employees and their dependents stationed at remote locations:

- (1) emergency medical services and supplies;
- (2) food and other subsistence supplies;
- (3) dining facilities;
- (4) audio-visual equipment, accessories and supplies for recreation and training;
- (5) reimbursement for food, clothing, medicine and other supplies furnished by such employees in emergencies for the temporary relief of distressed persons;
- (6) living and working quarters and facilities; and
- (7) transportation for school-age dependents of employees to the nearest appropriate educational facilities.

(b) The furnishing of medical treatment under paragraph (1) of subsection (a) of the furnishing of services and supplies under paragraphs (2), (3) and (4) of subsection (a) shall be at prices reflecting reasonable value as determined by the Secretary.

(c) Proceeds from reimbursements under this section may be credited to the appropriations or funds that bear all or a part of the cost of such work or services or to refund excess sums when necessary.

#### USE OF FACILITIES

SEC. 429. (a) With their consent, the Secretary may, with or without reimbursement, use the research, equipment, services and facilities of any agency or instrumentality of the United States, of any State, or of any foreign government, in carrying out any function or program vested in the Secretary or in the Department.

(b) In carrying out his duties, the Secretary, under such terms, at such rates and for such periods (not exceeding five years), as the Secretary may deem to be in the public interest, is authorized to permit the use by public and private agencies, corporations, associations or other organizations, or by individuals, of any real property, or any facility, structure or other improvement thereon, acquired pursuant to sections 427 and 428, under the custody and control of the Secretary for Department purposes. The Secretary may require permittees under this section to recondition and maintain to a satisfactory standard, at their own expense, the real property, facilities, structures and improvements involved. This subsection shall not apply to excess property as defined in section 3(e) of the Federal Property and Administrative Services Act of 1949.

(c) Proceeds from reimbursements under this section may be credited to the appropriations or funds that bear all or a part of the cost of such work or services or to refund excess sums when necessary, except that such proceeds may be credited to a working capital fund otherwise lawfully established, including a fund established pursuant to section 432 of this Act and used under the law governing such fund.

(d) All interests in real property acquired pursuant to this Act shall be acquired in the name of the United States Government.

#### COPYRIGHTS AND PATENTS

SEC. 430. The Secretary is authorized to acquire any of the following described rights if the property acquired thereby is for use by or for, or useful to, the Department:

(a) copyrights, patents and applications for patents, designs, processes and manufacturing data;

(b) licenses under copyrights, patents and applications for patents; and

(c) releases, before suit is brought, for past infringement of patents or copyrights.

#### GIFTS AND BEQUESTS

SEC. 431. The Secretary is authorized to accept, hold, administer and utilize gifts, bequests and devises of property, both real and personal, for the purpose of aiding or facilitating the work of the Department. Gifts, bequests and devises of money and proceeds from sales of other property received as gifts, bequests or devises shall be deposited in the Treasury and shall be available for disbursement upon the order of the Secretary.

#### WORKING CAPITAL FUND

SEC. 432. (a) The Secretary, with the approval of the Director of the Office of Management and Budget, is authorized to establish for the Department a working capital fund, to be available without fiscal year limitation, for expenses necessary for the maintenance and operation of such common administrative services as the Secretary shall find to be desirable in the interests of economy and efficiency, including such services as a central supply service for stationery and other supplies and equipment for which adequate stocks may be maintained to meet in whole or in part the requirements of the Department and its components; central messenger, mail, telephone and other communications services; office space; central services for document reproduction, and for graphics and visual aids; and a central library service.

(b) The capital of the fund shall consist of any appropriations made for the purpose of providing working capital and the fair and reasonable value of such stocks of supplies, equipment, and other assets and inventories on order as the Secretary may transfer to the fund, less related liabilities and unpaid obligations. Such funds shall be reimbursed in advance from available funds of agencies and offices in the Department or from other sources, for supplies and services at rates that will approximate the expense of operation, including the accrual of annual leave and the depreciation of equipment. The fund shall also

be credited with receipts from sale or exchange of property and receipts in payment for loss or damage to property owned by the fund. There shall be covered into the Treasury as miscellaneous receipts any surplus of the fund (all assets, liabilities, and prior losses considered) above the amounts transferred or appropriated to establish and maintain such fund. There shall be transferred to the fund the stocks of supplies, equipment, other assets, liabilities and unpaid obligations relating to the services which the Secretary determines, with the approval of the Office of Management and Budget, will be performed.

#### FUNDS TRANSFER

SEC. 433. The Secretary may, when authorized in an appropriation Act in any fiscal year, transfer funds from one appropriation to another within the Department, except that no appropriation for any fiscal year may be thus increased or decreased by more than ten percent.

#### SEAL OF DEPARTMENT

SEC. 434. The Secretary shall cause a seal of office to be made for the Department of such design as the Secretary shall approve. Judicial notice shall be taken of such seal.

#### ANNUAL REPORT

SEC. 435. (a) The Secretary shall, as soon as practicable after the close of each fiscal year, make a single comprehensive report to the President for transmission to the Congress on the activities of the Department during such fiscal year. Such report shall include a statement of goals, priorities and plans for the Department together with an assessment of the progress made toward the attainment of those objectives, the more effective and efficient management of the Department and the coordination of its functions.

(b) (1) In preparing and developing the report required by subsection (a), the Secretary shall, to the maximum extent practicable, consult with members of the public, including representatives of parents, students, educators, State and local governments, private institutions, other organizations and individuals. The Secretary shall hold such public hearings in the District of Columbia and in such other locations as the Secretary deems appropriate to maximize public participation.

(2) The Secretary may reimburse any person for expenses reasonably incurred in the course of consultation or hearings under paragraph (1) if such person—

(A) has made or is likely to make a material contribution to the work of the Department; and

(B) could not otherwise participate fully and effectively in such consultation.

(3) For purposes of this section, the term "person" shall have the same meaning as in section 551(2) of title 5 of the United States Code.

#### AUTHORIZATION OF APPROPRIATIONS

SEC. 436. Subject to any limitation on appropriations applicable with respect to any function or program transferred to the Department or the Secretary, there are authorized to be appropriated such

sums as are necessary to carry out the provisions of this Act and to enable the Department and the Secretary to perform any function or conduct any program or office that may be vested in the Department or the Secretary. Funds appropriated in accordance with this section shall remain available until expended.

#### RELATIONSHIP TO GENERAL EDUCATION PROVISIONS ACT

SEC. 437. Except where inconsistent with the provisions of this Act, the General Education Provisions Act shall apply to functions transferred by this Act to the extent applicable on the day preceding the effective date of this Act.

#### TECHNICAL ADVICE

SEC. 438. (a) The Secretary is authorized, upon request, to provide advice, counsel and technical assistance to applicants or potential applicants for grants and contracts and other interested persons with respect to any functions or programs of the Secretary or the Department.

(b) The Secretary may permit the consolidation of applicants for grants or contracts with respect to two or more functions or programs administered by the Secretary or the Department: *Provided that*, such packaging or consolidation shall not alter the statutory criteria for approval of applications for funding with respect to such functions or programs.

### TITLE V—TRANSITIONAL, SAVINGS AND CONFORMING PROVISIONS

#### TRANSFER AND ALLOCATION OF APPROPRIATIONS AND PERSONNEL

SEC. 501. (a) Except as otherwise provided in this Act, the personnel employed in connection with, and the assets, liabilities, contracts, property, records and unexpended balance of appropriations, authorizations, allocations and other funds employed, held, used, arising from, available to or to be made available in connection with the functions, programs, offices or portions thereof transferred by this Act, subject to section 202 of the Budget Accounting Act of 1950, shall be transferred to the Secretary for appropriate allocation. Unexpended funds transferred pursuant to this subsection shall be used only for the purposes for which the funds were originally authorized and appropriated.

(b) Positions expressly specified by statute or reorganization plan to carry out functions, offices or programs transferred by this Act, personnel occupying those positions on the effective date of this Act, and personnel authorized to receive compensation in such positions at the rate prescribed for offices and positions at level I, II, III, IV, or V of the executive schedule (5 U.S.C. 5312-5316) on the effective date of this Act, shall be subject to the provisions of section 503 of this Act.

#### EFFECT ON PERSONNEL

SEC. 502. (a) Except as otherwise provided in this Act, the transfer pursuant to this title of full-time personnel (except special Government employees) and part-time personnel holding permanent posi-

tions pursuant to this title shall not cause any such employee to be separated or reduced in grade or compensation for one year after the date of transfer to the Department.

(b) Any person who, on the day preceding the effective date of this Act, holds a position compensated in accordance with the executive schedule prescribed in chapter 53 of title 5 of the United States Code and who, without a break in service, is appointed in the Department to a position having duties comparable to those performed in such prior position shall continue to be compensated in such new position at not less than the rate provided for the previous position, for the duration of the service of such person in the new position.

#### AGENCY TERMINATIONS

SEC. 503. (a) The following offices shall terminate upon the transfer of functions or programs pursuant to this Act:

(1) the Education Division of the Department of Health, Education, and Welfare (but not the National Institute of Education);

(2) the Office of the Assistant Secretary for Education of the Department of Health, Education, and Welfare;

(3) the Office of Education and the Office of the Commissioner of Education of the Department of Health, Education, and Welfare; and

(4) the Office for Dependents' Schools of the Department of Defense.

(b) Each position which was expressly authorized by law, or the incumbent of which was authorized to receive compensation at the rate prescribed for level IV or V of the executive schedule (5 U.S.C. 5315-5316), in an office terminated pursuant to this Act shall also terminate.

(c) (1) The director of any office in the Department the director of which was required prior to the effective date of this Act to report to the Commissioner of Education or the Assistant Secretary for Education of the Department of Health, Education, and Welfare shall report to the Secretary.

(2) The Secretary is authorized to delegate reporting requirements vested in the Secretary by paragraph (1) of this subsection to any officer or employee of the Department.

#### INCIDENTAL TRANSFERS

SEC. 504. (a) The Director of the Office of Management and Budget, at such time or times as the Director shall provide, is authorized and directed—

(1) to make such determinations as may be necessary with regard to the transfer of functions, programs, offices or portions thereof that relate to or are utilized by an officer, agency, commission or other body, or component thereof, transferred by this Act; and

(2) to make such additional incidental dispositions of personnel, assets, liabilities, contracts, property, records and unexpended balances of appropriations, authorizations, allocations and other funds held, used, arising from, available to or to be made available



in connection with such functions, programs, offices or portions thereof, as the Director may deem necessary to accomplish the purposes of this Act.

(b) The Director shall provide for terminating the affairs of all offices terminated by this Act and for such further measures and dispositions as the Director deems necessary to effectuate the purposes of this Act.

(c) After consultation with the Director of the Office of Personnel Management, the Director of the Office of Management and Budget is authorized and directed, at such time as the Director of the Office of Management and Budget shall provide, to make such determinations as may be necessary with regard to the transfer of positions within the Senior Executive Service in connection with functions transferred by this Act.

#### SAVINGS PROVISIONS

SEC. 505. (a) All orders, determinations, rules, regulations, permits, grants, contracts, certificates and privileges that—

(1) have been lawfully issued, made, granted or allowed to become effective in the performance of functions or programs which are transferred under this Act to the Department after the date of enactment of this Act, and

(2) are in effect at the time this Act takes effect, shall continue in effect according to their terms until lawfully modified, terminated, superseded, set aside or revoked.

(b) (1) The provisions of this Act shall not affect any proceedings (including, but not limited to, notices of proposed rulemaking) or any application for any license, permit, certificate or financial assistance pending at the time this Act takes effect before any department, agency, commission or component thereof, functions, offices or programs of which are transferred by this Act; but such proceedings and applications, to the extent that they relate to functions, offices or programs so transferred, shall be continued. Orders shall be issued in such proceedings, appeals shall be taken therefrom, and payments shall be made pursuant to such orders, as if this Act had not been enacted; and orders issued in any such proceedings shall continue in effect until lawfully modified, terminated, superseded, or revoked. Nothing in this subsection shall be deemed to prohibit the discontinuance or modification of any such proceeding under the same terms and conditions and to the same extent that such proceeding could have been discontinued or modified if this Act had not been enacted.

(2) The Secretary is authorized to promulgate regulations providing for the orderly transfer of such proceedings to the Department.

(c) Except as provided in subsection (c)—

(1) the provisions of this Act shall not affect suits commenced prior to the date this Act takes effect; and

(2) in all such suits, proceedings shall be had, appeals taken, and judgments rendered in the same manner and effect as if this Act had not been enacted.

(d) No suit, action or other proceeding commenced by or against any officer in his official capacity as an officer of any department or agency, functions or programs of which are transferred by this Act, shall abate by reason of the enactment of this Act. No cause of action by or against any department or agency, functions or programs of

which are transferred by this Act, or by or against any officer thereof in his official capacity shall abate by reason of the enactment of this Act.

(e) If, before the date on which this Act takes effect, any department or agency, or officer thereof, in his official capacity, is a party to a suit, and under this Act any function, office or program of such department, agency or officer is transferred to the Secretary or any other official, then such suit, insofar as it relates to such function, office or program, shall be continued with the Secretary or other official, as the case may be, substituted.

#### SEPARABILITY

SEC. 506. If any provision of this Act, or the application thereof to any person or circumstance is held invalid, neither the remainder of this Act nor the application of such provision to other persons or circumstances shall be affected thereby.

#### REFERENCE

SEC. 507. With respect to any function or program transferred by this Act and exercised after the effective date of this Act, reference in any other Federal law to any department, commission or agency or any officer or office the functions or programs of which are so transferred shall be deemed to refer to the Secretary, other official or component of the Department in which this Act vests such functions.

#### AMENDMENTS

SEC. 508. (a) Section 19(d) (1) of title 3 of the United States Code is amended—

(1) by striking out "Secretary of Health, Education, and Welfare" and inserting in lieu thereof "Secretary of Health and Human Services"; and

(2) by inserting immediately before the period at the end thereof the following: ", Secretary of Education".

(b) Section 101 of title 5 of the United States Code is amended—

(1) by striking out "Health, Education, and Welfare" and inserting in lieu thereof "Health and Human Services"; and

(2) by adding at the end thereof the following: "The Department of Education."

(c) Section 5108(a) of title 5 of the United States Code is amended by striking out "10,777" and inserting in lieu thereof "10,838".

(d) Section 5312 of title 5 of the United States Code is amended by adding at the end thereof the following:

"(15) Secretary of Education."

(e) Section 5314 of title 5 of the United States Code is amended by inserting immediately after paragraph (4) thereof the following:

"(5) Under Secretary of Education."

(f) Section 5315 of title 5 of the United States Code is amended—

(1) by striking out paragraph (17) and inserting in lieu thereof

"(17) Assistant Secretaries of Health and Human Services (4)."; and

(2) by inserting immediately after paragraph (24) thereof the following:

“(25) Assistant Secretaries of Education (6).

“(26) General Counsel, Department of Education.

“(27) Inspector General, Department of Education.”.

(g) Section 5316 of title 5 of the United States Code is amended by striking out paragraph (41) and by inserting in lieu thereof the following:

“(41) Officers, Department of Education, (6).”.

(h) Subchapter II of chapter 53 of title 5 of the United States Code is further amended by striking out “Health, Education, and Welfare” each place it appears and inserting in lieu thereof “Health and Human Services”.

(i) The Comprehensive Employment and Training Act of 1973 is amended as follows:

(1) Section 111(a) shall read:

“SEC. 111(a). The Secretary of Labor shall consult with the Secretary of Health and Human Services with respect to arrangements for services of a health or welfare character under this Act. The Secretary of Labor shall consult with the Secretary of Education with respect to arrangements for services of an educational nature under this Act, and the Secretary of Education and the Secretary of Health and Human Services shall solicit the advice and comments of appropriate State agencies with regard to, respectively, education and health and welfare services. Such services shall include basic or general education; educational programs conducted for offenders; institutional training; health care, child care, and other supportive services; and new careers and job restructuring in the health, education, and welfare professions.”

(2) Section 127(b) is amended by striking out “and the Secretary of Health, Education, and Welfare” in the first line and inserting in lieu thereof, “the Secretary of Education and the Secretary of Health Human Services”.

(3) Section 311(g) is amended by striking out “Health, Education, and Welfare,” and inserting in lieu thereof “Health and Human Services, Department of Education,”;

(4) Section 314 is amended by striking out “Health, Education, and Welfare” and inserting in lieu thereof “Education”;

(5) Section 438(a)(2) is amended by striking out the words “Health, Education, and Welfare,” and inserting in lieu thereof the words “Education, Secretary of Health and Human Services,”;

(6) Section 502(a) is amended by

(A) striking out the number “15” and inserting in lieu thereof “16”; and

(B) striking out the words “, Health, Education, and Welfare.” in paragraph (1) and inserting in lieu thereof the words “Education, Secretary of Health and Human Services”.

(j) Section 5 The Alcohol and Drug Abuse Education Act is amended—

(1) by inserting after the word "Secretary" in the first sentence the words, ", the Secretary of Health and Human Services,"; and

(2) by striking out the words "of Health, Education, and Welfare" in the second sentence and inserting in lieu thereof the words "Department of Health and Human Services,".

(k) Section 1411 of the Defense Dependents' Education Act of 1978 is amended:

(1) by inserting in subsection (a) (1) thereof after the words "Assistant Secretary")"the words . . .

"and principal officer of the Department of Education responsible for the office established pursuant to section 207 of the Department of Education Act," and by striking out in such subsection the word "Chairman" and inserting in lieu thereof "Co-chairmen";

(2) by adding in subsection (a) (2) thereof after the word "Secretary," the words

"and the principal officer of the Department of Education responsible for the office established pursuant to section 207 of the Department of Education Act,";

(3) by striking out all of subparagraphs (A) and (B) of subsection (a) (3) thereof, inserting in lieu thereof the new subparagraph (A) which shall read—

"(A) the Secretary of Education," and relettering subparagraphs (C), (D), and (E) of paragraph (3) as (B), (C), and (D), respectively; and

(4) by adding to subsection (c) thereof a new paragraph (2) which shall read

"(2) make recommendations to the Director and to the Secretary of Education on the orderly transfer of the functions of under the Dependents' Education Act of 1978 to the Secretary and Department of Education," and renumbering paragraphs (2), (3) and (4) of subsection (c) as paragraphs (3), (4), and (5), respectively.

(l) Section 103(c) (2) (B) of the Elementary and Secondary Education Act of 1965 is amended by adding at the end thereof the following new sentence:

"The Secretary of Health and Human Services shall transmit the information required by this subparagraph to the Secretary of Education not later than February 1 of each year."

#### REDESIGNATION

SEC. 509. (a) The Department of Health, Education, and Welfare is hereby redesignated the Department of Health and Human Services, and the Secretary of Health, Education, and Welfare or any other official of the Department of Health, Education, and Welfare is hereby redesignated the Secretary or official, as appropriate, of Health and Human Services.

(b) Any reference to the Department of Health, Education, and Welfare, the Secretary of Health, Education, and Welfare or any other official of the Department of Health, Education, and Welfare in any law, rule, regulation, certificate, directive, instruction or other official paper in force on the effective date of this Act will be deemed to refer

and apply to the Department of Health and Human Services, the Secretary of Health and Human Services, respectively, except to the extent such reference is to a function or program transferred to the Secretary under this Act.

#### TRANSITION

SEC. 510. With the consent of the appropriate department or agency head concerned, the Secretary is authorized to utilize the services of such officers, employees and other personnel of the departments and agencies from which functions, offices or programs have been transferred to the Secretary, and funds appropriated to such functions, offices or programs, for such period of time as may reasonably be needed to facilitate the orderly implementation of this Act.

### TITLE VI—EFFECTIVE DATE AND INTERIM APPOINTMENTS

#### EFFECTIVE DATE

SEC. 601. The provisions of this Act shall take effect one hundred eighty days after the Secretary first takes office, or on such earlier date as the President may prescribe and publish in the Federal Register, except that at any time after the date of enactment of this Act, (1) any of the officers provided for in title II of this Act may be nominated and appointed, as provided in such title, and (2) the Secretary may promulgate regulations pursuant to section 505(b)(2) of this Act. Funds available to any Department or agency (or any official or component thereof), the functions, offices or programs of which are transferred to the Secretary by this Act, may, with the approval of the Director of the Office of Management and Budget, be used to pay the compensation and expenses of any officer appointed pursuant to this title and other transitional and planning expenses associated with establishment of the Department or transfer of functions, offices or programs thereto until such time as funds for these purposes are otherwise available.

#### INTERIM APPOINTMENTS

SEC. 602. In the event that one or more officers required by this Act to be appointed by and with the advice and consent of the Senate shall not have taken office on the effective date of this Act, and notwithstanding any other provision of law, the President may designate any officer in the executive branch to act in such office until the office is filled. While so acting, any such officer shall receive compensation at the rate provided under this Act for the office in which he or she acts.















IMPORT RELIEF FOR THE  
U.S. WOOD AND PLASTIC CLOTHESPIN INDUSTRY

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COMMUNICATION

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

A REPORT ON HIS DECISION TO MODIFY THE RECOMMENDATION OF THE U.S. INTERNATIONAL TRADE COMMISSION FOR IMPORT RELIEF FOR THE WOODEN AND PLASTIC SPRING CLOTHESPIN INDUSTRY, PURSUANT TO SECTION 203(b)(2) OF THE TRADE ACT OF 1974



FEBRUARY 13, 1979.—Referred to the Committee on Ways and Means  
and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

39-011

WASHINGTON : 1979



THE WHITE HOUSE,  
Washington, February 8, 1979.

HON. THOMAS P. O'NEILL, Jr.,  
Speaker of the U.S. House of Representatives,  
Washington, D.C.

DEAR MR. SPEAKER: In accordance with section 203(b)(1) of the Trade Act of 1974, enclosed is a report to the Congress setting forth my decision to provide import relief on wood and plastic clothespins in the form of a price-bracketed quota.

Sincerely,

JIMMY CARTER.

### IMPORT RELIEF ACTION

#### CLOTHESPINS

As required under section 203(b)(2) of the Trade Act of 1974, I am transmitting this report to Congress setting forth the action I will take with respect to wood and plastic clothespins covered by the affirmative finding on December 12, 1978 of the U.S. International Trade Commission (USITC) under section 201(d)(1) of the Trade Act.

After considering all relevant aspects of the case, including those considerations set forth in section 202(c) of the Trade Act of 1974, I have decided to authorize import relief which is a variation on the relief recommended by the USITC. Within 15 days, I will issue a Presidential Proclamation authorizing the imposition of a three-year, global quota on wooden and plastic spring clothespins (TSUS 790.05) with a dutiable value of not more than \$1.70 per gross. The quota, administered quarterly on a *pro rata* basis, will be broken down as follows:

Category	Yearly quota allocation (gross)
Valued not over 80 cents per gross.....	500,000
Valued over 80 cents per gross but not over \$1.35 per gross.....	600,000
Valued over \$1.35 per gross but not over \$1.70 per gross.....	900,000
Total .....	2,000,000

During the course of each year, as it becomes apparent that the quota for any price bracket will not be filled for the year, then the remainder of the allocation may be reapportioned among the other brackets whose quotas have been filled.

The relief option I have authorized is slightly less restrictive than the USITC recommended action though it will be effective in limiting imports. The USITC quota was overly restrictive with respect to lowest price producers and too generous with higher price clothespins which are not currently traded in significant volumes. The remedy I have chosen also would have a less distortive impact on the imports of additional suppliers, who have not participated in the surge in imports and should enable domestic producers to expand their capacity utilization rates to more effective operating levels.



SUPPLEMENTAL APPROPRIATIONS AND  
BUDGET AMENDMENT

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COMMUNICATION

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

REQUESTS FOR SUPPLEMENTAL APPROPRIATIONS AND AP-  
PROPRIATIONS LANGUAGE FOR FISCAL YEAR 1979 AND AN  
AMENDMENT TO THE REQUEST FOR APPROPRIATIONS FOR  
FISCAL YEAR 1980



FEBRUARY 13, 1979.—Referred to the Committee on Appropriations and  
ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

39-012

WASHINGTON : 1979





THE WHITE HOUSE,  
Washington, D.C., February 9, 1979.

*The Speaker of the House of Representatives:*

SIR: I ask the Congress to consider requests for supplemental appropriations in the amount of \$1,091,000 and appropriations language for fiscal year 1979 and an amendment to the request for appropriations for the fiscal year 1980 in the amount of \$2,407,000.

The details of these proposals are set forth in the enclosed letter from the Director of the Office of Management and Budget. I concur with his comments and observations.

Respectfully,

JIMMY CARTER.

Enclosures.

(1)



[Estimate No. 01: 96th Cong., 1st sess.]

EXECUTIVE OFFICE OF THE PRESIDENT,  
OFFICE OF MANAGEMENT AND BUDGET,  
*Washington, D.C., February 9, 1979.*

THE PRESIDENT,  
*The White House.*

SIR: I have the honor to submit for your consideration requests for supplemental appropriations in the amount of \$1,091,000 and appropriation language for the fiscal year 1979 and an amendment to the request for appropriations for the fiscal year 1980 in the amount of \$2,407,000. The details of these requests are contained in the enclosures to this letter.

I have carefully reviewed the proposals contained in this document and am satisfied that these requests are necessary at this time. I recommend, therefore, that these proposals be transmitted to the Congress.

Respectfully,

JAMES T. MCINTYRE, Jr.,  
*Director.*

Enclosures.

(3)



EXECUTIVE OFFICE OF THE PRESIDENT

SPECIAL ASSISTANCE TO THE PRESIDENT

SALARIES AND EXPENSES

*The amount made available in the appropriation under this heading in the Treasury Department, the United States Postal Service, and Executive Office of the President Appropriations Act 1979, for expenses of travel is increased by \$10,000.*

This appropriation language would increase the limitation on travel expenses of the Office of the Vice President by \$10 thousand. This proposal would not increase outlays.

EXECUTIVE OFFICE OF THE PRESIDENT

COUNCIL ON WAGE AND PRICE STABILITY

SALARIES AND EXPENSES

1979 BUDGET AMENDMENT

1980 budget appendix page	Heading	Fiscal year 1979		
		Supplemental request pending	Proposed amendment	Revised request
1080	Salaries and expenses	\$4,108,000	\$1,091,000	\$5,199,000

1980 BUDGET AMENDMENT

1980 budget appendix page	Heading	Fiscal year 1980		
		Request pending	Proposed budget amendment	Revised request
69	Salaries and expenses	\$6,076,000	12,407,000	\$8,483,000

These amended budget requests would provide the personnel necessary for the President's anti-inflation program. These requests would increase fiscal year 1979 outlays by \$1.1 million and fiscal year 1980 outlays by \$2.4 million.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

SAINT ELIZABETHS HOSPITAL

For an additional amount for "Saint Elizabeths Hospital", \$3,428,000 to be derived by transfer from "Alcohol, drug abuse, and mental health".

## HEALTH CARE FINANCING ADMINISTRATION

## QUALITY CARE MANAGEMENT, RESEARCH AND DEVELOPMENT

For an additional amount for "Quality care management, research and administration", \$3,800,000 to be derived by transfer from the "Federal Hospital Insurance Trust Fund" and the "Federal Supplementary Medical Insurance Trust Fund" as authorized by Section 201(g)(1) of the Social Security Act.

This supplemental appropriation language would provide authority to transfer funds to cover the October 1978 Federal pay raise. This proposal would not increase outlays.



CUMULATIVE REPORT ON  
RESCISSIONS AND DEFERRALS,  
FEBRUARY 1979

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COMMUNICATION

FROM

THE DIRECTOR, OFFICE OF MANAGEMENT  
AND BUDGET, EXECUTIVE OFFICE  
OF THE PRESIDENT

TRANSMITTING

A CUMULATIVE REPORT ON RESCISSIONS AND DEFERRALS  
OF BUDGET AUTHORITY AS OF FEBRUARY 1, 1979, PURSUANT  
TO SECTION 1014(e) OF PUBLIC LAW 93-344



FEBRUARY 13, 1979.—Referred to the Committee on Appropriations  
and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1979





EXECUTIVE OFFICE OF THE PRESIDENT,  
OFFICE OF MANAGEMENT AND BUDGET,  
Washington, D.C., February 8, 1979.

HON. THOMAS P. O'NEILL,  
*Speaker of the House of Representatives,*  
*Washington, D.C.*

DEAR MR. SPEAKER: In accordance with Executive Order 11845, I am transmitting the cumulative report required by section 1914(e) of the Congressional Budget and Impoundment Control Act of 1974. In accordance with that act, the report is also being transmitted to the Senate and will be published in the Federal Register.

Sincerely,

JAMES T. MCINTYRE, Jr.,  
*Director.*

Enclosures.

Identical letter sent to the President of the Senate.

CUMULATIVE REPORT ON RESCISSIONS AND DEFERRALS,  
FEBRUARY 1979

This report is submitted in fulfillment of the requirements of section 1014(e) of the Impoundment Control Act of 1974 (Public Law 93-344). Section 1014(e) provides for a monthly report listing all budget authority for this fiscal year with respect to which, as of the first day of the month, a special message has been transmitted to the Congress.

This month's report gives the status as of February 1, 1979, of 11 rescissions and 52 deferrals contained in the first five special messages of fiscal year 1979. These messages were transmitted to the Congress on October 2, November 30, December 7, and December 12, 1978, and January 31, 1979.

*Rescissions (table A and attachment A)*

Eleven rescission proposals totalling \$914.7 million in budget authority are presently before the Congress. Table A summarizes the status of rescissions proposed by the President as of February 1, 1979, while attachment A shows the history and status of each rescission proposed during fiscal year 1979.

*Deferrals (table B and attachment B)*

As of February 1, 1979, \$2,900.2 million in 1979 budget authority was being deferred from obligation and another \$1.1 million in 1979 obligations was being deferred from expenditure. Table B summarizes the status of deferrals reported by the President, and attachment B shows the history and status of each deferral reported during fiscal year 1979.

*Information from special messages*

The special messages containing information on each of the rescissions and deferrals covered by the cumulative report are contained in the Federal Registers of:

Wednesday, October 11, 1978 (vol. 43, No. 197, part III).

Wednesday, December 6, 1978 (vol. 43, No. 235, part III).

Wednesday, December 13, 1978 (vol. 43, No. 240, part VI).

Monday, December 18, 1978 (vol. 43, No. 243, part VI).

Monday, February 5, 1979 (vol. 44, No. 25, part VI).

Attachments.

TABLE A.—*Status of 1979 rescission proposals*

	<i>Amount (millions)</i>
Rescissions proposed by the President.....	\$914.7
Rescinded by the Congress.....	
Rejected by the Congress.....	
Pending before the Congress.....	914.7

TABLE B.—*Status of 1979 deferrals*

	<i>Amount (millions)</i>
Deferrals proposed by the President.....	\$4,065.1
Routine Executive releases (—\$1,155.1 million) and adjustments (—\$8.6 million) through Feb. 1, 1979 <sup>1</sup> .....	-1,163.8
Overtaken by the Congress.....	
Currently before the Congress.....	2,901.3

<sup>1</sup> Detail does not add to total due to rounding.

<sup>2</sup> This amount includes \$1,100,000 in outlays for 2 Department of the Treasury deferrals (D79-25A and D79-40A).

(Amounts in thousands of dollars)

Agency/bureau/account	Rescission No.	Amount previously considered by Congress	Amount currently before the Congress	Date of message	Amount rescinded	Amount made available	Date made available
<b>DEPARTMENT OF ENERGY</b>							
Energy programs: Fossil energy construction: BA.....	R79-2	50,000	50,000	Jan. 31, 1979			
Total BA.....		50,000	50,000				
<b>DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE</b>							
National Institutes of Health: Buildings and facilities: BA.....	R79-3	37,000	37,000	Jan. 31, 1979			
Health Resources Administration: Health resources: BA.....	R79-4	167,893	do	do			
Office of Education: Special projects and training: BA.....	R79-5	22,365	do	do			
Total BA.....		227,258					
<b>DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT</b>							
Housing programs: Subsidized housing programs: BA.....	R79-6	600,000	600,000	Jan. 31, 1979			
New Communities Development Corporation: New community assistance grants: BA.....	R79-7	8,167	8,167	Jan. 31, 1979			
Total.....		608,167					
<b>DEPARTMENT OF THE INTERIOR</b>							
Bureau of Mines: Helium fund: BA.....	R79-8	3,127	3,127	Jan. 31, 1979			
Total BA.....		3,127					
<b>NATIONAL AERONAUTICS AND SPACE ADMINISTRATION</b>							
Research and program management: BA.....	R79-9	2,400	2,400	Jan. 31, 1979			
Total BA.....		2,400					
<b>OTHER INDEPENDENT AGENCIES</b>							
Foreign Claims Settlement Commission:							
Payment of Vietnam prisoner of war claims: BA.....	R79-10	19,000	19,000	Jan. 31, 1979			
Salaries and expenses: BA R79-1.....	R79-1	75	75	Nov. 30, 1978			
Small Business Administration: Salaries and expenses: BA.....	R79-11	14,665	14,665	Jan. 31, 1979			
Total BA.....		23,740					
Total BA.....		914,692					

1 This amount was initially deferred (079-29) in a special message transmitted to the Congress on Oct. 2, 1978.

ATTACHMENT B

STATUS OF DEFERRALS—FISCAL YEAR 1979 AS OF FEB. 5, 1979

[Amounts in thousands of dollars]

Agency/Bureau/Account	Deferral No.	Amount transmitted original request	Amount transmitted subsequent change	Date of message	Cumulative OMB agency releases	Congressionally required releases	Cumulative adjustments	Amount deferred as of Feb. 1, 1979
<b>FUNDS APPROPRIATED TO THE PRESIDENT</b>								
Internal Security Assistance:								
Military assistance: BA	D79-31	161,875		Nov. 30, 1978	1-161,875			
International military education and training: BA	D79-35	24,312		Dec. 7, 1978	1-24,312			
Foreign military credit sales: BA	D79-45	651,000		Dec. 12, 1978	1-557,000			94,000
Total BA		837,187			-743,187			94,000
<b>DEPARTMENT OF AGRICULTURE</b>								
Foreign Agricultural Service: Salaries and expenses (special foreign currency):								
BA	D79-1	415		Oct. 2, 1978	-13			402
Agricultural Stabilization and Conservation Service:								
Commodity credit corporation:								
BA	D79-2	3,530		do				
BA	D79-2A			Dec. 7, 1978	-3,530			
Forest Service:								
Acquisition of lands for Wasatch National Forest: BA	D79-36	209		do				209
Timber salvage sales: BA	D79-37	5,500		do				4,798
Expenses, brush disposal:								
BA	D79-3	32,225		Oct. 2, 1978				
BA	D79-3A		5,276	Jan. 31, 1979				37,501
Restoration of forest lands: BA	D79-4	48		Oct. 2, 1978				48
Total BA		41,927	5,276		-4,245			42,958
<b>DEPARTMENT OF COMMERCE</b>								
National Oceanic and Atmospheric Administration:								
Operations, research, and facilities: BA	D79-47	500		Jan. 31, 1979				500
Construction:								
BA	D79-5	9,830		Oct. 2, 1978				
BA	D79-5A		202	Dec. 12, 1978				10,032
Promote and develop fishery products and research: BA	D79-6	12,060		Oct. 2, 1978	-5,481			6,579
Fisheries loan fund:								
BA	D79-7	5,429		do				
BA	D79-7A		208	Jan. 31, 1979				5,637
U.S. Fire Administration: Facilities: BA	D79-32	6,150		Nov. 30, 1978				6,150
Maritime Administration: Ship construction: BA	D79-33	157,000		do				23,000
Total BA		100,000	410		-134,000			170,487

DEPARTMENT OF DEFENSE—MILITARY

Procurement: Shipbuilding and conversion, Navy: BA.....	D79-34	563,940	Nov. 30, 1978	563,940
Military Construction: Military construction, all services: BA.....	D79-8	548,451	Oct. 2, 1978	300,199
Total BA.....		1,112,391		864,139

DEPARTMENT OF DEFENSE—CIVIL

Corps of Engineers: Alaska hydroelectric power development fund: BA.....	D79-10	5,450	Oct. 2, 1978	5,450
Wildlife Conservation, military reservations:				
Wildlife conservation, all services:				
BA.....	D79-9	458	do.	588
BA.....	D79-9A	130	Jan. 31, 1979	588
Total BA.....		5,908	130	6,038

DEPARTMENT OF ENERGY

Energy programs: Uranium enrichment—operating expenses: BA.....	D79-48	63,000	Jan. 31, 1979	63,000
Total BA.....		63,000		63,000

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Alcohol, Drug Abuse, and Mental Health Administration: Construction and renovation, St. Elizabeths Hospital: BA.....	D79-11	27,577	Oct. 2, 1978	27,577
Social Security Administration: Limitation on salaries and expenses: BA.....	D79-12	1,725	do.	1,725
Total BA.....		29,302		29,302

DEPARTMENT OF THE INTERIOR

Bureau of Land Management:				
Oregon and California grant lands:				
BA.....	D79-46	12,811	Dec. 12, 1978	14,712
BA.....	D79-46A	1,901	Jan. 31, 1979	14,712
Heritage Conservation and Recreation Service: Land and water conservation fund: BA.....	D79-13	30,000	Oct. 2, 1978	30,000
Geological Survey: Payments from proceeds, sale of water: BA.....	D79-14	36	do.	36
Bureau of Mines: Drainage of anthracite mines: BA.....	D79-15	1,700	do.	1,587
Office of Territorial Affairs:				
Administration of territories: BA.....	D79-38	25,000	Dec. 7, 1978	25,000
Trust Territory of the Pacific Islands: BA.....	D79-16	12,000	Oct. 2, 1978	12,000
Total BA.....		81,547	1,901	83,335

DEPARTMENT OF JUSTICE

Legal Activities: Salaries and expenses, Community Relations Service: BA.....	D79-49	572	Jan. 31, 1979	572
Federal Prison System:				
Buildings and facilities:				
BA.....	D79-17	25,300	Oct. 2, 1978	37,005
BA.....	D79-17A	11,865	Nov. 30, 1978	37,005
Total BA.....		25,872	11,865	37,577

See footnotes at end of table, p. 7.

ATTACHMENT B—Continued

STATUS OF DEFERRALS—FISCAL YEAR 1979 AS OF FEB. 5, 1979—Continued

[Amounts in thousands of dollars]

Agency/Bureau/Account	Deferral No.	Amount transmitted original request	Amount transmitted subsequent change	Date of message	Cumulative OMB agency releases	Congressionally required releases	Cumulative adjustments	Amount deferred as of Feb. 1, 1979
DEPARTMENT OF LABOR								
Employment and Training Administration: Employment and training assistance:								
BA.....	D79-50	122,133		Jan. 31, 1979				122,133
Total BA.....		122,133						122,133
DEPARTMENT OF STATE								
Administration of Foreign Affairs: Acquisition, operation, and maintenance of buildings: BA.....								
	D79-39	36,787		Dec. 7, 1978				36,787
Other:								
Emergency refugee and migration assistance fund:								
BA.....	D79-18	2,750		Oct. 2, 1978				8,040
BA.....	D79-18A		9,500	Nov. 30, 1978	-4,210			
Total BA.....		39,537	9,500		-4,210			44,827
DEPARTMENT OF TRANSPORTATION								
Federal Aviation Administration:								
Civil supersonic aircraft development: BA.....								
BA.....	D79-19	3		Oct. 2, 1978				3
Facilities and equipment (airport and airway trust fund):								
BA.....	D79-20	290,176		do.				
BA.....	D79-20A		21,259	Jan. 31, 1979				311,435
Federal Highway Administration:								
Trust fund share of other highway programs: BA.....								
Overseas highway: BA.....	D79-21	40,000		Oct. 2, 1978	-10,831			29,169
Urban Mass Transportation Administration: Urban mass transportation fund: BA.....	D79-22	13,100		do.				13,100
BA.....	D79-51	968,616		Jan. 31, 1979				968,616
Total BA.....		1,311,895	21,259		-10,831			1,322,323

DEPARTMENT OF THE TREASURY

Office of the Secretary:

Antirecession financial assistance fund:						
BA.....	D79-23	2,205	Oct. 2, 1978			
BA.....	D79-23A		73 Dec. 7, 1978	-22		2,256
O.....	D79-40	5	do.			
O.....	D79-40A		3 Jan. 31, 1979			8
State and local government fiscal assistance fund:						
BA.....	D79-24	78,489	Oct. 2, 1978			
BA.....	D79-24A		1,665 Dec. 7, 1978	-366		79,788
O.....	D79-25	2,404	Oct. 7, 1978			
O.....	D79-25A		1,562 Dec. 7, 1978	-2,857		1,109
Bureau of the Mint: Construction of mint facilities: BA.....	D79-26	5,730	Oct. 2, 1978			5,730
Total:		86,424	1,738	-388		87,774
O.....		2,409	1,565	-2,857		1,117

GENERAL SERVICES ADMINISTRATION

Property management and disposal activities: Rare silver dollar program: BA.....	D79-27	2,123	Oct. 2, 1978			2,123
Federal Preparedness Agency: State and local preparedness: BA.....	D79-28	80	do.			80
Total BA.....		2,203				2,203

OTHER INDEPENDENT AGENCIES

Foreign Claims Settlement Commission: Payment of Vietnam prisoner of war claims: BA.....	D79-29	10,945	Oct. 2, 1978	-1,051		894
Salaries and expenses: BA.....	D79-41	2,095	Dec. 7, 1978			2,095
Acquisition and construction of radio facilities: BA.....	D79-42	3,141	do.			3,141
Interstate Commerce Commission: Payments for directed rail service: BA.....	D79-30	13,990	Oct. 2, 1978			13,990
Small Business Administration: White House conference on small business: BA.....	D79-43	1,600	Dec. 7, 1978			1,600
Navaho and Hopi Indian Relocation Commission: Salaries and expenses: BA.....	D79-44	12,000	Dec. 7, 1978			12,000
Tennessee Valley Authority: Tennessee Valley Authority fund: BA.....	D79-52	15,000	Jan. 31, 1979			15,000
Total BA.....		58,771		-1,051	-9,000	48,720

Total:		4,009,066	52,079	-1,152,292		2,900,227
O.....		2,409	1,565	-2,857		1,117

<sup>1</sup> This amount was released before the special message containing the deferral was transmitted to Congress.

<sup>2</sup> This amount is in the special message transmitted to the Congress on Jan. 31, 1979.









## DEFERRALS

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MESSAGE

FROM

## THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

REVISIONS TO THREE PREVIOUSLY REPORTED DEFERRALS  
OF BUDGET AUTHORITY, PURSUANT TO SECTION 1014(c) OF  
PUBLIC LAW 93-344



FEBRUARY 15, 1979. - Message and accompanying papers referred to the  
Committee on Appropriations and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

39-012

WASHINGTON : 1979



*To the Congress of the United States:*

In accordance with the Impoundment Control Act of 1974, I herewith report revisions to three previously transmitted deferrals increasing the amount deferred by \$33.8 million. These revisions to existing deferrals involve programs in the Departments of Transportation and the Treasury and the International Communication Agency.

The details of the deferrals are contained in the attached reports.

JIMMY CARTER.

THE WHITE HOUSE, *February 14, 1979.*

(1)

## CONTENTS OF SPECIAL MESSAGE

[In thousands of dollars]

Item	Budget authority	
Deferral No.:		
D79-21A.....	Department of Transportation: Federal Highway Administration: Trust fund share of other highway programs.....	54, 169
D79-25B.....	Department of the Treasury: Office of the Secretary: State and local government fiscal assistance fund.....	15, 801
D79-42A.....	Other independent agencies: International Communication Agency: Acquisition and construction of radio facilities.....	10, 973
	Total, deferrals.....	80, 943

<sup>1</sup> Outlays only.

## SUMMARY OF SPECIAL MESSAGES FOR FISCAL YEAR 1979

[In thousands of dollars]

	Rescissions	Deferrals
6th special message:		
New items.....		33, 836
Changes to amounts previously submitted.....		
Effect of sixth special message.....		33, 836
Previous special messages.....	914, 692	4, 065, 120
Total amount proposed in special messages.....	914, 692	4, 098, 956

<sup>1</sup> In 11 rescission proposals.<sup>2</sup> This amount represents budget authority except for \$15,809,478 in 2 Treasury Department deferrals of outlays only (D79-40A and D79-25B).<sup>3</sup> In 52 deferrals.

## SUPPLEMENTARY REPORT

## Report Pursuant to Section 1014(c) of Public Law 93-344

This report updates Deferral No. D79-21 transmitted to the Congress on October 2, 1978, and printed as House Document No. 95-392.

This revision of a deferral for the Trust fund share of other highway programs in the Department of Transportation's Federal Highway Administration increases the previously reported deferral from \$40,000,000 to \$54,168,837. This increase of \$14,168,837 results from additional budgetary resources made available to the account by Public Law 95-599.

Deferral No. D79-21A

## DEFERRAL OF BUDGET AUTHORITY

## Report Pursuant to Section 1013 of Public Law 93-344

*Department of Transportation—Federal Highway Administration*TRUST FUND SHARE OF OTHER HIGHWAY PROGRAMS (GREAT RIVER ROAD)—69-8009 <sup>1</sup>

New budget authority (Public Law 95-599).....	\$25, 000, 000
Other budgetary resources.....	79, 168, 837
Total budgetary resources.....	<sup>2</sup> 104, 168, 837
Amount to be deferred: Entire year.....	<sup>3</sup> 54, 168, 837

<sup>1</sup> This account was subject of a similar deferral during fiscal year 1978.<sup>2</sup> This amount is the portion of "Trust fund share of other highway programs" available for the Great River Road. Total funds available to the "Trust fund share of other highway programs" is \$147,965,589.<sup>3</sup> Revised from previous report.

OMB identification code: 69-8009-0-7-404.

Grant program: Yes.

Type of account or fund:<sup>1</sup> Multiple year (expiration dates—Sept. 30, 1979 \$22,918,837; <sup>2</sup> Sept. 30, 1980 \$31,250,000; Sept. 30, 1981 \$25,000,000; Sept. 30, 1982 \$25,000,000).

Legal authority (in addition to section 1013): Antideficiency Act.

Type of budget authority: Contract authority.

#### JUSTIFICATION

The National Scenic and Recreation Highway (Great River Road) was authorized by the Federal-Aid Highway Act of 1973. It provides for constructing a two-lane scenic highway in the ten States bordering the Mississippi River. The Great River Road spans more than 2,000 miles.

The contract authority provided for this program is liquidated through both the Highway Trust Fund and the General Fund. A total of \$171,250,000 in contract authority has been made available through fiscal year 1979 for the program. Of this total, \$90,000,000 was made available in the Federal-Aid Highway Act of 1973, \$56,250,000 was made available in the Federal-Aid Highway Act of 1976, and \$25,000,000 was made available in the Federal-Aid Highway Act of 1978. The Highway Trust Share of the \$171,250,000 total is \$141,250,000 (\$54,168,837 of this amount to be deferred) with the balance of \$30,000,000 constituting the General Fund Share. The table below displays the origin of the \$171,250,000 in contract authority provided through 1979.

[In thousands of dollars]

	1974	1975	1976	TQ	1977	1978	1979	Total
Origin of contract authority:								
1973 Highway Act:								
Trust fund.....	10,000	25,000	25,000					60,000
General fund.....	10,000	10,000	10,000					30,000
1976 Highway Act: Trust fund.....				6,250	25,000	25,000		56,250
1978 Highway Act: Trust fund.....							25,000	25,000
<b>Total.....</b>	<b>20,000</b>	<b>35,000</b>	<b>35,000</b>	<b>6,250</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>(171,250)</b>
Trust fund.....	(10,000)	(25,000)	(25,000)	(6,250)	(25,000)	(25,000)	(25,000)	(141,250)
General fund.....	(10,000)	(10,000)	(10,000)					(30,000)

Note: To date, \$171,250,000 of contract authority has been appropriated for use by the States. As of Sept. 30, 1978 the States obligated only \$67,081,163.

A deferral of \$54,168,837 of contract authority is proposed for two reasons:

State plans for fiscal year 1979 indicate that no more than \$50,000,000 will be obligated, falling short of availability by \$54,168,837. This \$54,168,837 is not needed at this time and should be deferred.

The \$50,000,000 obligation level is considered adequate for this program.

#### ESTIMATED EFFECTS

This deferral will have no programmatic effect. Current plans indicate that the amount deferred would not be obligated by the States this fiscal year.

<sup>1</sup> None of these funds are deferred.

<sup>2</sup> Revised from previous report.

## OUTLAY EFFECTS

There is no outlay effect of this deferral because the funds would not be expected to be used if made available.

## SUPPLEMENTARY REPORT

Report Pursuant to Section 1014(c) of Public Law 93-344

This report updates Deferral No. D79-25A transmitted to the Congress on December 7, 1978, and printed as House Document No. 96-3.

This revision of a deferral for the State and local government fiscal assistance trust fund in the Office of the Secretary of the Treasury increases the previously reported deferral from \$3,966,000 to \$15,801,244. This increase of \$11,835,244 results from noncompliance by additional local governments with the technical requirements of the State and Local Fiscal Assistance Act, as amended. It is anticipated that \$13,661,516 of these funds will be released shortly.

Deferral No. D79-25B

## DEFERRAL OF BUDGET AUTHORITY

Report Pursuant to Section 1013 of Public Law 93-344

*Department of the Treasury—Office of the Secretary*

STATE AND LOCAL GOVERNMENT FISCAL ASSISTANCE  
TRUST FUND—20X8111<sup>1 2</sup>

New budget authority (Public Law 95-392).....	\$6, 854, 924. 000
Other budgetary resources.....	<sup>3</sup> 80, 154, 000
	<hr/>
Total budgetary resources.....	<sup>3</sup> 6, 935, 078, 000
Amount to be deferred: Part of year <sup>4</sup> .....	<sup>3</sup> 15, 801, 244

<sup>1</sup> This account is the subject of another deferral, D79-24A.

<sup>2</sup> This account was the subject of a similar deferral during fiscal year 1978.

<sup>3</sup> Revised from previous report.

<sup>4</sup> Outlays only. The outlays being deferred were obligated in fiscal year 1978 and, therefore, are not reflected in the total budgetary resources available for obligation in fiscal year 1979.

OMB identification code: 20-8111-0-7-851.

Grant program: yes.

Type of account or fund: No year.

Legal authority (in addition to section 1013): Antideficiency Act.

Other: Public Law 92-512, sections 121 and 123, Public Law 94-488.

Type of budget authority: Appropriation.

## Justification

The State and Local Government Fiscal Assistance Trust Fund is the vehicle for disbursement of general revenue sharing funds. This deferral represents payments withheld from various governments involved in annexations or disincorporations and for reasons of non-compliance with the requirements of the State and Local Fiscal Assistance Act, as amended.



## Estimated Effect

The release of these funds is contingent upon adherence by the various governments to the compliance regulations, and determinations as to which higher level of government is eligible to receive those funds withheld because of annexations and disincorporations.

## Outlay Effect

There is no outlay effect of this deferral because the funds will be made available this fiscal year.

## SUPPLEMENTARY REPORT

## Report Pursuant to Section 1014(c) of Public Law 93-344

This report updates Deferral No. D79-42 transmitted to the Congress on December 7, 1978, and printed as House Document No. 96-3.

This revision of a deferral for acquisition and construction of radio facilities by the International Communication Agency increases the previously reported deferral from \$3,140,845 to \$10,973,190. This increase of \$7,832,245 is the result of a completion date for the projects that is later than anticipated.

Deferral No. D79-42A

## DEFERRAL OF BUDGET AUTHORITY

## Report Pursuant to Section 1013 of Public Law 93-344

*International Communication Agency*

## ACQUISITION AND CONSTRUCTION OF RADIO FACILITIES, INTERNATIONAL COMMUNICATION AGENCY—67X0204

New budget authority (Public Law 95-431)-----	\$19, 685, 000
Other budgetary resources-----	<sup>1</sup> 20, 612, 066
	<hr/>
Total budgetary resources-----	<sup>1</sup> 40, 297, 066
Amount to be deferred: Entire year-----	<sup>1</sup> 10, 973, 190

<sup>1</sup> Revised from previous report.

OMB identification code: 67-0204-0-1-154.

Grant program: No.

Type of account or fund: No year.

Legal authority (in addition to section 1013): Antideficiency Act.

Type of budget authority: Appropriation.

## JUSTIFICATION

The United States International Communication Agency (ICA) is authorized by the United States Information and Educational Exchange Act of 1948, as amended (22 U.S.C. 1431 et seq.), the Mutual Educational and Cultural Exchange Act of 1961 (22 U.S.C. 2451 et seq.), Executive Order No. 11034 of June 25, 1952, as amended, and Reorganization Plan No. 2 of 1977, to carry out international communication, cultural and educational exchange programs.

The Foreign Relations Authorization Act, 1979 (P.L. 95-426, approved October 7, 1978) authorized to be appropriated for fiscal year 1979, \$420,577,000 for all activities of ICA. The Departments of State, Justice, and Commerce, the Judiciary, and Related Agencies Appropriation Act, 1979, (P.L. 95-431, approved October 10, 1978) appropriated \$19,685,000, to remain available until expended, for the "Acquisition and Construction of Radio Facilities" account primarily to expand the transmitter capacity of the Voice of America's world-wide broadcasting system.

This amount, together with funds appropriated in FY 1978, would expand transmitter facilities in England, Liberia and the Philippines. Delays in these projects have been caused by lags in the procurement and scheduling process and by the need to arrange reprogrammings to finance increased estimated costs and exchange rate losses. Therefore, \$10,973,190 are deferred for the Philippines and Liberia projects. These funds will be used in succeeding years.

This deferral action is taken in accordance with the Antideficiency Act (31 U.S.C. 665).

#### ESTIMATED EFFECTS

There are no programmatic or budgetary effects resulting from this deferral action.

#### OUTLAY EFFECT

There is no outlay effect of this deferral, because the funds could not be used if made available.



PRESIDENTIAL PRIMARY MATCHING PAYMENTS  
REGULATIONS

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COMMUNICATION  
FROM  
THE CHAIRMAN,  
FEDERAL ELECTION COMMISSION

TRANSMITTING

PROPOSED REGULATIONS GOVERNING THE PRESIDENTIAL  
PRIMARY MATCHING PAYMENT ACCOUNT. PURSUANT TO  
SECTION 315(c) OF THE FEDERAL ELECTION CAMPAIGN ACT  
OF 1971, AS AMENDED



FEBRUARY 21, 1979.—Referred to the Committee on House Administration  
and ordered to be printed

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39-011

WASHINGTON : 1979



FEDERAL ELECTION COMMISSION,  
Washington, D.C., February 16, 1979.

HON. THOMAS P. O'NEILL, JR.,  
*Speaker of the House of Representatives,*  
*Washington, D.C.*

DEAR MR. SPEAKER: In accordance with Section 315(c) of the Federal Election Campaign Act of 1971, as amended, 2 U.S.C. § 438(c), the Federal Election Commission transmits herewith proposed regulations pertaining to the administration of the Presidential Primary Matching Payment Account Act. (Chapter 95, Title 26, United States Code). The regulations are numbered as 11 C.F.R. Parts 9032 through 9038 and are intended as a substitute for the present 11 C.F.R. Parts 130 through 134. Accompanying the regulations is the detailed statement of explanation and justification required by the Act.

The proposed regulations are the result of the Commission's experiences in administering the primary matching fund in conjunction with the 1976 Presidential primaries which were the first to be conducted under public financing. Additional suggestions for modifications were generated through public comments solicited pursuant to the notice of proposed rulemaking published in the Federal Register on May 31, 1978, and the public hearings held pursuant to that notice on June 20, 1978.

2 U.S.C. § 438(c)(2) provides that if neither the Senate nor the House of Representatives disapproves of the proposed regulations within thirty legislative days of receipt of the attached statement, the Commission may formally prescribe them. We therefore request your assistance in insuring that the attached statement is brought to the attention of the members of the House of Representatives as expeditiously as possible.

Thank you very much for your cooperation in this matter.

Sincerely,

JOAN D. AIKENS, *Chairman.*

Enclosures.

**TITLE 11, CODE OF FEDERAL REGULATIONS SUBCHAPTER C, PRESIDENTIAL ELECTION CAMPAIGN FUND, PRESIDENTIAL PRIMARY MATCHING FUND, PARTS 9032-9038**

**PART 9031 SCOPE**

The restrictions, liabilities and obligations imposed by this subchapter are in addition to those imposed by sections 431-455 of Title 2 and regulations prescribed thereunder. Unless expressly stated to the contrary, this subchapter does not affect the restrictions, obligations and liabilities imposed by sections 431-455 of Title 2 and regulations prescribed thereunder.

Authority: Sec. 310(8), Pub. L. 92-225, added by Section 208, Pub. L. 93-443, 88 Stat. 1279, and amended by Secs. 105 and 107(a)(1) Pub. L. 94-293, 90 Stat. 481 (2 U.S.C. 437d(a)(8)), and Sec. 408(c), Pub. L. 93-443, 88 Stat. 1297 (26 U.S.C. 9039(b)).

## PART 9032 DEFINITIONS

9032.1 Authorized Committee  
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### § 9032.1 Authorized Committee.

“Authorized committee” means any political committee which is authorized by a candidate to solicit or receive contributions or to make expenditures on behalf of the candidate. This authorization shall be in writing and addressed to the authorized political committee. A copy of the authorization shall be filed by the candidate with the Commission. A withdrawal of authorization shall also be in writing and shall be addressed and filed in the same manner as the authorization.

An expenditure by an authorized committee on behalf of the candidate who authorized the committee can not qualify as an independent expenditure.

### § 9032.2 Candidate.

“Candidate” means an individual who seeks nomination for election to the office of President of the United States. An individual is considered to seek nomination for election if he or she—

- (1) Takes the action necessary under the law of a State to qualify for a caucus, convention, primary election or run off election;
- (2) Receives contributions or incurs qualified campaign expenses;
- (3) Gives consent to any other person to receive contributions or to incur qualified campaign expenses on his or her behalf; or
- (4) Receives written notification from the Commission that any other person is receiving contributions or making expenditures on the individual’s behalf and fails to disavow that activity by letter to the Commission within 30 days of notification.

### § 9032.3 Commission.

“Commission” means the Federal Election Commission, 1325 “K” Street, Northwest, Washington, D.C. 20463.

### § 9032.4 Contribution.

For purposes of Subchapter C, “contribution” has the same meaning given the term under 2 U.S.C. § 431(e) and 11 C.F.R. § 100.4, except as provided at 11 C.F.R. § 9034.4(e).

### § 9032.5 Matching payment account.

“Matching payment account” means the Presidential Primary Matching Payment Account established by the Secretary of the Treasury under 26 U.S.C. § 9037 (a).

### § 9032.6 Matching payment period.

“Matching payment period” means the period beginning January 1 of the year in which a Presidential general election is held and ending on one of the following dates:

(a) For a candidate seeking the nomination of a party which nominates its Presidential candidate at a national convention, the date on which the party nominates its candidate.

(b) For a candidate seeking the nomination of a party which does not make its nomination at a national convention, the earlier of—

(1) The date the party nominates its Presidential candidate, or

(2) The last day of the last national convention held by a major party in the calendar year.

### § 9032.7 Primary election.

“Primary election” means an election, including a runoff election, or a nominating convention or a caucus held by a political party—

(a) For the selection of delegates to a national nominating convention of a political party;

(b) For the expression of a preference for the nomination of Presidential candidates;

(c) For the purposes stated in both paragraphs (a) and (b); or

(d) To nominate a Presidential candidate.

### § 9032.8 Political committee.

“Political committee” means any committee, club, association, organization or other group of persons (whether or not incorporated) which accepts contributions or incurs qualified campaign expenses for the purposes of influencing, or attempting to influence, the nomination of any individual for election to the office of President of the United States.

### § 9032.9 Qualified campaign expense.

“Qualified campaign expense” means a purchase, payment, distribution, loan, advance, deposit, or gift of money or anything of value—

(1) Incurred by a candidate or his or her authorized committees from the date the individual becomes a candidate through the last day of the candidate’s eligibility as determined under § 9033.4.

(2) made in connection with his or her campaign for nomination; and

(3) Neither the incurrence nor payment of which constitutes a violation of any law of the United States or of any State in which the expense is incurred or paid, except that any State law which has been preempted by the Federal Election Campaign Act of 1971, as amended shall not be considered a State law for purposes of this Subchapter.

(b) An expenditure is made on behalf of a candidate, including a Vice Presidential candidate, if it is made by—

(1) An authorized committee or any other agent of the candidate for purposes of making an expenditure;

(2) Any person authorized or requested by the candidate, an authorized committee of the candidate, or an agent of the candidate to make the expenditure; or

(3) A committee which has been requested by the candidate, by an authorized committee of the candidate, or by an agent of the candidate to make the expenditure, even though such committee is not authorized in writing.

**§ 9032.10 "State" means each State of the United States, Puerto Rico, the Canal Zone, the Virgin Islands, the District of Columbia, and Guam**

**PART 9033. ELIGIBILITY**

9033.1 Candidate agreements

9033.2 Candidate certifications; threshold amounts

9033.3 Matching payment threshold requirements

9033.4 Ineligibility dates defined

9033.5 Determination of Inactive Candidacy

9033.6 Determination of Active Candidacy

9033.7 Reestablishment of Eligibility

9033.8 Suspension of Payments

**§ 9033.1 Candidate agreements.**

(a) A candidate seeking to become eligible to receive Presidential primary matching fund payments shall agree in a letter signed by the candidate to the Commission that the candidate and his or her principal campaign committee will comply with the conditions set forth below.

The candidate has the burden of proving that expenditures by the candidate, the principal campaign committee or any authorized committee are qualified campaign expenses.

The candidate shall agree to obtain and furnish to the Commission at its request any evidence regarding qualified campaign expenses by the candidate, the principal campaign committee and all authorized committees. The candidate must include as part of this evidence the following documentation:

A. For expenditures exceeding \$100 or for expenditures of less than \$100 to a payee who receives expenditures aggregating more than \$100 per year, either:

i. a receipted bill which is from the payee and states the particulars of the expenditure; or

ii. if such a receipted bill is not available, the following documents, which must state the particulars of the expenditure:

a. a cancelled check negotiated by the payee; plus

b. one of the following documents generated by the payee—

a bill, invoice, voucher or contemporaneous memorandum;

c. where the documents specified in Subsection (b) are not

available, a voucher or contemporaneous memorandum from the candidate or the committee; or

iii. if neither a receipted bill nor the documentation specified in

subsection ii is available, a canceled check stating the particulars

of the expenditure.



Where the supporting documentation required above is not available, the candidate or committee may present a canceled check and collateral evidence to document the qualified campaign expense. Such evidence may include but is not limited to: (1) evidence demonstrating that the expenditure is part of an identifiable program or project which is otherwise sufficiently documented, such as where the expenditure is one of a number of documented expenditures relating to a campaign mailing or to the operation of a campaign office; (2) evidence that the expenditure is covered by a preestablished written campaign committee policy, such as a per diem policy; etc.

For purposes of subsection (1), the term "particulars" means the identification of the payee, the date and amount of the expenditure, and a description of the goods or services purchased.

**B. For all other expenditures:**

- i. if from the petty cash fund, a record disclosing the identification of the payee, the amount and the date of the expenditure; or
- ii. a canceled check which has been negotiated by the payee and states the identification of the payee, and the amount and date of the expenditure.

For purposes of subsection (1), "payee" means the person who provides the goods or services to the candidate or committee in return for the expenditure except for an advance of \$500 or less for travel and/or subsistence to an individual who will be the recipient of the goods or services purchased.

(2) Upon the request of the Commission the candidate shall supply an explanation of the connection between the expenditure and the campaign;

(3) The candidate shall keep and furnish to the Commission any books, records, including bank records for all accounts and supporting documentation for matching fund submissions, or other information that the Commission may request, as well as copies of books and records maintained by all authorized committee of the candidate.

(4) For purposes of audit and examination pursuant to Part 9038, and at the Commission's request, the candidate shall gather the books and records specified in subsection 3 in one centralized location

(5) The candidates shall permit an audit and examination pursuant to Part 9038 of all campaign expenditures, including those made by all authorized committees; facilitate such audit by making available office space, records, and such personnel as is necessary to the conduct of the audit and examination; and pay any amounts required to be paid under Part 9038.

(6) The candidate shall submit the name and mailing address of the person who is entitled to receive matching fund payments on behalf of the candidate and the name and address of the national or State bank designated by the candidate as a campaign depository as required at 11 C.F.R. Part 103 of this Chapter and § 9037.3.

(7) The candidate shall prepare matching fund submissions in accordance with Federal Election Commission Guideline for Presentation in Good Order.

(8) The candidate shall comply with applicable requirements of Sections 431-434; 437b Title 2, U.S. Code and Parts 100-108 of these Regulations;

(9) The candidate shall pay any civil penalties including in a conciliation agreement with or imposed under 2 U.S.C. § 437g against the candidate, the principal campaign committee or any authorized committee of the candidate.

(b) The candidate may submit the letter containing the agreements required under section 9033.1 at any time after January 1 of the year immediately preceding the Presidential election year.

(c) Payments may be suspended to a candidate if he or she knowingly, willfully and substantially fails to comply with this disclosure requirements of 2 U.S.C. § 434 and 11 C.F.R. Part 104 as specified in the candidate agreement. Any determination to suspend payments shall be made in accordance with the procedure set forth at § 9033.8.

### **§ 9033.2 Candidate certifications; threshold amount.**

A candidate seeking to become eligible to receive Presidential primary matching fund payments shall make the following certifications to the Commission in a written statement signed by the candidate.

(a) The candidate shall certify that he or she is seeking nomination by a political party to the office of President in more than one State. For purposes of this section in order for a candidate to be deemed to be seeking nomination by a political party to the office of President, the party whose nomination the candidate seeks must have a procedure for holding a primary election, as defined in § 9032.7, for nomination to that office.

For purposes of this section, the term political party means an association, committee or organization which nominates an individual for election to the office of President. The fact that an association, committee or organization qualifies as a political party under this section does not affect the party's status as a national political party for purposes of 2 U.S.C. § 441a(a)(1)(B) and § 441a(a)(2)(B).

(b) The candidate and his or her authorized committee(s) shall certify that they will not incur qualified campaign expenses in excess of the limitations under § 9035.

(c)(1) The candidate and his or her authorized committees shall certify that they have received matchable contributions which, in the aggregate, exceed \$5,000 in contributions from individuals who are residents of each of at least 20 States, and which with respect to any individual do not exceed \$250.

In order to be considered a resident for threshold purposes, the individual need not meet the qualifications of voting residence, but a candidate may not submit contributions from one individual as a resident of more than one State.

(c)(2) For each State in which the candidate certifies he or she has met this requirement, the candidate shall—

(A) Submit an alphabetical list of contributors showing: each contributor's full name and residential address; the date of the deposit into the designated campaign depository; the dollar amount of each contribution submitted for matching purposes; the matchable portion thereof; the total amount of all matchable contributions submitted; an indication of which contributions were received as a result of entertainment activity; and for individuals whose aggregate contributions exceed \$100 per calendar year, the occupation and principal place of business;

(B) Submit a photocopy of each check or other written instrument for each contribution which the candidate submits to establish eligibility for matching funds. The photocopies shall be segregated alphabetically by State, and shall be accompanied by and referenced to copies of the relevant deposit slip.

(c) (3) Contributions which are not submitted in compliance with this subsection shall not count toward the threshold amount.

(d) The Commission may conduct audits of candidate records and make verifications of contributions submitted under this section to determine eligibility and shall notify candidates if it chooses to conduct such audits or verifications. In that case, the Commission may at its own discretion waive the submission requirement under subsection (c) (2).

(e) The candidate may submit the certifications required under § 9033.2 at any time after January 1 of the year immediately preceding the Presidential election year.

(f) Payments may be suspended to a candidate if he or she knowingly and willfully exceeds the expenditure limitations at 2 U.S.C. § 441a(b). Any determination to suspend payments shall be made in accordance with the procedure set forth at § 9033.8.

### **§ 9033.3 Matching payment threshold requirements.**

The Commission shall, as soon as practicable and, during the Presidential election year, generally within 5 working days, examine the submission under §§ 9033.1 and 9033.2 and shall either—

(a) Make a determination that the candidate has satisfied the minimum contribution threshold requirement under § 9033.2(c);  
or

(b) Make an initial determination that the candidate has failed to satisfy the matching payment threshold requirements. The Commission shall notify the candidate of its initial determination, giving the legal and factual reasons for the determination and advising the candidate of the evidence upon which its initial determination is based. The candidate will be given an opportunity to satisfy the threshold requirements or to submit within 30 days of the receipt of the Commission's notice written legal or factual materials to demonstrate that he or she has satisfied those requirements. The Commission will consider any written legal or factual materials submitted by the candidate before making its final determination. Such materials may be submitted by counsel if the candidate so desires. A final determination that the candidate has failed to satisfy threshold requirements shall be accompanied by a written statement of reasons for the Commission's action. This statement shall explain the legal and factual reasons underlying the Commission's determination and shall summarize the results of any investigation upon which the determination is based.

### **§ 9033.4 Ineligibility dates defined.**

The ineligibility date of a candidate is determined by paragraph (a), (b), or (c), whichever occurs first.

(a) The ineligibility date shall be the day on which an individual ceases to be a candidate because he or she is not actively conducting

campaigns in more than one State in connection with seeking the Presidential nomination. This date shall be the earlier of—

(1) The date the candidate publicly announces that he or she will not be actively conducting campaigns in more than one State; or

(2) The date the candidate notifies the Commission by letter that he or she is not actively conducting campaigns in more than one State; or

(3) The date which the Commission determines under 9033.5 to be the date that the candidate is not actively seeking election in more than one State.

(b) The ineligibility date shall be the 30th day following the date of the second consecutive primary election in which such individual receives less than 10 percent of the number of popular votes cast for all candidates of the same party for the same office in that primary election, if the candidate permitted or authorized his or her name to appear on the ballot, unless the candidate certifies to the Commission at least 25 business days prior to the primary that he or she will not be an active candidate in the primary involved.

(1) The Commission may refuse to accept the candidate's certification if it determines under § 9033.6 that the candidate is an active candidate in the primary involved.

(2) For purposes of this paragraph, if the candidate is running in two primary elections in different States on the same date, the highest percentage of votes a candidate receives in any one State will govern. Separate primary elections held in more than one State on the same date are not deemed to be consecutive primaries. If two primary elections are held on the same date in the same State (e.g., a primary to select delegates to a national nominating convention and a primary for the expression of preference for the nomination of candidates for election to the office of President), the highest percentage of votes a candidate receives in either election will govern.

(c) The ineligibility date shall be the last day of the matching payment period for the candidate as specified in § 9032.6.

### **§ 9033.5 Determination of Inactive Candidacy**

(a) The Commission may on the basis of the factors listed in subsection (c) make an initial determination that a candidate is no longer actively seeking nomination for election in more than one State at any time after March 1 but before July 1 of the Presidential election year.

(b) The Commission shall notify the candidate in writing of its initial determination, giving the legal and factual reasons for the determination and advising the candidate of the evidence upon which its initial determination is based and of the date on which active campaigning in more than one State ceased. The candidate will be given an opportunity to submit within 15 business days of receipt of the Commission's notice, written legal or factual materials to demonstrate that he or she is actively campaigning in more than one State.

(c) The Commission will consider any written legal or factual materials submitted by the candidate in making its final determination.

Such materials may be submitted by counsel if the candidate so desires. In addition prior to making a final determination, the Commission will consider the factors listed in subsection (e).

(d) A final determination of inactive candidacy shall be accompanied by a written statement of reasons for the Commission's action. This statement shall explain the reasons underlying the Commission's determination and shall summarize the results of any investigation upon which the determination is based.

(e) Making its final determination, the Commission shall consider, but is not limited to considering, the following factors:

(1) The frequency and type of public appearances, speeches, and advertisements;

(2) Campaign activity with respect to soliciting contributions or making expenditures for campaign purposes;

(3) Continued employment of campaign personnel or the use of volunteers; and

(4) The release of committed delegates.

(f) Upon a final determination by the Commission that the candidate is inactive, that candidate's eligibility for matching payments will terminate.

### **§ 9033.6 Determination of Active Candidacy**

(a) Where a candidate certifies to the Commission under § 9033.4 (b) that he will not be an active candidate in an upcoming primary, the Commission may within 10 business days of receiving such certification notify the candidate in writing that it has made an initial determination that the candidate is an active candidate in the primary involved. This initial determination shall be based on the factors listed in § 9033.5(e).

(b) The Commission's notice shall set forth the legal and factual reasons for the initial determination and advise the candidate of the evidence upon which its initial determination is based. The candidate will be given an opportunity to submit within 10 business days of receipt of the Commission's notice written legal or factual materials to demonstrate that he or she is not an active candidate in the primary involved.

(c) The Commission will consider any written legal or factual materials submitted by the candidate in making its final determination. Such materials may be submitted by counsel if the candidate so desires. In addition, prior to making a final determination, the Commission will consider the factors listed in § 9033.5(e).

(d) A final determination by the Commission under this section shall be accompanied by a written statement of reasons for the Commission's action. This statement shall explain the reasons underlying the Commission's determination and shall summarize the results of any investigation upon which the determination is based.

### **§ 9033.7 Reestablishment of Eligibility**

(a) A candidate who has become ineligible under § 9033.4(a) on the basis that he or she is not actively campaigning in more than one state may reestablish eligibility for matching payments by submitting to the Commission evidence of active campaigning in more than one State. In determining whether the candidate has reestablished eli-

gibility, the Commission will consider, but is not limited to considering, the factors listed in § 9033.5(e). The Commission shall make its determination without requiring the individual to reestablish eligibility under § 9033.1 and 2. The day the Commission determines to be the day the candidate became active again will be the reestablishment of eligibility date.

(b) A candidate determined to be ineligible under § 9033.4(b) by failing to obtain the required percentage of votes in two consecutive primaries may have his or her eligibility reestablished if the candidate receives at least 20 percent of the total number of votes cast for candidates of the same party for the same office in a primary election held subsequent to the date of the election which rendered the candidate ineligible.

### **§ 9033.8 Suspension of Payments**

(a) If the Commission has reason to believe that a candidate has knowingly, willfully and substantially failed to comply with the disclosure requirements of 2 U.S.C. § 434 and 11 C.F.R. Part 104, or that a candidate has knowingly and willfully exceeded the expenditure limitations at 2 U.S.C. § 441a(b), the Commission may make an initial determination to suspend payments to that candidate.

(b) The Commission shall notify the candidate of its initial determination, giving the legal and factual reasons for the determination and advising the candidate of the evidence upon which its initial determination is based. The candidate will be given an opportunity within 20 days of the Commission's notice to comply with the above cited provisions or to submit written legal or factual materials to demonstrate that he or she is not in violation of those provisions.

(c) The Commission will consider any written legal or factual materials submitted by the candidate in making its final determination. Such materials may be submitted by counsel if the candidate so desires.

(d) A final determination to suspend payments by the Commission shall be accompanied by a written statement of reasons for the Commission's action. This statement shall explain the reasons underlying the Commission's determination and shall summarize the result of any investigation upon which the determination is based.

(e) A candidate whose payments have been suspended under this section may become entitled to receive payments if he or she fulfills the following conditions:

(1) For candidates whose suspension was based on failure to comply with reporting requirements, compliance with reporting requirements and payments or agreement to pay any civil or criminal penalties resulting from failure to comply; or

(2) For candidates whose payments were suspended for exceeding expenditure limitations, repayment of an amount equal to the amount by which the candidate exceeded the expenditure limitation and payment of or agreement to pay any civil or criminal penalties resulting from violation of limitation.

## PART 9034. ENTITLEMENTS

9034.1 Candidate entitlements

9034.2 Matchable Campaign Contributions

9034.3 Nonmatchable Campaign Contributions

9034.4 Use of Contributions and matching payments

9034.5 Net outstanding campaign obligations

### § 9034.1 Candidate Entitlements

(a) A candidate who has been notified by the Commission under 9036.1 that he or she has successfully satisfied eligibility and certification requirements is entitled to receive payments in an amount equal to the amount of each matchable campaign contribution received by the candidate, except that a candidate who has become ineligible under § 9033.4 may not receive further matching payments regardless of the date of deposit of the underlying contributions if he or she has no net outstanding campaign obligations as defined in § 9034.5.

(b) If on the date of ineligibility a candidate has net outstanding campaign obligations as defined under § 9034.5, that candidate may continue to receive matching payments for matchable contributions received and deposited before December 31 of the presidential election year only if on the date of submission there are remaining net outstanding campaign obligations. The candidate shall be entitled to payment only if at the time of submission the sum of the contributions received on or after the date of ineligibility plus matching funds received on or after the date of ineligibility (on the basis of post ineligibility contributions) is less than the candidate's net outstanding campaign obligations. This entitlement will be equal to the lesser of:

- (1) the amount of contributions submitted for matching; or
- (2) the remaining net outstanding campaign obligations.

(c) A candidate whose eligibility has been reestablished under § 9033.7 or who after suspension of payments has met the conditions set forth at § 9033.8(e) is entitled to receive payments for matchable contributions for which payments were not received during the ineligibility or suspension period.

(d) The total amount of payments to a candidate under this section shall not exceed 50 percent of the total expenditure limitation applicable under 2 U.S.C. § 441a(b)(1)(A) as adjusted by 2 U.S.C. § 441a(c).

### § 9034.2 Matchable Campaign Contributions

(a) Contributions meeting the following requirements will be considered matchable campaign contributions:

(1) The contribution must be a gift of money made: by an individual; by a written instrument identifying the contributor by full name and mailing address; and for the purpose of influencing the result of a primary election.

(2) The contribution shall be matchable only to the extent of the first \$250 contribution by an individual.

(3) The amount of the contribution which is submitted for matching shall be actually received by the candidate or any of the candidate's authorized committees and deposited in a desig-

nated campaign depository maintained by the principal campaign committee.

(4) The written instrument used in making the contribution shall be dated, physically received and deposited by the candidate or authorized committee on or after January 1 of the year immediately preceding the calendar year of the Presidential election but no later than December 31 following the matching payment period.

(b) For purposes of this section, the term written instrument means a check written on a personal, escrow or trust account; a money order; or any other negotiable instrument.

(c) The written instrument must be: payable on demand; and to the order of, or specifically endorsed without qualification to, the Presidential candidate, his or her principal campaign committee, or his or her authorized committee. The written instrument shall contain: the full name and signature of the contributor, except in the case of contributions from joint accounts or by certain money orders; the amount and date of the contribution; and the mailing address of the contributor.

(1) In cases of a check drawn on a joint checking account the contributor is considered to be the owner whose signature appears on the check. To be attributed equally to other joint tenants of the account, the check or other accompanying written document shall contain the signature(s) of the joint tenant(s).

(2) In cases of money orders which do not contain the signature of the contributor, an accompanying written document shall contain the signature of the contributor.

(3) Checks drawn on escrow or trust accounts can only be a contribution from the person who has beneficial ownership of the account and therefore must be signed by that person with the statement that the giving of the contribution does not violate the conditions of the trust or escrow agreement.

(4) Contributions in the form of checks written on partnership accounts or accounts of unincorporated associations or businesses are matchable contributions, so long as—

(i) The checks are accompanied by documentation which specifies that the contribution is made by a specific individual or individuals;

(ii) Such documentation is signed by the individual or individuals; and

(iii) The aggregate amount of the contributions drawn on a partnership or unincorporated association or business account does not exceed \$1,000 to any one Presidential candidate seeking nomination.

### **§ 9034.3 Nonmatchable Campaign Contributions**

A contribution to a candidate other than one which meets the requirements of § 9034.2 is not matchable. Contributions which are not matchable include—

(a) In-kind contributions of real or personal property;

(b) A subscription, loan, advance, or deposit of money, or anything of value;



(c) A contract, promise, or agreement, whether or not legally enforceable, such as a pledge card or credit card transaction, to make a contribution for any such purposes (but a gift of money by written instrument is not rendered unmatchable solely because the contribution was preceded by a promise or pledge);

(d) Funds from a corporation, labor organization, government contractor, political committee as defined in § 100.14 or any group of persons other than those under § 9034.2(c)(4);

(e) Contributions which are illegally made or accepted, such as contributions in the name of another;

(f) Contributions in the form of a check drawn upon the account of a committee, corporation, union, or government contractor even though the funds represented personal funds earmarked by a contributing individual to a Presidential candidate;

(g) Contributions in the form of the purchase price paid for an item with significant intrinsic and enduring value, such as a watch;

(h) Contributions in the form of the purchase price paid for a chance to participate in a raffle, lottery, or a similar drawing for valuable prizes;

(i) Contributions in the form of the purchase price paid for the admission to any activity that primarily confers private benefits in the form of entertainment to the contributor, such as a concert, motion picture, or theatrical performance, in which case the amount of the matchable contribution shall include only the excess of the amount paid for admission over the fair market value of all the benefits available to the purchaser of the ticket, using a good faith reasonable estimate.

(1) The fair market value and any amount in excess of the fair market value of the benefits conferred shall be clearly and separately indicated on the promotional material and the tickets for the event, and a copy of such material and of a ticket shall accompany the submission of documentation under §§ 9033.2 and 9036.2.

(2) A contribution in the form of the purchase price paid for admission to an activity that is essentially political is fully matchable. An "essentially political" program is one the principal purpose of which is political speech or discussion, such as the traditional political dinner or reception.

(j) Contributions which are made by persons without the necessary donative intent to make a gift or made for any purpose other than to influence the result of a primary election; and

(k) Contributions of currency of the United States or currency of any foreign country.

#### **§ 9034.4 Use of Contributions and Matching Payments**

(a) Except as provided in subsection (e), all contributions received by an individual from the date he or she becomes a candidate and all matching payments received by the candidate shall be used only to defray qualified campaign expenses or to repay loans or otherwise restore funds (other than contributions which were received and expended to defray qualified campaign expenses), which were used to defray qualified campaign expenses.

(b) Any expenses incurred after a candidate reaches the date of ineligibility under § 9033.4 are *not* qualified campaign expenses, except as provided in subsection (c) below

(c) Winding down costs shall be considered a qualified campaign expense if such costs are :

- (1) Incurred before the date of ineligibility ; or
- (2) Associated with the termination of political activity, such as the cost of complying with post election requirements of the Act and other necessary administrative costs, including office space rental, staff salaries, etc.

For purposes of this subsection, winding down costs shall be deemed to have been incurred before the candidate's date of ineligibility of an oral or written arrangement or commitment for the activity was made on or before candidate's date of ineligibility.

(d) An expenditure which is in excess of any of the limitations under 2 U.S.C. § 441a(b) (1) (A) shall not be considered a qualified campaign expense.

(e) Civil or criminal penalties paid pursuant to the Federal Election Campaign Act are not qualified campaign expenses and can not be defrayed from contributions or matching payments. Any amounts received or expended to pay such penalties shall not be considered contributions or expenditures, but such amounts shall be reported in accordance with 11 C.F.R. Part 104.

(f) Even though incurred prior to the date an individual becomes a candidate, payments made for the purpose of determining whether an individual should become a candidate, such as those incurred in conducting a poll, shall be considered qualified campaign expenses if the individual subsequently becomes a candidate.

(g) Where a candidate has received matching funds and is simultaneously seeking nomination or election to another Federal office, any transfer of funds between his or her principal campaign committees or authorized committees must be in accordance with 2 U.S.C. § 441a(a) (5) (C) and 11 C.F.R. § 110.3(a) (1) (v).

(h) A candidate whose eligibility has been reestablished under § 9033.7 or who after suspension of payments has met the conditions set forth at 9033.8(e) is entitled to receive payments for matchable contributions for which payments were not received during the ineligibility or suspension period.

#### **§ 9034.5 Net outstanding campaign obligations**

(a) A candidate's net outstanding campaign obligations equal the difference between (1) and (2) :

- (1) the total of all outstanding obligations for qualified campaign expenses as of the candidate's date of ineligibility under § 9033.4, plus estimated necessary winding down costs as defined under section 9034.4(c) less

the total of :

A. cash on hand as of the close of business on the last day of eligibility (including all contributions received as of that date whether or not submitted for matching) ;

B. the fair market value of capital assets on hand ; and

C. amount owed to the campaign in the form of credits, returns, receivables, or rebates of qualified campaign expenses; or a commercially reasonable amount based on the collectibility of those credits, returns, receivables or rebates.

(b) The candidate shall submit a statement of net outstanding campaign obligations within 15 days of the candidate's date of ineligibility.

(c) For purposes of this section, a capital asset means any property which has remaining useful life exceeding 1 year from the date of the candidate's ineligibility, provided that the fair market value at the date of ineligibility exceeds \$500.

#### PART 9035 EXPENDITURE LIMITATION

9035.1 Qualified Campaign Expense Limitation

9035.2 Limitation on Expenditures From Personal or Family Funds

##### § 9035.1 Qualified Campaign Expense Limitation

No candidate who has accepted matching funds shall knowingly incur qualified campaign expenses in excess of the expenditure limitation applicable under 2 U.S.C. § 441a (b) (1) (A) :

##### § 9035.2 Limitation on Expenditures from Personal or Family Funds

(a) No candidate who has accepted matching funds shall knowingly make expenditures from his or her personal funds, or funds of his or her immediate family, in connection with his or her campaign for nomination for election to the office of President in excess of, in the aggregate \$50,000.

(b) For purposes of this section, the term "immediate family" means a candidate, spouse, and any child, parent, grandparent, brother, half-brother, sister, or half-sister of the candidate and the spouses of such persons.

(c) For purposes of this section, "personal funds" has the same meaning as specified in § 110.10.

#### PART 9036 CERTIFICATION BY THE COMMISSION

9036.1 Initial Certification

9036.2 Additional certification

9036.3 Insufficient documentation

9036.4 Certification review and notice

9036.5 Resubmission and hearing opportunity

9036.6 Continuation of Certification

##### § 9036.1 Initial Certification

(a) After a determination has been made that the candidate has successfully satisfied the eligibility and certification requirements under § 9033.1 and 9033.2 including the threshold requirement, the Commission shall so notify the candidate in writing and shall request the submission in accordance with subsection (b) of this section of all contributions received and deposited by a date specified by the Commission.

(b) Contributions which are submitted for purposes of meeting the threshold requirements must be submitted in accordance with the

## Federal Election Commission Guideline for Presentation in Good Order.

(c) Within 10 calendar days after the Commission has sent notification to the candidate under subsection (a), but not before the beginning of the matching payment period, the Commission shall certify to the Secretary of the Treasury for payment of the amount to which such candidate is entitled.

### § 9036.2 Additional certifications

(a) To obtain subsequent certifications following the initial certification and payment, a candidate shall file all information required for the initial eligibility under Part 9033, except that—

(1) The alphabetical listing of contributors need not be segregated by State;

(2) The candidate need not resubmit the agreement under § 9033.1 and the certifications under § 9033.2; and

(3) The occupation and principal place of business need not be disclosed for individuals whose aggregate contributions exceed \$100 per calendar year, except that such information is subject to recordkeeping and reporting requirements under 2 U.S.C. §§ 432(c)(2), 434(b)(2) and 11 C.F.R. §§ 102.9(a)(2), 104.2(b)(2).

(b) Requests for additional certifications may be submitted on dates to be determined and published by the Commission from time to time.

(c) Except as provided by § 9036.4, requests for additional certification shall cover a period beginning the day following the close of the period for the previous submission.

(d) All submissions for matching payments must be in accordance with the Federal Election Commission Guideline for Presentation in Good Order.

(e) The Commission shall certify to the Secretary of the Treasury any additional amount to which a candidate is entitled within 15 calendar days of receipt of information submitted under paragraph (a), but not before the beginning of the matching payment period.

### § 9036.3 Insufficient documentation.

Contributions which are otherwise matchable may be rejected for matching purposes because of insufficient supporting documentation. These contributions may become matchable if there is a proper resubmission in accordance with §§ 9036.5 and 9036.6. Insufficient documentation includes—

(a) Discrepancies in the written instruments, such as—

(1) Instruments drawn on other than personal accounts of contributors and not signed by the contributing individual;

(2) Signature discrepancies; and

(3) Lack of the contributor's signature, the amount of the contribution, or the listing of the committee or candidate as payee;

(b) Discrepancies between listed contributions and supporting documentation, such as—

(1) The contributor's name is misspelled;

(2) The listed amount requested for matching exceeds the amount contained on the written instrument; and

(3) A written instrument has not been submitted to support a listed contribution;

(c) Discrepancies within or between contribution lists submitted, such as—

(1) The address of the contributor is missing or incomplete or the contributor's name is alphabetized incorrectly, or more than one contributor is listed per item; and

(2) A discrepancy in aggregation within or between submissions, or a listing of a contributor more than once within the same submission.

#### **§ 9036.4 Certification review and notice**

(a) The Commission will review the submission to determine if the submission meets acceptable standards of good order under §§ 9036.6 and 9036.3. Those submissions not meeting the standards will not be certified, and the candidate will be requested to resubmit the documentation. Submissions of a sufficient size will be reviewed using statistical sampling, and the candidate will be given a reduced amount based on the results of the sample. (Note that under § 9036.5 contributions which are submitted and rejected may be resubmitted for matching.) If the Commission certifies to the Treasury for payment an amount which is less than the amount requested by the candidate, the Commission shall notify the candidate in writing which notice or notices shall include—

(1) The amount less than the full amount requested for certification;

(2) The amount of the contribution and the name of the contributor which the Commission considers not matchable and the reasons therefore, or, if statistical sampling is used, the estimated amount of contributions by type and the reason for rejection;

(3) The amount of contributions which are not in dispute and which the Commission will certify to the Treasury for payment; and

(4) A statement that the candidate has the opportunity to supply the Commission with additional documentation or other explanation in the form of a resubmission under § 9036.5 in order as to make the disputed contributions matchable.

(b) In any case where the candidate or his or her committee has knowledge that a contribution which has been submitted for matching purposes does not so qualify, such as a check returned to the committee for insufficient funds, the Commission shall be notified as soon as possible so that a proper adjustment may be made in the amount to be certified.

#### **§ 9036.5 Resubmissions and hearing opportunity**

(a) Contributions which were submitted and rejected under § 9036.4 may be resubmitted with the necessary information.

(b) In order to be reviewed, the resubmission of disputed contributions shall be made on a separate list identifying the submission in which the contributions were originally submitted.

(c) Resubmissions must be presented to the Commission at a time specified and, to the extent approved, will be certified to the Secretary of the Treasury within 15 calendar days.

(d) If the candidate chooses to make a resubmission and the Commission determines that the disputed contribution is still unmatchable, the Commission will notify the candidate in writing of its determination. The Commission will advise the candidate of the legal and factual reasons for its determination and of the evidence on which that determination is based. The candidate will be given an opportunity to submit within 30 days of the Commission's notice written legal or factual materials to demonstrate that the contribution is matchable.

(e) The Commission will consider any written legal or factual materials submitted by the candidate in making its final determination. Such materials may be submitted by counsel if the candidate so desires.

(f) A final determination by the Commission that a contribution is not matchable shall be accompanied by a written statement of reasons for the Commission's action. This statement shall explain the reasons underlying the Commission's determination and shall summarize the results of any investigation upon which the determination is based.

### **§ 9036.6 Continuation of Certification**

(a) Candidates who have received matching funds and who are eligible to continue to receive such funds may continue to submit contributions to the Commission to be certified for matching through January 21 of the year following the election.

(b) No contribution will be matched if it is submitted after this period, regardless of the date the contributions were deposited.

## **PART 9037. PAYMENTS**

9037.1 Payments of Presidential Primary Matching Funds

9037.2 Equitable Distribution of Funds

9037.3 Deposits of Presidential Primary Matching Funds

### **§ 9037.1 Payments of Presidential Primary Matching Funds**

Upon receipt of a written certification from the Commission, but not before the beginning of the matching payment period, the Secretary of the Treasury or his or her delegate will promptly transfer the amount certified from the matching payment account to the candidate.

### **§ 9037.2 Equitable Distribution of Funds**

In making such transfers to candidates of the same political party, the Secretary or his or her delegate will seek to achieve an equitable distribution of funds available in the matching payment account, and the Secretary or his or her delegate will take into account, in seeking to achieve an equitable distribution of funds available in the matching payment account, the sequence in which such certifications are received.

### **§ 9037.3 Deposits of Presidential Primary Matching Funds**

Upon receipt of any matching funds, the candidate shall deposit the full amount received into a checking account maintained by the candidate's principal campaign committee in the depository designated by the candidate.

## **PART 9038 EXAMINATIONS AND AUDITS**

9038.1 Audit

9038.2 Repayments

9038.3 Liquidation of Obligations; Repayment

### § 9038.1 Audit

(a) After the close of a matching payment period, the Commission shall conduct an audit of the qualified campaign expenses of every candidate and his or her authorized committees who received Presidential primary matching funds. For candidates whose date of ineligibility occurs before the end of the matching payment period, the audit may be conducted at anytime after the date of ineligibility.

(b) In addition, the Commission may conduct other examinations and audits from time to time as it deems necessary to carry out the provisions of this subchapter.

### § 9038.2 Repayments

(a) If the Commission determines that—

(1) Any portion of the payments made to a candidate from the matching payment account was in excess of the aggregate amount to which such candidate was entitled; or

(2) Any amount of any payment made to a candidate from the matching payment account or any contributions received by the candidate were used for any purposes other than—

(i) To defray qualified campaign expenses; or

(ii) To repay loans which were used to defray qualified campaign expenses; or

(iii) To restore funds (other than contributions which were received and expended to defray qualified campaign expenses) which were used to defray qualified campaign expenses; or

(3) Any amounts spent by the candidate from matching funds or from private contributions were not documented in accordance with § 9038.1(a)(1); the Commission shall notify the candidate as soon as possible, but no later than 3 years after the end of such matching payment period. The candidate shall repay to the Secretary of the Treasury, within 90 days of the notice, an amount equal to the amount improperly paid under § 9038.2(a)(1), an amount equal to the amount improperly expended under § 9038.2(a)(2), or an amount equal to the amount of any expenditure which is improperly documented under § 9038.2(a)(3). The Commission's notice shall set forth the legal and factual reasons for the determination that a repayment is required and shall also advise the candidate of the evidence upon which that determination is based. Upon application by the candidate, the Commission may grant a 90 day extension of the repayment period.

(b) If the candidate disputes the Commission's determination that a repayment is required, he or she shall be given an opportunity to submit in writing, within 30 days of receipt of the Commission's notice, legal or factual materials to demonstrate that a repayment is not required.

(c) The Commission will consider any written legal or factual materials submitted by the candidate in making its final determination. Such materials may be submitted by counsel if the candidate so desires.

(d) A final determination by the Commission that a candidate must repay a certain amount shall be accompanied by a written statement of reasons for the Commission's action. This statement shall explain the reasons underlying the Commission's determination and shall sum-

marize the results of any investigation upon which the determination is based.

(e) The candidate shall repay to the Secretary of the Treasury the amount specified by the Commission in its notice of final determination within 20 days from the date the notice is received by the candidate. Upon application by the candidate, the Commission may grant a 90 day extension of this period.

### **§ 9038.3 Liquidation of obligations; repayment**

(a) Amounts received by the candidate from the matching payment account may be retained for 6 months after the end of the matching payment period and may be used to pay qualified campaign expenses incurred by the candidate.

(b) After all obligations have been liquidated, the candidate shall so inform the Commission in writing.

(c) (1) If on the last day of candidate eligibility the candidate's net outstanding campaign obligations, as defined in § 9034.5, reflect a surplus, the candidate shall within 30 days of the ineligibility date repay to the Secretary of the Treasury an amount which represents the amount of matching funds contained in the candidate's surplus. The amount shall be an amount equal to that portion of the surplus which bears the same ratio to the total surplus that the total amount received by the candidate from the matching payment account bears to the total deposits made to the candidate's accounts.

(2) For purposes of this subsection, total deposits shall be considered all deposits to all candidate accounts minus transfers between accounts, refunds, rebates, reimbursements, checks returned for insufficient funds, proceeds of loans and other similar amounts.

#### EXPLANATION AND JUSTIFICATION OF THE PRESIDENTIAL PRIMARY MATCHING FUND REGULATIONS, PARTS 9031 THROUGH 9038

### **§ 9032.1 Authorized Committee**

Except for the language concerning independent expenditures, this definition generally follows 26 U.S.C. § 9032(1). The language regarding independent expenditures provides that an expenditure by an authorized committee on behalf of the candidate who authorized that committee can not qualify as an independent expenditure. With the addition of this language, the definition of authorized committee for Title 26 purposes is the same as the definition of that term for Title 2 purposes (11 C.F.R. § 109.1(e)).

### **§ 9032.2 Candidate**

This definition generally follows 26 U.S.C. § 9032(2), except that the language concerning an individual who is not actively conducting campaigns in more than one State has been transferred to the sections dealing with termination of payments to inactive candidates. (§§ 9033.4(a), 9033.5). In addition, this definition also adds the disavowal language appearing at 11 C.F.R. § 100.2(c).

### **§ 9032.3 Commission**

This definition follows 26 U.S.C. Section 9032(3).



### § 9032.4 Contribution

The statute contains a definition of the term contribution two provisions—26 U.S.C. §§ 9032(4) and 9034(a). However, these statutory definitions only set forth the criteria for matchable and nonmatchable contributions. The criteria for matchable and nonmatchable contributions will appear at Part 9034 of these regulations.

Because the definition of contribution in Title 2 is applicable to Title 26, this section incorporates the definition of the term “contribution” as it now appears in Title 2 provisions and regulations thereunder.

### § 9032.5 Matching Payment Account

This definition follows 26 U.S.C. § 9032(5).

### § 9032.6 Matching Payment Period

This definition follows 26 U.S.C. Section 9032(6).

### § 9032.7 Primary Election

This definition generally follows 26 U.S.C. Section § 9032.7.

### § 9032.8 Political Committee

This definition generally follows 26 U.S.C. § 9032(8), except that the word individual is eliminated. With this deletion, the definition of the term “political committee” is the same for Title 26 purposes as it is for Title 2 purposes. (See U.S.C. Section 431(d).)

### § 9032.9 Qualified Campaign Expense

This section adds to the statutory definition of the term qualified campaign expense (26 U.S.C. § 9032(9)) by establishing a time frame for making qualified campaign expenses. This time frame begins on the date an individual becomes a candidate. Thus, this section in conjunction with § 9034.4, requires the candidate from the date he or she becomes a candidate to make expenditures only for the purpose of defraying qualified campaign expenses. This requirement in effect prohibits a candidate who accepts public funding from using private contributions received after becoming a candidate, including those received prior to establishing eligibility, for expenses which are not qualified campaign expenses. Where a candidate uses such contributions for nonqualified campaign expenses, repayment is required under § 9038.

If a candidate spends private campaign contributions received prior to establishing eligibility for public funding on nonqualified campaign expenses, those private funds would obviously not be available to defray the candidate’s qualified campaign expenses. The net result would be that the candidate would subsequently require more public funding to meet his or her qualified campaign expenses. In essence, this additional public funding would restore private campaign funds diverted by the candidate to nonqualified campaign purposes. Such an outcome would be equivalent to permitting a candidate to use matching funds to defray nonqualified campaign expenses.

In this regard, statutory provisions require candidates to repay matching funds used to restore amounts spent on nonqualified campaign expenses. 26 U.S.C. Section 9038(b)(2)(B) states in part as follows: “If the Commission determines that any amount of any pay-

ment made to a candidate from the matching payment account was used for any purpose other than . . . (B) . . . to restore funds . . . which were used to defray qualified campaign expenses . . . the candidate shall pay to the Treasury an amount equal to such amount.”

This section also establishes the close of the time frame for making qualified campaign expenses as the last day of the candidate’s eligibility. Since an individual’s candidacy for presidential nomination in essence ends on the date of ineligibility, any expenditures made after that date, except for winding down costs under § 9034.4(c), cannot be considered to be incurred by the candidate “in connection with” his or her campaign for nomination.

Subsection (b) incorporates language from 2 U.S.C. § 441a(b) (2) and 11 C.F.R. § 110.8(g).

### § 9032.10 State

This definition adds Puerto Rico, Guam, the Virgin Islands, and the Canal Zone to the language of 26 U.S.C. § 9032(10). Because primary elections are held in these areas, they should be included in the definition of State.

## PART 9033 ELIGIBILITY FOR PAYMENTS

The statute delineates three provisions which must be included in the agreement between the Commission and an eligible candidate. The candidate must agree: to furnish any evidence the Commission requests concerning qualified campaign expenses; to furnish any records, books or other information the Commission requests; and to submit to a Commission audit under 26 U.S.C. § 9038, as well as pay any amounts required to be paid under that provision.

With regard to the candidate agreement concerning evidence of qualified campaign expenses, subsection (a) (1) provides that the candidate has the burden of proving that his or her expenditures are qualified campaign expenses. While the statute does not explicitly state that this burden of proof rests with the candidate, the statutory requirement that the candidate “agree to obtain and furnish to the Commission any evidence it may request of qualified campaign expenses” clearly indicates that the candidate who accepts public funding has the burden of proving that his or her expenditures were made to defray qualified campaign expenses.

The candidate’s burden of proof with regard to qualified campaign expenses consists of two elements—the candidate must show 1) that the expenditure was made, and 2) that the goods or services purchased were in connection with the campaign. These two elements are derived from the statutory definition of the term qualified campaign expense. Section 9032(9) (A) of Title 26 states in part that a qualified campaign expense is one which is incurred by a candidate, or his authorized committee, in connection with his campaign for nomination for election.

Thus, the first element of the candidate’s burden of proof—showing that the expenditure was made—is directed at proving that the expenditure was actually incurred; while the second element—that the goods or services purchased were in connection with the campaign—is di-

ected at showing that the expenditure was in connection with the candidate's campaign.

Subsections (a) (1) and (2) set forth the minimum documentation necessary for a candidate to discharge his or her burden of proof concerning qualified campaign expenses. With regard to showing that the expenditure was incurred, all expenditures, except for petty cash fund expenditures, must be documented by a cancelled check to the payee who provides the goods or services to the campaign. Except in the case of certain travel advances, an expenditure may not be documented by a canceled check to a campaign staffer who in turn pays for goods or services used by the campaign. A cancelled check to a campaign staffer would not suffice to meet the candidate's burden of proof because at the time an advance is made to a staffer, the expenditure is not yet incurred for a campaign purpose.

With regard to showing that an expenditure was made in connection with the candidate's campaign, the purpose of the expenditure must be documented. For expenditures exceeding \$100, or to a payee who receives more than \$100 per year, the candidate must present written documentation disclosing a description of the goods or services purchased. If this written documentation is not available, in certain collateral evidence may be used to show the purpose of the expenditure. Finally, if a description of the goods or services does not suffice to show that the expenditure is campaign related, the Commission may request the candidate to state the connection between the expenditure and the campaign.

Subsections (a) (3) and (4) deal with the statutorily prescribed area of the candidate agreement concerning books and records. The candidate is required to furnish to the Commission bank records for all accounts as well as supporting documentation for contributions submitted for matching. These records relate to the basic issues of whether candidate expenditures are qualified and off the matchability of contribution.

Subsection (a) (5) deals with the candidate agreement concerning audit and examination. This subsection is intended to enable the Commission to conduct its audit and examination expeditiously.

In addition to the specific areas of candidate agreement mentioned in the statute, this section sets forth additional requirements.

Subsections (a) (6) and (7) relate to matching fund submissions and payments. These requirements will insure a standard format for making payments and determining matchability of contributions. This standard format will enable the Commission to provide funds to candidates on a prompt basis.

Under subsection (a) (8), candidates must agree to comply with the Title 2 Recordkeeping and Disclosure Requirements. Such a condition is desirable in order to encourage prompt disclosure as well as adequate recordkeeping.

Finally, subsection (a) (9) requires the candidate and principal campaign committee to agree to pay any civil penalties included in a conciliation agreement with or imposed by a court against the candidate, the principal campaign committee or any authorized committee. This agreement is designed to deal with a situation in which such a penalty

is imposed against an authorized committee after it has transferred all of its campaign funds to the principal campaign committee. Thus, the principal campaign committee would be liable for those penalties.

Subsection (c) provides that the Commission may suspend payments to a candidate if he or she knowingly, willfully, and substantially fails to comply with Title 2 disclosure requirements. While the statute does not specifically authorize such a suspension, the Commission's power to suspend is implied from its express authority to initially determine candidate eligibility. It is clear that the statute empowers the Commission to determine whether a candidate has established eligibility by meeting the conditions set forth at 26 U.S.C. Section 9033 and regulations prescribed thereunder. Since eligibility is a continuing requirement, the power to initially determine whether eligibility has been established necessarily implies the authority to monitor and, where the candidate is no longer fulfilling the conditions of eligibility, revoke eligibility.

### **§ 9033.2 Candidate certifications; threshold amount**

Subsection (a) concerns the statutory provision at 26 U.S.C. § 9033 (b) (2), which requires the candidate to certify that he is seeking nomination by a political party for election to the office of President. Subsection (a) provides that in order to meet this certification requirement, the party whose nomination the candidate seeks must have a procedure for holding a primary election for nomination to the office of President. Because Chapter 96 of Title 26 provides public funding for presidential primary candidates, it is obvious that the party whose nomination the candidate seeks must hold a primary election as defined at section 9032.7.

Subsection (a) also defines the term political party to mean an association, committee or organization which nominates an individual for election to the office of President. This definition is derived from 2 U.S.C. Section 431(m).

Subsections (b) and (c) basically follow 26 U.S.C. § 9033(b) (1), (2) and (3). Subsection (c) establishes an orderly procedure for submitting information and documentation concerning threshold contributions. This information and documentation is necessary for the Commission to determine whether the candidate has in fact established eligibility. The verification process under this section may consist of such activity as contacting contributors to verify residential addresses stated by the candidate under § 9033.2(c) (2) (A) or contacting contributors to determine if a contribution was in fact made, etc. Such verifications and audits are directed at determining whether the conditions of eligibility have in fact been met by a candidate.

Subsection (f) provides that the Commission may suspend payments to a candidate who knowingly and willfully exceeds the expenditure limitations set forth in 2 U.S.C. Section 441a(b). As with suspension for failure to comply with reporting requirements, suspension for expenditures is within the implied authority of the Commission to determine, monitor and revoke eligibility.

### **§ 9033.3 Matching payment threshold requirements**

This section deals with a Commission determination that a candidate has failed to meet the minimum contribution requirement. Where

the Commission makes such a determination, the candidate is afforded an opportunity to either satisfy the threshold requirement or to demonstrate that he has satisfied that requirement. This opportunity to demonstrate that the Commission's determination is in error takes the form of submitting written materials to the Commission. (See Explanation and Justification of § 9033.8.)

#### **§ 9033.4 Ineligibility dates defined**

This section sets forth the several possible dates on which a candidate may become ineligible for matching funds.

Subsection (a) basically follows the language of 26 U.S.C. § 9032(2), which states that the term candidate shall not include an individual who is not actively conducting campaigns in more than one State.

Subsection (b) follows the language of 26 U.S.C. § 9033(c)(1)(B), which provides for the termination of payments to a candidate who fails to receive a requisite percentage of votes in two consecutive primaries.

Subsection (c) establishes the last day of the matching payment period as one of the possible dates of ineligibility for candidates. Since the last day of the matching payment period will be the ineligibility date for candidates who remain active until their party chooses a nominee, the date of ineligibility for all candidates is covered under this section.

#### **§ 9033.5 Determination of Inactive Candidacy**

This section sets forth a procedure for determining payments to a candidate who is no longer actively seeking nomination for election in more than one State. Prior to termination, the candidate is given an opportunity to present written material to demonstrate that he or she is an active candidate in more than one State. (See Explanation and Justification of § 9033.8)

This section also provides that the Commission will not make a determination of inactive candidacy at any time before March 1 or after July 1 of the presidential election year. Because most States hold their presidential preference primaries or caucuses during the period from March 1 through July 1, it would be unreasonable to require the candidate to remain active in more than one State either before or after that period.

Subsection (c) sets forth the factors which the Commission will consider in determining whether a candidate is inactive. These factors are designed to indicate minimal campaign activity in at least two States.

#### **§ 9033.6 Determination of Active Candidacy**

Statutory provisions require that payments terminate to a candidate who fails to receive at least 10% of the votes cast for all candidates of his or her party in two consecutive primaries unless the candidate certifies to the Commission that he or she will not be an active candidate in the primary involved (26 U.S.C. § 9033(c)(1)(B)). This section sets forth a procedure through which the Commission may refuse to accept the candidate's certification by determining that he or she is an active candidate in the primary involved. This procedure is intended to deal with a situation where a candidate who is active in a

particular State primary nevertheless certifies to the Commission that he or she is not active in that primary in order to escape the operation of 26 U.S.C. § 9033(c) (1) (B).

### § 9033.7 Reestablishment of Eligibility

This section establishes a procedure for a candidate whose eligibility has terminated through inactivity to reestablish eligibility for matching payments upon becoming an active candidate again.

### § 9033.8 Suspension of Payments

This section sets forth the procedure for suspending payments under § 9033.1(c) and § 9033.2(f). The Federal Election Campaign Act does not provide that Administrative procedure Act (APA) requirements for adjudicative hearings (5 U.S.C. §§ 554-557) apply to determinations by the Commission. While APA requirements for a full trial type hearing may not be applicable, procedural due process requirements mandate that prior to suspension the candidate be afforded some type of opportunity to demonstrate to the Commission that suspension is not warranted. (See K. Davis, *Administrative Law of the Seventies*, § 7.00-1-3 (Supp. 1977); *Mathews v. Eldridge*, 424 U.S. 319 (1976).)

The procedure set forth in this section fulfills due process requirements. It includes the following elements: Notice of the legal and factual matters upon which the Commission is relying; an opportunity to present in writing evidence and reasons why suspension should not occur; a final determination by the Commission on the basis of all evidence presented; and a statement of reasons underlying the Commission's determination. (It should be noted that even if the APA requirements were applicable to determinations by the Commission, the APA itself contains a significant exception to the requirement for a full trial type hearing by providing for the submission of evidence in written form under 5 U.S.C. § 556(d).

## PART 9034 ENTITLEMENTS

### § 9034.1 Candidate Entitlements

Subsection (a) deals with entitlement to matching fund payments prior to the date of ineligibility. It provides that a candidate is entitled to receive payments in an amount equal to each matchable campaign contribution received by the candidate. However, once a candidate reaches the date of ineligibility under Section 9033.4, that candidate receives no further matching payments unless he or she has net outstanding campaign obligations.

For example, assume that candidate X is in the following financial status on the date of ineligibility:

Obligations for qualified campaign expenses.....	\$120,000
Cash on hand.....	20,000
Candidate's X net outstanding campaign obligation.....	100,000
Matchable contributions not submitted for matching.....	15,000

Since candidate X has net outstanding campaign obligations of \$100,000, he is entitled to \$15,000 in matching funds on the basis of matchable contributions that had not been submitted for matching

prior to the date of ineligibility. On the other hand, assume candidate Y in the following financial status on the date of ineligibility.

Obligations for qualified campaign expenses.....	\$10,000
Cash on hand.....	20,000
Net outstanding campaign obligations.....	0
Matchable contributions not submitted for matching.....	15,000

Because candidate Y has no net outstanding campaign obligations on the date of ineligibility, he is entitled to no matching funds.

Subsection (a) thus bases entitlement to matching fund payments on or after the date of ineligibility on the existence of net outstanding campaign obligations on that date. In essence this approach requires the candidate to apply private funds whenever possible to discharge obligations for qualified campaign expenses.

Subsection (a) follows the legislative intent of 26 U.S.C. § 9033 (c) (1) which provides that payments are cut off to a candidate who become inactive, except where those payments are used to defray expenses incurred before the date of ineligibility. Therefore, if a campaign has no debts for qualified campaign expenses on the date of ineligibility, no further matching funds are forthcoming. While 26 U.S.C. § 9033(c) (1) specifically applies only to an individual whose candidacy terminates through inactivity, the same legislative intent would be appropriate for application to a candidate whose date of ineligibility occurs at the end of the matching payment period. Finally, inasmuch as the statutory language of 26 U.S.C. § 9034 entitles a candidate to matching funds for contributions received after a certain date without any specific mention of a final date for matching contributions, subsection (a) accords with statutory requirements.

Subsection (b) sets forth the entitlement formula for candidates who have net outstanding campaign obligations on the date of ineligibility. Basically, these candidates are entitled to payments only if the private contributions received between the date of ineligibility and the date of submission are not sufficient to discharge the net debt.

For example, assume that candidate A is in the following financial status on the date of ineligibility:

Net debt at date of ineligibility.....	\$100,000
Matchable contributions received after the date of ineligibility but before the date of submission <sup>1</sup> .....	30,000

<sup>1</sup> Example assumes all contributions are 100% matchable.

Because on the date of submission, the difference between: (1) the amount of private contributions received by candidate A after the date of ineligibility; and (2) candidate A's remaining net debt is \$70,000, he is entitled to receive \$30,000—an amount equal to the amount of matchable contributions received after the date of ineligibility.

As with subsection (a), subsection (b) accords with statutory requirements. In addition, subsection (b) also furthers the policy that the candidate should use private contributions to discharge campaign obligations wherever possible.

Subsection (c) deals with candidates whose eligibility has been re-established after having fallen into inactive status.

Subsection (d) follows the language of 26 U.S.C., § 9034(b).

### § 9034.2 Matchable Campaign Contributions

This section sets forth the rules for determining which contributions are matchable. The language of 26 U.S.C. § 9034 makes it clear that not all contributions are matchable. The major statutory restrictions reflected in this section are that contributions must be a gift of money made by written instrument and that only \$250 from each individual contributor is considered matchable.

Statutory restrictions also require that the contribution be "received" by the candidate on or after January 1 of the calendar year immediately preceding the presidential election year (26 U.S.C. § 9034). This section specifies that the candidate must physically receive the contribution after the January 1 date. This requirement specifically precludes a candidate from collecting post-dated checks before January 1 of the year preceding the presidential general election year and then submitting those checks for matching on the basis that they weren't received until the date written on the check. The legislative history of the public financing provisions clearly indicates congressional intent to bar candidates from receiving matching funds for contributions solicited and received prior to the year preceding the presidential general election year. (See 120 Cong. Rec. 54438, daily ed., March 26, 1974).

This section defines a written instrument to mean a check, money order, or any other negotiable instrument payable on demand to the candidate or his or her committee. The contributor's full name, signature, and mailing address, as well as the amount and date of the gift, must appear on the instrument or in an accompanying written document.

### § 9034.3 Nonmatchable contributions.

This section reflects statutory restrictions found in 26 U.S.C. § 9034(a), which excludes certain categories of contributions from being matched.

Subsections (g) through (i) reflect the Commission's view that amounts paid in the form of a purchase price for certain items or tickets are not matchable since the intent necessary to make a gift is lacking on the part of the purchaser. Particularly, subsections (h) through (i) follow Internal Revenue Service rulings 72-411 and 72-412 which exclude certain contributions from the category of political contributions that are deductible for income tax purposes.

### § 9034.4 Use of Contributions and Matching Payments

Subsection (a) specifies that the candidate must spend both private contributions and matching fund payments only on expenditures which are qualified campaign expenses. As was stated earlier, if a candidate were permitted to spend private campaign funds on campaign expenses which were not qualified, those private funds would not be available to defray the candidate's qualified campaign expenses. The candidate would then require more public funding to defray qualified campaign expenses. This additional public funding would in essence restore private campaign funds spent on nonqualified campaign expenses. Such a restoration of funds would violate 26 U.S.C. § 9038(b) (2) (B). (See Explanation and Justification of § 9032.9.)



Subsection (b) establishes the candidate's date of ineligibility as the cut off date for making qualified campaign expenses. Since a candidate's campaign for nomination essentially terminates on the date of ineligibility, any expenditures made after that date, except for winding down costs, can not possibly be made in connection with the candidate's campaign for nomination. The statutory definition of the term qualified campaign expense provides that such an expense is one which is "in connection with" a candidate's campaign for nomination. Expenditures made after the termination of that campaign can not meet such a requirement.

Subsection (c) deals with winding down costs. Such costs, although perhaps incurred after a candidate's date of ineligibility may nevertheless be considered qualified campaign expenses if they are associated with the termination of the candidate's campaign (Re: A.O.R. 1976-54). Examples of such costs include expenses incurred for transportation by campaign staff to return from National nominating convention, for employment of personnel necessary for Commission audit pursuant to PART 9038, etc.

Under subsection (d), an expenditure which is in excess of expenditure limitations is not considered a qualified campaign expense. The statutory definition of the term qualified campaign expense specifically excludes any expenditure which constitutes a violation of any Federal law. Since both 2 U.S.C. § 441(a)(b) and 26 U.S.C. § 9035(a) prohibit an eligible candidate from making expenditures in excess of certain limitations, any expenditure which exceeds those limitations is by definition not a qualified campaign expense.

Subsection (e) provides that civil or criminal penalties which must be paid pursuant to the Act are not considered qualified campaign expenses. If such amounts were considered qualified campaign expenses, a portion of the money used to pay those penalties would consist of Federal funds. In order to permit candidates to pay such penalties, subsection (e) provides that amounts received or expended to defray those penalties will not be considered contributions or expenditures. Such amounts will thus not be subject to contribution and expenditure limitations, but such amounts are subject to disclosure requirements.

Subsection (f) relates to payments for the purpose of determining whether an individual should become a candidate. These expenditures for "testing the waters" will be considered qualified campaign expenses despite the fact that they are usually made prior to the date an individual becomes a candidate. (See also 11 C.F.R. §§ 100.4(b)(1), 100.7(b)(1).)

Subsection (g) deals with statutory provisions at 2 U.S.C. § 441a(a)(5)(c)(iii).

Subsection (h) deals with a candidate who has reestablished eligibility after falling into inactive status. Expenditures made by such candidates while in inactive status are considered qualified campaign expenses as are those made after eligibility is reestablished.

### § 9034.5 Net outstanding campaign obligations

This section sets forth a formula for computing a candidate's financial status at the date of ineligibility. Under this formula, the campaign's obligations for qualified campaign expenses including winding

down costs are balanced against total of the campaign's cash on hand, the value of capital assets, and amounts owed to the campaign.

## PART 9035

This part follows the statutory language at 26 U.S.C. § 9035.

### PART 9036—CERTIFICATION BY THE COMMISSION

#### § 9036.1 Initial certification

This section sets out a procedure for the first certification of contributions to a candidate who has satisfied eligibility requirements. As is required by 26 U.S.C. § 9036(a), the Commission shall certify for payment amounts to which the candidate is entitled within ten days after the Commission notification to the candidate that he or she has established eligibility.

#### § 9036.2 Additional certifications

This section sets forth the format in which contributions submitted for matching must be presented to the Commission after the initial certification. These contributions must be presented in the same way except that contributions need not be segregated by State and the occupation and principal place of business of contributors whose aggregate contributions exceed \$100 during a calendar year need not be included. Since this information is important only for determining eligibility, it need not be included in subsequent certifications.

#### § 9036.3 Insufficient Documentation

This section sets forth the rules under which a contribution will be rejected for matching purposes because sufficient documentation is lacking to insure that it meets the criteria for a matchable contribution.

#### §9036.4 Certification Review and Notice

This section establishes a procedure for determining whether a candidate's submission meets acceptable standards of good order as prescribed at sections 9036.2 and 9036.3.

#### § 9036.5 Resubmissions and hearing opportunity

This section sets forth a mechanism for the settlement of disagreements over which contributions are matchable and which are not matchable. The candidate who disputes a Commission conclusion that a contribution is not matchable will be given an opportunity to present written materials to demonstrate that the contribution is matchable. After consideration of materials submitted by the candidate, the Commission will render a final determination on the issue. This procedure meets due process requirements. (See Explanation and Justification of § 9033.8)

#### § 9036.6 Continuation of certification

This section permits a candidate to submit contributions for matching until January 21 of the year following the presidential election year. In essence, this means that the candidate will have 21 days after the December 21 deposit date to submit those contributions to the Commission for matching. Thus, January 21 is the last day on which con-

tributions may be submitted to the Commission for matching. This deadline allows the candidate sufficient time to submit contributions for matching, while avoiding unnecessarily delayed submissions which would burden the Commission in the efficient performance of its certification duties.

#### PART 9037 PAYMENTS

This part follows the statutory language of 26 U.S.C. § 9037.

#### PART 9038 EXAMINATION AND AUDITS

##### § 9038.1 Audit

This section basically follows the statutory language at 26 U.S.C. § 9038(a), the Commission is authorized to conduct its audit before the close of the matching payment period for candidates who become inactive prior to that date. Since these candidates have terminated campaign activity, no purpose is served by waiting until the end of the matching payment period to conduct an audit.

##### § 9038.2 Repayments

This section is based on statutory provisions at 26 U.S.C. § 9038(b). It requires a candidate to repay any amounts spent from private contributions of matching funds if the expenditures were not documented in accordance with Section 9033.1(a)(1). The candidate has the burden of proving that expenditures are qualified campaign expenses. Where required documentation is lacking, the candidate has not met that burden of proof. Therefore, the Commission has the authority to require repayment.

This section also requires repayment where the candidate spends private contributions as well as public funds on expenditures on which are not qualified campaign expenses. For an explanation of this approach, see the Explanation and Justification of § 9032(9).

This section also sets forth a procedure for determining disputes concerning the amount of a repayment. This procedure meets due process requirements. (See Explanation and Justification of § 9033.8).

##### § 9038.3 Liquidation of Obligations; Repayment

This section generally follows the statutory provisions at 26 U.S.C. § 9038. It sets forth a formula for recapturing from the candidate's accounts that portion of the account which represents Federal funds.







SUPPLEMENTAL APPROPRIATIONS AND  
BUDGET AMENDMENTS

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COMMUNICATION

FROM

**THE PRESIDENT OF THE UNITED STATES**

TRANSMITTING

REQUESTS FOR SUPPLEMENTAL APPROPRIATIONS FOR FISCAL YEAR 1979 AND AMENDMENTS TO THE REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 1980



FEBRUARY 26, 1979.—Referred to the Committee on Appropriations  
and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE





THE WHITE HOUSE,  
Washington, February 26, 1979.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

Sir: I ask the Congress to consider requests for supplemental appropriations for the fiscal year 1979 in the amount of \$5,603,000 and amendments to the request for appropriations for the fiscal year 1980 in the amount of \$7,796,000.

The details of these proposals are set forth in the enclosed letter from the Director of the Office of Management and Budget. I concur with his comments and observations.

Respectfully,

JIMMY CARTER.

Enclosures:

[Estimate No. 02: 96th Congress, 1st session]

EXECUTIVE OFFICE OF THE PRESIDENT,  
*Office of Management and Budget,*  
Washington, D.C. February 26, 1979.

THE PRESIDENT,  
*The White House.*

Sir: I have the honor to submit for your consideration requests for supplemental appropriations in the amount of \$5,603,000 for the fiscal year 1979 and amendments to the request for appropriations for the fiscal year 1980 in the amount of \$7,796,000. The details of these requests are contained in the enclosures to this letter.

I have carefully reviewed the proposals contained in this document and am satisfied that these requests are necessary at this time. I recommend, therefore, that these proposals be transmitted to the Congress.

Respectfully,

JIM MCINTYRE,  
*Director.*

Enclosures.

FISCAL YEAR 1979 SUPPLEMENTAL APPROPRIATIONS

LEGISLATIVE BRANCH

1980 budget appendix page	Heading	1979 supplemen- tal request pending	1979 proposed amendment	1979 revised request
SENATE				
1076	Salaries, officers and employees.....	\$1,688,000	\$88,000	\$1,776,000
JOINT ITEMS				
1076	Joint Committee on Printing.....	60,000	35,000	95,000

(1)

## FISCAL YEAR 1979 SUPPLEMENTAL APPROPRIATIONS

## LEGISLATIVE BRANCH

## GOVERNMENT PRINTING OFFICE

OFFICE OF SUPERINTENDENT OF DOCUMENTS  
SALARIES AND EXPENSES

For an additional amount for "Salaries and expenses", \$980,000.

This proposed supplemental appropriation is necessary to cover the anticipated increase costs for accredited law school libraries designated as part of the depository library distribution program in accordance with Public Law 95-261. This law provides for the designation of libraries of accredited law schools as depository libraries for government publications. We estimate that a total of 80 accredited law school libraries will request and be approved as depository libraries during 1979. This proposal would increase 1979 outlays by \$980 thousand.

TEMPORARY COMMISSION ON FINANCIAL OVERSIGHT OF  
THE DISTRICT OF COLUMBIA

## SALARIES AND EXPENSES

For an additional amount for "Salaries and expenses", \$4,500,000, to remain available until expended. *This appropriation shall be made available only upon enactment into law of authorizing legislation.*

## FISCAL YEAR 1980 BUDGET AMENDMENTS

## LEGISLATIVE BRANCH

1980 budget appendix page	Heading	1980 supplemen- tal request pending	1980 proposed amendment	1980 revised request
SENATE				
SALARIES, OFFICERS AND EMPLOYEES				
11	Administrative, clerical, and legislative assistance to Senators.....	\$74,957,000	\$176,000	\$75,133,000
CONTINGENT EXPENSES OF THE SENATE				
13	Miscellaneous items .....	38,625,000	500,000	39,125,000
JOINT ITEMS				
16	Joint Committee on Printing.....	744,000	120,000	864,000

## FISCAL YEAR 1980 AMENDMENT

## DEPARTMENT OF STATE

## OTHER

1980 budget appendix page	Heading	1980 request pending	1980 proposed amendment	1980 revised request
684	<i>United States-Yugoslavia Bilateral Science and Technology Agreement</i> (Insert the above heading and the following appropriation language immediately after the material under the heading "International Center, Washington, D.C.")  <i>For expenses, not otherwise provided for, necessary to enable the United States to meet its obligations in connection with participation in a five year program of scientific and technological cooperation with Yugoslavia, \$7,000,000, to remain available until expended.</i>		\$7,000,000	\$7,000,000

This 1980 appropriation request would finance the United States' share (50 percent) of an ongoing program of science and technology cooperation with Yugoslavia for a second five-year period. The United States' share for the initial 5-year period was funded with surplus U.S.-owned Public Law 480 Yugoslav dinars. This request would increase 1980 outlays by \$1.4 million. Since this proposal was included in the 1980 budget as an item for later transmittal, budget totals would not be affected.

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REFORM OF THE  
FEDERAL CIVIL JUSTICE SYSTEM

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MESSAGE

FROM

**THE PRESIDENT OF THE UNITED STATES**

TRANSMITTING

PROPOSALS FOR THE REFORM OF THE FEDERAL CIVIL  
JUSTICE SYSTEM



FEBRUARY 27, 1979.—Message referred to the Committee on the Judiciary  
and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

39 011

WASHINGTON : 1979





*To the Congress of the United States :*

Today I am announcing my program to reform the Federal civil justice system. My proposals are intended to increase the efficiency, cut the cost, and maintain the integrity of our Federal courts. I hope that the same spirit of cooperation which led to the 95th Congress, passage of historic civil service reform legislation, which had similar goals for the Executive Branch, will mark Congressional-Administration efforts in reforming the Judicial Branch.

The American system of justice—and the part our Federal courts play in it—has long been the envy of people throughout the world. An impartial and talented judiciary protects the rights of all Americans, ensuring due process guarantees and fair adjudication of disputes. But the courts cannot perform their traditional and essential function if they are required to operate with inadequate resources, saddled with outmoded procedures, and burdened with more business than they can fairly dispose of within a reasonable time. Nor can our citizens avail themselves of their “day in court” if, as is too often true in these days of rising litigation expenses, the price of participation in litigation is beyond their means.

Delay and expense play a part in our civil justice system. We have long recognized that justice delayed is justice denied. For many injured parties, having to wait a year or two to obtain legal relief in the courts is extremely harmful. The benefits of a legal victory are sometimes outweighed by the costs of achieving it. As litigation expenses and the size of court dockets increase, this seems to be happening with increasing frequency. Legal redress should not consume years of time and thousands of dollars.

These problems are not merely the special concern of a particular economic class or racial group, nor are they limited to certain geographic regions; they affect all segments of American society, in all areas of the country.

I am committed to improving access to justice by ensuring that every person involved in a legal controversy has a readily available forum in which that controversy can be resolved speedily, fairly, and at reasonable cost. To achieve this goal, we must do two things. First, we must develop new means for handling disputes that do not necessarily require full court resolution. Second, we must provide the courts with sufficient resources and improved procedures so that they can function fairly and effectively in those cases that must be brought **before them.**

I know that the Congress shares my concerns and is equally committed to taking effective remedial action. Last year the Congress made an excellent beginning when it created 152 new Federal judgeships and carefully reviewed a number of other legislative proposals designed to improve the administration of justice. But unless we improve the system of justice itself, we may find that the additional judges have been swallowed up by outmoded procedures and by an

ever-rising volume of cases. We must take prompt and effective steps to eliminate the remaining obstacles to efficiency in the justice system, and to increase access to Federal courts by those with Federal claims.

Five of the specific measures by which we hope to accomplish these ends have previously been proposed, in whole or part, by my Administration, in the 95th Congress, dealing with arbitration, United States magistrates, the diversity of citizenship jurisdiction of the Federal courts, the Supreme Court's obligatory jurisdiction, and minor dispute resolution. Both before and during the last legislative session, each of these proposals received a great deal of careful Congressional thought and attention. They are introduced again, some with modifications discussed in the last Congress. Each is now ripe for favorable action.

The arbitration proposal would provide an innovative means for resolving speedily, fairly, and at reduced cost certain types of civil cases in which the main dispute is over the amount of money that one person owes to another. This legislation is modeled on court-annexed arbitration plans that have proved successful in several States, including Ohio, Pennsylvania and New York. It would allow Federal district courts to adopt a procedure requiring that tort and contract cases involving less than \$100,000 be submitted to arbitration. This approach has been tested since early last year in three Federal courts and the experiences so far have been quite promising. Both litigants and the courts are benefiting from the procedure. Cases going to arbitration are being resolved faster than they otherwise could be and at significantly less expense to the parties. It is time that these benefits were extended to litigants in all Federal trial courts.

The second major element of our comprehensive civil justice program is a bill to enlarge the civil and criminal jurisdiction of Federal magistrates. These judicial officers, who are appointed by the district courts, constitute a potential resource of great value. If magistrates were given broader authority to decide civil cases and to handle less serious criminal matters, as we have proposed, the capacity of the Federal courts would be substantially increased. The result, especially in districts which currently have large case backlogs, would be speedier and less costly dispositions for the litigants.

The third measure that we regard as essential to improving the civil justice system would curtail the exercise of diversity of citizenship jurisdiction in the Federal courts. Too many cases now jamming the dockets in Federal courts involve solely issues of State law that would be more properly and more efficiently disposed of in State courts. The historical basis for permitting these claims to be heard in Federal court—presumed prejudice towards citizens of one State in the courts of another—no longer appears valid. Moving these State law cases to the State courts where they belong would not create an undue burden on any State, but would enable the Federal courts to concentrate on serving the needs of those whose disputes involve questions of Federal law. Under my proposal, diversity jurisdiction would be abolished totally and cases could be brought in Federal court only where Federal law is involved.

The next component of our judicial reform package is a bill that would permit the Supreme Court to exercise greater control over its

own docket. By eliminating the Supreme Court's mandatory jurisdiction, except for appeals in three-judge cases, this proposal would do away with the artificial and out-dated distinction between discretionary review and review of right. The change would enable the Court to focus its limited resources on the cases and issues truly deserving of its attention. This, in turn, would permit speedier clarification of the law, to the benefit not only of litigants in the lower courts but also persons wishing to avoid legal controversies.

The last of the proposals carried over from the previous Congress is a bill to improve the means available to the people of the United States for resolving everyday disputes, such as complaints by neighbors, customers, tenants, and family members. Everyday problem, small or large, if left unsettled, can fester and grow. They can lead to breakdowns in otherwise harmonious neighborhood relationships. They can even lead to crime. This legislation, entitled the Dispute Resolution Act, would provide Federal assistance to the States to improve the institutions that deal with these programs. The programs established by this bill would promote improvements in small claims courts and more widespread use of Neighborhood Justice Centers, a new concept that the Department of Justice is presently testing in Los Angeles, Kansas City, and Atlanta. This legislation would enable the Federal and State governments to work in partnership to improve the delivery of justice to all the people of the United States. No additional funding is being sought; existing funds in the Law Enforcement Assistance Administration will be used to finance these programs.

Passage of these five bills would be a major step in eliminating excessive delays, red tape, and exorbitant costs within the civil justice system. These bills have been discussed in the 95th Congress, and I hope that after further careful examination these bills will be enacted during the 96th Congress. These measures are necessary if we are to derive maximum benefit from the newly authorized judgeships. We will work for their enactment.

In addition to these bills, the Attorney General will transmit to Congress additional proposals to improve the courts which have been developed in consultation with Congressional leaders in this area. These new measures would solve a variety of problems relating to administration of the Federal judiciary, as well as practice and procedure in the courts in the following ways:

Create a new intermediate Federal appellate court on the same tier as the existing courts of appeals. The new court, which would be known as the "United States Court of Appeals for the Federal Circuit", would be formed by merging the Court of Claims and the Court of Customs and Patent Appeals into a single appellate tribunal with expanded, nationwide jurisdiction for appeals in patent and trademark cases as well as other matters. This new forum would induce economies from the combination of the two existing courts. Most important, however, it would expand the Federal judicial system's capacity for definitive adjudication of national law and thereby contribute to the uniformity and predictability of legal doctrine in these areas, which have long been marked by inconsistent appellate decisions, encourage industrial innovation, and in the long run reduce patent and trademark

litigation. I further note that a similar need exists for uniformity and predictability of the law in the tax area, where conflicting appellate decisions encourage litigation and uncertainty. The Justice and Treasury Departments will work with Congress to develop an appropriate solution.

Permit more effective means of rulemaking and administration within the Federal judiciary through the implementation of two proposals. One proposal requires each court of appeals to appoint an advisory committee composed of persons outside the court to make recommendations on the rules of practice and operating procedures within that court. These committees should do much to assist the courts in formulating sounder rules. The other proposal would restructure the membership of the circuit judicial councils, the governing administrative bodies in the eleven judicial circuits. The councils will be made smaller and more efficient and will include district judges in their membership for the first time. If enacted, these proposals will help assure that the Federal courts conduct their business so as to serve the public more effectively.

**Allowing equitable interest on claims and judgments.** There is a serious backlog in civil litigation. Sometimes years pass between the time of an injury and the granting of a judgment. More years may pass while that judgment is appealed. Current Federal law is ambiguous about whether and under what circumstances interest may be paid for the period prior to judgment, and permits unrealistically low as well as conflicting rates of interest while the decision is under appeal. Yet such interest may be essential in order to truly compensate the plaintiff or to avoid the unjust enrichment of the defendant. For instance, a plaintiff who is unlawfully deprived of the use of \$20,000 in 1976 and who does not receive a judgment until 1979, could have obtained \$4,500 in those three years by investing the money at 7% compounded interest. If a judgment on appeal is entered at a rate well below the prime interest rate, the losing party may well profit from the appeal. The bill proposes that where a defendant knew of his potential liability, interest be awarded for the pre-judgment period where necessary to compensate the plaintiff for his losses or to avoid the unjust enrichment of the defendant. Post-judgment interest rates would no longer be left to inconsistent State laws, but along with the new pre-judgment interest standard, would be based on a nationally uniform rate. Litigants would be encouraged to settle cases, and not drag them out needlessly causing additional expense.

Other measures relating to the sound administration of the Federal judiciary are proposals providing more reasonable terms for chief judges, enhanced integrity for appellate panels, and easier transfer for any case inadvertently started in the wrong Federal court to the proper court without loss of litigants' rights and with savings of time and money.

Finally, I urge the Congress to give serious consideration to improving procedures for litigating class actions, especially for those cases where the alleged economic injury is widespread and large in the aggregate, yet small in its impact on each individual. The Justice De-

partment will continue to have my support in working with Congress to devise class action procedures which will develop methods for courts to handle these complex cases more effectively and at less cost to the taxpayers and the parties involved.

The members of the Judiciary Committees of both houses have shown outstanding leadership in developing answers to the problems facing the justice system. It is now time for Congress as a whole to take action so that the American people will benefit from a more effective civil justice system.

JIMMY CARTER.

THE WHITE HOUSE, *February 27, 1978.*





SOCIAL SECURITY TOTALIZATION AGREEMENT  
WITH THE FEDERAL REPUBLIC OF GERMANY

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MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

AN AGREEMENT BETWEEN THE UNITED STATES AND THE  
FEDERAL REPUBLIC OF GERMANY ON SOCIAL SECURITY,  
PURSUANT TO SECTION 233(e) (1) OF THE SOCIAL SECURITY  
ACT, AS AMENDED



FEBRUARY 28, 1979.—Message and accompanying papers referred to the  
Committee on Ways and Means and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE





*To the Congress of the United States:*

Pursuant to section 233(e) (1) of the Social Security Act as amended by the Social Security Amendments of 1977 (Public Law 95-216: 42 U.S.C. 1305 note), I am transmitting the Agreement between the United States of America and the Federal Republic of Germany (F.R.G.), signed on January 7, 1976, the Final Protocol to the 1976 Agreement, also signed on January 7, 1976, and the Administrative Agreement to implement the 1976 Agreement, signed on June 21, 1978.

These U.S.-F.R.G. agreements are similar in objective to the U.S.-Italian social security agreements which I submitted to the Congress on February 28, 1978. Such bilateral agreements, which are generally known as totalization agreements, provide for limited coordination between the United States and foreign social security systems to overcome the problems of gaps in protection and of dual coverage and taxation. In addition to remedying these problems, the 1976 U.S.-F.R.G. Agreement and Administrative Agreement would extend under specified conditions voluntary coverage rights under the F.R.G. system to U.S. citizens who have a prior connection with the F.R.G. system or who reside in the United States and were victims of persecution.

I also transmit for the information of the Congress a comprehensive report prepared by the Department of Health, Education, and Welfare, which explains the provisions of the Agreement and provides data on the number of persons affected by the agreements and the effect on social security financing as required by the same provision of the Social Security Amendments of 1977.

The Department of State and the Department of Health, Education, and Welfare join in commending this Agreement, Protocol, and Administrative Agreement.

JIMMY CARTER.

THE WHITE HOUSE, *February 28, 1979.*

AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE  
FEDERAL REPUBLIC OF GERMANY ON SOCIAL SECURITY

The United States of America and the Federal Republic of Germany,  
Being Desirous of regulating the relationship between them in the  
area of social security,  
Have agreed as follows:

PART 1

GENERAL PROVISIONS

ARTICLE 1

For the purpose of this Agreement—

1. "Territory" means, as regards the United States of America, the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam and American Samoa, and as regards the Federal Republic of Germany, the area in which the Basic Law (Grundgesetz) of the Federal Republic of Germany is in force;

2. "Laws" means the laws and regulations concerning the systems of social security specified in Article 2, paragraph 1;

3. "Competent Authority" means, as regards the United States of America, the Secretary of Health, Education, and Welfare, and as regards the Federal Republic of Germany, the Federal Minister of Labor and Social Affairs (Bundesminister für Arbeit und Sozialordnung);

4. "Agency" ("Träger") means the institution or authority responsible for implementing laws specified in Article 2, paragraph 1;

5. "Competent Agency" means the agency responsible for applying the laws in a specific case;

6. "Employment" means employment or self-employment as defined by the applicable laws;

7. "Period of coverage" ("Versicherungszeit") means a period of payment of contributions or a period of earnings from employment, as defined or recognized as a period of coverage by the laws under which such period has been completed, or any similar period insofar as it is recognized by such laws as equivalent to a period of coverage;

8. "Benefit" ("Rente") means an old-age, dependent, survivor, or disability insurance benefit provided by the applicable laws;

9. "Cash benefit" ("Geldleistung") means a benefit ("Rente") and any other cash payment provided by the applicable laws; and

10. "Benefit-in-kind" ("Sachleistung") means a rehabilitation benefit-in-kind provided by the applicable laws.

## ARTICLE 2

1. For the purpose of this Agreement, the applicable laws are:
  - (a) as regards the Federal Republic of Germany, laws governing
    - Wage Earners' Pension Insurance
    - Salaried Employees' Pension Insurance
    - Miners' Pension Insurance
    - Steelworkers' Supplementary Pension Insurance
    - Farmers Old Age Benefits; and
  - (b) as regards the United States of America, laws governing
    - the Federal Old-Age, Survivors and Disability Insurance Program.

2. Laws within the meaning of paragraph 1 of this Article shall not include laws resulting for one Contracting State from other international treaties or supranational legislation, or from laws promulgated for their implementation.

## ARTICLE 3

Unless otherwise provided, the present Agreement shall apply to—

(a) nationals of a Contracting State within the meaning of Article XXV, paragraph 6, of the Treaty of Friendship, Commerce and Navigation between the United States of America and the Federal Republic of Germany of October 29, 1954 and of paragraph 22 of the Protocol thereto, with the proviso that henceforth the term "Certificate of Residence" (Heimatschein) shall be replaced by the term "Certificate of Nationality" (Staatsangehörigkeitsausweis),

(b) refugees within the meaning of Article 1 of the Convention of the Status of Refugees dated July 28, 1951 and the Protocol to that Convention dated January 31, 1967,

(c) stateless persons within the meaning of Article 1 of the Convention on the Status of Stateless Persons dated September 28, 1954,

(d) other persons with respect to the rights they derive from a national of either Contracting State, from a refugee or a stateless person within the meaning of this Article, and

(e) nationals of a State other than a Contracting State who are not included among the persons referred to in paragraph (d) of this Article.

## ARTICLE 4

1. Unless otherwise specified in the present Agreement, the persons designated in Article 3(a), (b), (c) and (d) who ordinarily reside in the territory of either Contracting State shall in the application of the laws of one Contracting State receive equal treatment with the nationals of that Contracting State.

2. Nationals of one Contracting State who ordinarily reside outside of the territories of both Contracting States shall be granted the cash benefits and benefits-in-kind provided by the laws of the other Contracting State under the same conditions which the other Contracting State applies to its own nationals who ordinarily reside outside of the territories of both Contracting States.

#### ARTICLE 5

Unless otherwise provided in this Agreement, the laws of one Contracting State which require that entitlement to or payment of cash benefits be dependent on residence in the territory of that Contracting State, shall not be applicable to the persons designated in Article 3 (a), (b), (c) and (d) who ordinarily reside in the territory of the other Contracting State.

#### ARTICLE 6

1. Except as otherwise provided in this Article, persons who have employment within the territory of one of the Contracting States shall be subject to the laws on compulsory coverage of only that Contracting State even when the employer is located in the territory of the other Contracting State.

2. The employment of a person in the territory of one Contracting State to which he was sent from the territory of the other Contracting State by his employer in that territory shall continue to be subject to the laws on compulsory coverage of only the other Contracting State, as if he were still employed in the territory of the other Contracting State, even when the employer also has a place of business (*Zweigniederlassung*) in the territory of the Contracting State of employment.

3. In the case of the employment of a person as an officer or member of a crew of a sea-going vessel which has been granted the right to fly the flag of the Federal Republic of Germany, a German aircraft, an American vessel, an American aircraft, a vessel which has been granted the right to fly the flag of the Federal Republic of Germany and is at the same time an American vessel under United States laws, or of an aircraft which is a German aircraft but which is treated as an American aircraft under United States laws, the following rules shall apply with regard to the laws on compulsory coverage:

(a) If the person is subject to the laws of only one of the Contracting States, he shall remain subject to those laws.

(b) If the person is a national of one of the Contracting States and subject to the laws of both Contracting States, he shall be subject only to the laws of the Contracting State of which he is a national.

(c) (1) If the person is a national of both Contracting States or is a member of a group specified in Article 3 (b), (c) or (e) and is subject to the laws of both Contracting States, he shall be subject only to the laws of the Contracting State in whose territory he ordinarily resides.

(2) If he does not ordinarily reside in the territory of either Contracting State, he and his employer may apply for an exemption from the laws on compulsory coverage of one of the Contracting States under the procedure provided in paragraph 5 of this Article.

(d) A person who is a national of one contracting State employed on the vessel or aircraft of the other Contracting State and who is not otherwise subject to the laws on compulsory coverage of either Con-

tracting State shall be subject to the laws on compulsory coverage of the other Contracting State.

4. (a) A national of one of the Contracting States employed by that Contracting State in the territory of the other Contracting State shall be subject to the laws on compulsory coverage of only the first Contracting State.

(b) A person who is a national of one of the Contracting States employed in the territory of the other Contracting State, where he does not ordinarily reside, by an employee of the first Contracting State who is a national of the first Contracting State shall be subject to the laws on compulsory coverage of only the first Contracting State.

(c) A person who is a national of one of the Contracting States employed in the territory of the other Contracting State, where he ordinarily resides, by an employee of the first Contracting State who is a national of the first Contracting State shall be subject to the laws on compulsory coverage of only the other Contracting State.

5. Upon application of a person specified in the preceding paragraphs of this Article, except paragraph 3(c) (2), and his employer, or upon application of a self-employed person, the Competent Authority of the Contracting State from whose laws on compulsory coverage the exemption is desired may grant the exemption, if the person and his employer, or the self-employed person, will be subject to the laws on compulsory coverage of the other Contracting State.

## PART II

### BENEFIT INSURANCE SYSTEM

#### ARTICLE 7

1. Where periods of coverage have been completed under the laws of both Contracting States, the Agency which determines the entitlement to cash benefits and benefits-in-kind under its laws shall take account of periods of coverage which are creditable under the laws of the other Contracting State and which do not coincide with periods of coverage credited under its own laws.

2. This Agreement shall not result in entitlement to a benefit under the laws of a Contracting State unless a minimum period of coverage has been completed by a person under its laws and the completed period of coverage alone does not result in entitlement to benefits. In the application of United States laws, periods of coverage totaling 6 quarters of coverage shall be the required minimum, and, in the application of German laws, periods of coverage totaling 18 months shall be the required minimum.

3. Where a person's periods of coverage are less than the minimum period required by paragraph 2 of this Article under the laws of one Contracting State, those periods of coverage, whether or not consecutive, shall nevertheless be considered by the Agency of the other Contracting State for purposes of the computation of a benefit, as if they were periods of coverage under its own laws, provided that

(a) the person has the minimum period required by paragraph 2 under the laws of the other Contracting State and has entitle-

ment for benefits with or without the application of paragraph 1 of this Article under the laws of the other Contracting State, or  
 (b) the person is entitled to benefits under the laws of the other Contracting State with less than the minimum period required by paragraph 2.

#### ARTICLE 8

The following provisions shall apply to the Federal Republic of Germany:

1. The periods of coverage to be considered in accordance with Article 7 shall be taken into account by the insurance system whose Agency is competent for determining a person's benefit if only the German laws were applied. If under this provision the Competent Agency is the Miners' Pension Insurance system, the periods of coverage completed under United States laws shall be taken into account by the Miners' Pension Insurance system if the periods were completed underground in a mine.

2. Periods of coverage completed under United States laws which are to be considered by the Competent Agency for the computation of the benefit payable by it, in accordance with Article 7, paragraph 3, shall only increase the number of creditable insurance years under German laws.

3. In determining the benefit computation base (Rentenbemessungsgrundlage), only periods of coverage considered under German laws shall be taken into account.

4. If the requirements for entitlement to a benefit are met only by applying the provisions of Article 7, paragraph 1, only half of the benefit amount which is attributable to deemed periods of coverage (Zurechnungszeit) shall be payable.

5. The following rules shall apply where an amount is payable as a supplement to a child; these rules shall also apply if the child's supplement is an integral part of the orphan's pension:

(a) If a supplement is payable under German laws without the application of Article 7, paragraph 1, but no child's insurance benefit is payable under United States laws, the supplement shall be payable in full.

(b) If a supplement is payable under German laws with or without the application of Article 7, paragraph 1, and a child's insurance benefit is payable under United States laws, one-half of the supplement shall be payable.

(c) If a supplement is payable under German laws only with the application of Article 7, paragraph 1, and no child's insurance benefit is payable under United States laws, one-half of the supplement shall be payable.

6. For purposes of terminating the right to the compensatory cash benefit for a miner who has been separated from his mining occupation (Knappschaftsausgleichsleistung), a United States mining establishment shall be treated as equivalent to a German mining establishment.

7. In the case of a self-employed craftsman, whose liability status for compulsory coverage is conditional upon payment of a minimum number of contributions, periods of coverage completed under United States laws shall be taken into account to determine whether the craftsman is liable.

## ARTICLE 9

The following provisions shall apply to the United States of America:

1. Where there is eligibility for a benefit under United States laws by applying Article 7, paragraph 1, the Competent Agency shall first compute a theoretical Primary Insurance Amount taking into consideration the periods of coverage completed under the laws of the two Contracting States as if all these periods of coverage had been completed under United States laws. The Competent Agency shall then compute a pro rata Primary Insurance Amount based on the ratio of the total periods of coverage completed under United States laws to the total periods of coverage completed under the laws of the two Contracting States. Any benefits payable under United States laws on the basis of an earnings record where a pro rata Primary Insurance Amount has been computed will be paid on the basis of that pro rata Primary Insurance Amount.

2. Periods during which a person was determined by a Competent German Agency to be totally disabled under German laws shall, when it is to his advantage, be excluded in determining whether he meets the insured status requirements under United States laws and in computing a Primary Insurance Amount under this Agreement.

3. For the purposes of computing a person's theoretical Primary Insurance Amount, the Competent Agency shall take into account, if it is to his advantage, his earnings in any year during periods of coverage completed under German laws, as if they had been completed under United States laws.

## PART III

## MISCELLANEOUS PROVISIONS

## Chapter 1—Administrative Cooperation

## ARTICLE 10

The Competent Authorities, Agencies and associations of the Agencies of the Contracting States shall assist each other in applying this Agreement and in implementing each other's laws as if they were applying their own laws. This assistance shall be free of charge subject to exceptions to be agreed upon by the Contracting States.

## ARTICLE 11

1. A final decision of a Court or a ruling by a Competent Authority or an Agency of a Contracting State, concerning a matter arising under its laws, which is enforceable under its laws, shall be recognized by the other Contracting State. A Contracting State may refuse recognition if the decision or ruling is contrary to its public policy including its requirements for due process of law.

2. The final decisions and rulings referred to in paragraph 1 shall be enforced under the laws specified in Article 2, paragraph 1, in the territory of the Contracting State in which the decisions or rulings are recognized.

## ARTICLE 12

1. Where the laws of a Contracting State provide that any document which is submitted to the Competent Authority or an Agency of that Contracting State shall be exempted, wholly or partly, from fees or charges, including consular and administrative fees, the exemption shall also apply to documents which are submitted to the Competent Authority or an Agency of the other Contracting State in accordance with its laws.

2. A document or a copy of a document certified as authentic which is accepted as authentic by the Competent Authority or an Agency of one Contracting State shall be accepted as authentic by the Competent Authority or an Agency of the other Contracting State without further certification.

## ARTICLE 13

1. The Competent Authorities and the Agencies of the Contracting States may correspond directly with each other and with any person wherever he may reside whenever it is necessary for the administration of this Agreement. The correspondence may be in the writer's official language.

2. An application or document may not be rejected by a Competent Authority or an Agency because it is in the official language of the other Contracting State.

## ARTICLE 14

1. An application in writing or other document presented to the Competent Authority or an Agency of a Contracting State shall have the same effect as if it were presented to the Competent Authority or an Agency of the other Contracting State.

2. A person who files an application for cash benefits under the laws of a Contracting State may request that it not be treated as an application for cash benefits under the laws of the other Contracting State, or that it be effective on a different date in the other Contracting State, within the limitations of and in conformity with the laws of the other Contracting State.

## ARTICLE 15

The consular officers of a Contracting State at diplomatic or consular posts in the territory of the other Contracting State, at the request of a person who is a national of the first Contracting State, may take measures necessary to safeguard and maintain the rights of that person. The person's authorization need not be proven.

## CHAPTER 2—IMPLEMENTATION OF THE AGREEMENT

## ARTICLE 16

1. The Competent Authorities of the Contracting States shall, by mutual agreement, establish administrative procedures which are required to implement this Agreement. They shall inform each other of any amendments or additions to their laws.



2. Liaison agencies designated for the implementation of this Agreement are:

(a) In the Federal Republic of Germany—

(1) for the Wage Earners' Pension Insurance System, the Landesversicherungsanstalt Freie Hansestadt Hamburg (Regional Insurance Institution for Hamburg), Hamburg,

(2) for the Salaried Employees' Pension Insurance system, the Bundesversicherungsanstalt für Angestellte (Federal Insurance Institution for Salaried Employees), Berlin.

(3) for the Miners' Pension Insurance system, the Bundesknappschaft (Federal Miners' Insurance Institution), Bochum, and

(4) for the Steelworkers' Supplementary Pension Insurance system, the Landesversicherungsanstalt für das Saarland (Regional Insurance Institution for the Saarland), Saarbrücken;

(b) In the United States of America—the Social Security Administration.

#### ARTICLE 17

An Agency of a Contracting State may validly pay cash benefits to a person in the territory of the other Contracting State in the currency of its own State or of the other Contracting State. If the cash benefits are paid in the currency of the other Contracting State, the currency conversion shall be at the exchange rate in force on the day the remittance is made.

#### ARTICLE 18

1. (a) Where a German Agency has made an overpayment of cash benefits to a person, the amount of the overpayment may be withheld for the account of the German Agency by the United States Agency from a cash benefit payable by it on the earnings record of the same person, within the limits of the United States laws.

(b) In case of payment of an advance or provisional cash benefit to a person by a German Agency which is more than the amount due, the United States Agency shall withhold for the account of the German Agency an amount equal to the excess amount paid from any cash benefits payable by it on the earnings record of this same person.

2. (a) Where the United States Agency has made an overpayment of cash benefits on the earnings record (Versicherungskonto) of a person, the amount of the overpayment may be withheld for the account of the United States Agency by a German Agency from a cash benefit payable by it to the same person, within the limits of the German laws.

(b) In case of payment of an advance or provisional cash benefit of the earnings record (Versicherungskonto) of a person by the United States Agency which is more than the amount due, a German Agency shall withhold for the account of the United States Agency an amount equal to the excess amount paid from any cash benefits payable by it to the same person.

#### ARTICLE 19

1. Disagreements between the two Contracting States regarding the interpretation or implementation of this Agreement shall, as far as possible, be settled by the Competent Authorities.

2. If a disagreement cannot be resolved by the Competent Authorities it shall, at the request of either Contracting State, be submitted for arbitration in accordance with the following procedures:

(a) An arbitration board shall be established on an ad hoc basis with each Contracting State appointing one member, and both members agreeing on a citizen from a third North Atlantic Treaty Organization member state as chairman who shall be appointed by the governments of the two Contracting States. The members shall be appointed within two months, and the chairman within three months, after one Contracting State has informed the other that it will refer the dispute to an arbitration board.

(b) If the deadlines mentioned in paragraph 2(a) are not met, each Contracting State may, in the absence of other agreements, ask the Secretary General of the North Atlantic Treaty Organization to make the necessary appointments. If the Secretary General is a national of one of the Contracting States or is prevented from acting for another reason, the Deputy Secretary General shall make the appointments. In case the Deputy Secretary General also is a national of one of the two Contracting States or is prevented from acting for another reason, the next Assistant Secretary General following in rank by protocol who is not a national of one of the two Contracting States and who is not prevented from acting for another reason, shall make the appointments.

(c) The arbitration board shall make its decision by majority vote on the basis of the agreements existing between the parties and general international law. Its decisions shall be binding on both Contracting States. Each Contracting State shall bear the cost for its member, as well as for its representation in the proceedings before the arbitration board; the cost for the chairman as well as other expenses, shall be shared equally between the Contracting States. The arbitration board can make a different decision concerning the allocation of expenses. In all other respects the arbitration board shall establish its own rules of procedure.

## PART IV

### TRANSITIONAL AND FINAL PROVISIONS

#### ARTICLE 20

1. This Agreement shall not establish any claim to payment of cash benefits for any period before its entry into force.

2. In the implementation of this Agreement, consideration shall also be given to periods of coverage and other events relevant under the laws occurring before the entry into force of this Agreement.

3. Determinations made before the entry into force of this Agreement shall not affect rights arising under it.

4. Cash benefits to which there was entitlement before the entry into force of this Agreement may be recomputed under its provisions. At least the amount of the cash benefits previously payable shall continue to be payable after the recomputation.

#### ARTICLE 21

The attached Final Protocol shall form an integral part of this Agreement.

## ARTICLE 22

This Agreement shall also apply to Land Berlin, provided that the Government of the Federal Republic of Germany does not make a contrary declaration to the Government of the United States of America within three months of the date of entry into force of this Agreement.

## ARTICLE 23

1. This Agreement shall be ratified, and the instruments of ratification shall be exchanged as soon as possible in Bonn.

2. This Agreement shall enter into force on the first day of the second month following the month in which the instruments of ratification are exchanged.

## ARTICLE 24

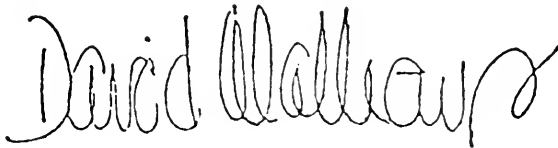
1. This Agreement shall remain in force and effect until the expiration of one calendar year following the year in which written notice of its denunciation is given by one of the Contracting States to the other Contracting State.

2. If this Agreement is terminated by denunciation, rights regarding entitlement to or payment of cash benefits acquired under it shall be retained; rights in the process of being acquired shall be recognized in conformity with supplementary agreements.

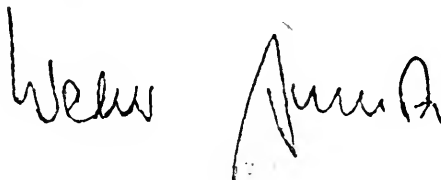
IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed the present Agreement and affixed thereto their seals.

DONE at Washington on January 7, 1976, in duplicate in the English and German languages, both texts being equally authentic.

For the United States of America:



For the Federal Republic of Germany:

FINAL PROTOCOL TO THE AGREEMENT BETWEEN THE UNITED STATES  
OF AMERICA AND THE FEDERAL REPUBLIC OF GERMANY ON SOCIAL  
SECURITY

At the time of signing the Agreement on Social Security concluded this day between the United States of America and the Federal Republic of Germany, the plenipotentiaries of both Contracting States stated that they are in agreement on the following points:

1. With reference to Article 1, paragraph 2, of the Agreement: The term "laws" shall include the regulations adopted by the German Agencies (Träger) relating to the systems of social security specified in Article 2, paragraph 1, of the Agreement.

2. With reference to Article 2 of the Agreement:

(a) Regarding Article 2, paragraph 1(b), of the Agreement, with respect to the United States of America, the laws governing the Federal Old-Age, Survivors and Disability Insurance Program are title II of the Social Security Act of 1935, as amended, and regulations promulgated under the authority provided therein, except sections 226 and 228 of that title and regulations pertaining to those sections, and Chapter 2 and Chapter 21 of the Internal Revenue Code of 1954 as amended.

(b) Part II of the Agreement shall not apply to the Steelworkers' Supplementary Pension Insurance system or to the Farmers' Old-Age Benefit system of the Federal Republic of Germany.

(c) If under the laws of one of the Contracting States the requirements for the application of another Convention or a supranational regulation are fulfilled in addition to the requirements for the application of this Agreement, the Agency of this Contracting State shall disregard the other Convention or supranational regulation when applying this Agreement.

(d) Article 2, paragraph 2, of the Agreement and paragraph 2(c) of this Protocol shall not apply if the social security laws resulting for the Federal Republic of Germany from international treaties or supranational law or designed to implement such treaties or law contain provisions relating to the apportionment of insurance burdens.

3. With reference to Article 4 of the Agreement:

(a) Provisions relating to the apportionment of insurance burdens that may be contained in international treaties shall not be affected.

(b) German laws which guarantee participation of the insured and of the employers in the organs of self-government of the Agencies and of their associations as well as in the adjudication of social security matters shall remain unaffected.

4. With reference to Article 5 of the Agreement :

(a) The German laws regarding cash benefits in respect of periods of coverage accumulated other than under federal law shall remain unaffected.

(b) German laws concerning the granting of medical, occupational and supplementary rehabilitation measures by the Agencies of the Pension Insurance system shall remain unaffected.

(c) Article 5 of the Agreement shall also apply to United States laws under which payment of cash benefits is made dependent on physical presence in the territory of the United States.

5. With reference to Article 6 of the Agreement :

(a) Article 6 of the Agreement shall also apply to persons who are treated as employees under the laws specified in Article 2, paragraph 1(a), of the Agreement.

(b) Article 6, paragraph 4, of the Agreement shall apply to an employee of any German public employer.

(c) With respect to the United States of America, the term "employed by that Contracting State" in Article 6, paragraph 4(a), of the Agreement shall mean employed by the Federal Government or one of its instrumentalities, and the term "employee of the first Contracting State" in Article 6, paragraph 4, (b) and (c), of the Agreement shall mean an employee of the Federal Government or one of its instrumentalities.

(d) Article 6, paragraph 5, of the Agreement shall not apply to exemptions from United States laws of United States nationals who ordinarily reside in the territory of the United States of America.

6. With reference to Article 7 of the Agreement :

(a) Periods of coverage completed under United States laws shall not be taken into account for the grant of increments (Leistungszuschlag) provided under German laws governing the Miners' Pension Insurance system.

(b) Under German pension insurance, Article 7, paragraph 1, of the Agreement shall apply mutatis mutandis to cash benefits and benefits-in-kind which may be granted at the discretion of the Agency.

(c) Notwithstanding Article 7, paragraph 3, of the Agreement, the United States Agency shall not be required to take account of periods of coverage completed under German laws in the case of any person who is entitled to transitional benefits on the basis of Section 227 of the United States Social Security Act.

7. With reference to Article 8 of the Agreement :

(a) Where under German laws the receipt of a benefit entails exemption from compulsory insurance and preclusion from voluntary insurance, receipt of a corresponding benefit under the laws of the United States shall have the same effect.

(b) United States nationals who ordinarily reside outside the territory of the Federal Republic of Germany shall be eligible for voluntary insurance in the German pension insurance system if they have validly paid contributions for at least 60 months

to this system or were eligible for voluntary insurance on the basis of transitional laws in force before October 19, 1972. This rule shall also apply to the persons specified in Article 3(b) and (c) of the Agreement who ordinarily reside in the territory of the United States of America.

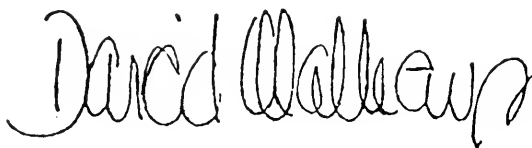
(c) Upon application United States nationals may pay voluntary contributions to the German pension insurance system retroactively, if eligibility for continued voluntary insurance was abolished by the laws governing voluntary insurance which entered into force on October 19, 1972 because they were either ordinarily residing or domiciled outside the territory of the Federal Republic of Germany. Retroactive voluntary contributions may be made for periods from October 19, 1972 to the day of the entry into force of the Agreement provided that these periods are not already covered by contributions paid to the German pension insurance system. Events relevant to eligibility for a benefit (Eintritt des Versicherungsfalles) which arise within one year after the entry into force of the Agreement shall not preclude payment of retroactive voluntary contributions. An application can be validly made only during the five-years' period following the date of entry into force of this Agreement. The Competent Agency may accept payments by installments for a period of up to three years.

(d) United States nationals to whom contributions were refunded between October 19, 1972 and the date of entry into force of this Agreement, may repay such contributions upon application. Such repayment may only be made in the full amount of the contributions refunded; it shall have the effect of cancelling any entry of refund of contributions in the insurance record. Paragraph 7(c), the last three sentences shall apply accordingly.

8. In the implementation of the Agreement, German laws to the extent that they contain more favorable provisions for persons who have suffered damages because of their political attitude or because of their race, religion or ideology, shall remain unaffected.

DONE at Washington on January 7, 1976, in duplicate in the English and German languages, both texts being equally authentic.

For the United States of America :

A handwritten signature in cursive script, reading "David Walker". The signature is written in black ink on a white background.

For the Federal Republic of Germany :

von *Stüben*.

Walter *Stüben*

REPORT TO CONGRESS TO ACCOMPANY THE SOCIAL SECURITY AGREEMENT  
BETWEEN THE UNITED STATES AND THE FEDERAL REPUBLIC OF GER-  
MANY AND AN ADMINISTRATIVE AGREEMENT FOR ITS IMPLEMENTATION

INTRODUCTION

The social security agreement between the United States and the Federal Republic of Germany (FRG) would improve the social security protection of people who have worked in both countries. It would accomplish this by providing a limited degree of coordination between the old-age, survivors, and disability insurance programs of the two countries. The agreement is similar in objective to one concluded by the United States with Italy in 1973.

The principal U.S.-FRG agreement was signed by former Secretary of Health, Education, and Welfare, David Mathews, and the Federal German Minister for Labor and Social Affairs on January 7, 1976, and is now being submitted to the Congress for review in accordance with section 233(e) of the Social Security Act. The FRG enacted a law approving the agreement in 1976.

The agreement would eliminate dual coverage, the situation that now exists in some cases where a person who is a national of one country and works in the other country is covered under and required to pay contributions to the systems of both countries simultaneously for the same work. Persons who had insufficient credits to become entitled under one or both countries' social security pension system would be able to combine their credits in order to qualify for a pro rata benefit from either system under which they failed otherwise to qualify. The agreement would also create substantial rights for U.S. citizens with a prior connection to the German social security system to make voluntary contributions to that system in order to qualify for or increase the amount of FRG social security benefits.

An administrative agreement for the implementation of the principal agreement is also being submitted for congressional review together with the principal agreement. The administrative agreement, which was signed by Secretary Califano and the Ambassador of the Federal Republic of Germany on June 21, 1978, clarifies some of the provisions of the principal agreement and establishes a number of principles which would serve as the basis for developing interagency operating procedures. The administrative agreement also contains an article which significantly expands the rights to make voluntary contributions to the FRG system for U.S. citizens who suffered persecution under the National Socialist regime.

Accompanying this report are paragraph-by-paragraph analyses of the principal agreement (Annex A) and administrative agreement (Annex B), as well as the report (Annex C) required by section 233(e)(1) of the Social Security Act on the effect of the agreements on income and expenditures of social security programs and the number of individuals affected by the agreements.



## MAIN PROVISIONS OF THE AGREEMENTS

*Required Provisions*

Section 233(c) (1) of the Social Security Act requires that international agreements concluded pursuant to that section provide for the elimination of dual coverage of the same work under the social security systems of the United States and the other country party to the agreement, and for the totalization of credits earned by a worker under the two systems for benefit eligibility purposes. In addition, the law requires that when social security benefit eligibility is established on the basis of totalized credits the amount of the benefit payable under title II be prorated based on the proportion of the worker's periods of coverage completed under that title to the combined total in both countries. The principal and administrative agreements include these required provisions.

Under article 6 of the principal agreement, dual coverage would be eliminated generally by maintaining a worker's coverage under the system of the country where the work is performed and exempting the person from compulsory coverage under the system of the other country. Special provisions would apply, however, for workers who are temporarily transferred from the United States to the FRG or vice versa. In these cases, a worker who has covered in one country before his transfer would have his coverage maintained under that country's system while being exempt from coverage in the other country. Thus, an American worker who is transferred by his company to the FRG would only be covered under and pay contributions to the U.S. program, and he and his employer would be relieved of the additional burden of paying social security contributions to the FRG program.

In conformity with section 233(c) (1) of the Social Security Act, the agreements also would prevent gaps in the protection of workers with work histories divided between the two countries by permitting their credits to be combined (or totalized) in order to meet the insured status requirements of either or both countries. A worker would need a minimum period of coverage under the system of a country before that system would consider periods of coverage from the other country. Under the agreement the minimum would be 6 quarters of coverage (as stipulated in section 233(c) (1) (A) of the Social Security Act) in the case of the United States and 18 months of coverage in the case of the FRG.

The benefits of persons who qualify based on totalized credits would be in amounts that are proportional to the percentage of combined coverage from both countries which was completed in the paying country. For example, a worker who retired with 5 years of credit under the U.S. system and 10 years under the FRG system (and who therefore under the present legal situation would qualify for benefits under neither system) could have his credits combined under each country's system to meet its eligibility requirements. The U.S. and FRG benefits would equal approximately one-third and two-thirds respectively of the benefit that would be payable if all the work had been covered under the system paying the benefits.

Periods of coverage under the U.S. social security program are measured in terms of calendar quarters while FRG periods of coverage

generally are measured in months. Under the agreement, the FRG agency would certify to the Social Security Administration a worker's total months of coverage under the FRG system. SSA would divide the total number of months for a year (minus any months of FRG coverage which coincide with quarters of coverage already credited under the U.S. program) by 3 to obtain the number of quarters of coverage to be credited under the U.S. program for the year. The FRG agency would give credit for each month in a quarter of coverage certified by the Social Security Administration, unless the month was already credited as a month of coverage under the FRG system.

#### *Additional Provisions*

Section 233(c)(2) of the Social Security Act also permits agreements to contain provisions suspending the application of the alien nonpayment provisions of the Social Security Act for persons residing in a foreign country which is party to an agreement. The principal agreement, in accordance with this section, provides that social security benefits payable to certain categories of aliens by the United States or the Federal Republic of Germany under the agreement or the country's national law shall be payable while the person resides in the other country. The categories are citizens of the other country, refugees, stateless persons, and aliens entitled on the accounts of workers who are, or were at the time of death, citizens of the United States or the FRG, refugees, or stateless persons. (This provision would not apply to FRG social security benefits based on coverage credits earned in certain communist-controlled countries in cases where such benefits are not payable to either Germans or non-Germans outside the FRG; however, the agreement assures that U.S. and FRG citizens would be treated equally with respect to the payment of these benefits outside the FRG.) The effect of this provision is limited because under the social security equal treatment provisions of the 1954 Treaty of Friendship, Commerce and Navigation between the United States and the Federal Republic of Germany, each country already pays social security cash benefits outside its territory to citizens of the other country. Thus, the effect of the new provision is to permit the payment of benefits to third country nationals, in particular those who are dependents and survivors of insured persons, residing in the FRG or the United States, notwithstanding either country's alien nonpayment provisions.

The Final Protocol to the principal agreement (which forms an integral part of it) contains provisions restoring to U.S. citizens rights to make voluntary contributions under the FRG system which they enjoyed until 1972. Under specified conditions, FRG law permits people who are at least 16 years old to make voluntary social security contributions for periods during which they are not compulsorily covered. Until 1972 this right existed for people with at least 5 years of FRG social security coverage within a 10-year period. An FRG law enacted in that year removed the 5-year coverage requirement but also excluded non-Germans residing outside the FRG from making voluntary contributions unless an international agreement provides otherwise. Under the U.S.-FRG agreement, U.S. citizens who lost this right because they resided outside the FRG would be permitted to resume their German voluntary insurance. U.S. citizens who acquire credit for 60 months of FRG contributions in the future and then leave the

FRG would also be permitted to continue coverage under the FRG system voluntarily on the same basis as German citizens.

The administrative agreement contains additional provisions which deal with the rights of victims of persecution under the National Socialist regime to make voluntary contributions. Until 1975, FRG laws permitted former victims to apply for the right to make voluntary contributions retroactively for periods during which they were prevented from obtaining coverage on account of their persecution and were between the ages of 16 and 65. Persecution victims who left Germany with less than 60 months of German social security coverage and later became U.S. citizens were generally denied these rights although victims who recovered German citizenship and had the same amount of German coverage were permitted to make the contributions. Victims who acquired the citizenship of certain other countries with which the FRG has concluded social security agreements could also make the contributions. The administrative agreement would place U.S. citizens who are also U.S. residents on a par with German citizens and the other nationalities by reopening the right to make the voluntary contributions during a limited period and by making the eligibility requirements for the contributions comparable to those that existed until 1975 for victims possessing German citizenship.

Neither the voluntary contributions provision in the Final Protocol to the main agreement nor the one for persecution victims in the administrative agreement will have any effect on the U.S. social security system.

#### *Administrative Provisions*

Section 233(c) (4) of the Social Security Act authorizes agreements to contain other provisions not inconsistent with title II of the Act which are appropriate to carry out the purposes of the agreements. In accordance with this provision, the principal and administrative agreements contain a number of articles designed to permit the United States or the Federal Republic of Germany to render free or reimbursable assistance to the other country in implementing the agreements and each other's social security laws.

The two agreements contain provisions typically included in totalization agreements under which certain benefit overpayments made by one country in implementing the agreements may be recovered by the other country from benefits it pays. However, the agreements provide that the overpayment recovery provisions will be implemented only within the limits of each country's law. In light of the pertinent provisions of the U.S. Social Security Act, it now appears that those provisions will not permit withholding of U.S. benefits to recover any FRG overpayments.

#### **ADMINISTRATIVE AGREEMENT FOR THE IMPLEMENTATION OF THE AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE FEDERAL REPUBLIC OF GERMANY ON SOCIAL SECURITY OF JANUARY 7, 1976**

The Government of the United States of America and the Government of the Federal Republic of Germany.

In application of Article 16.1 of the Agreement between the United States of America and the Federal Republic of Germany on Social

Security of January 7, 1976, hereinafter referred to as the "Agreement".

Have agreed as follows:

#### ARTICLE 1

For the purposes of the application of this Administrative Agreement, terms used in the Administrative Agreement shall have the meaning they have in the Agreement.

#### ARTICLE 2

The liaison agencies established under Article 16.2 of the Agreement and the Competent Agencies referred to in the second sentence of Article 3 of this Administrative Agreement with the participation of the Competent Authorities shall agree jointly upon uniform administrative measures, procedures, and forms for the implementation of the Agreement. The provisions of Article 16.1 of the Agreement shall not be affected.

#### ARTICLE 3

Where German laws do not already make provision to this effect, the liaison agency designated for the Wage Earners' Pension Insurance System shall be responsible within the scope of that system for the determination and award of cash benefits, with the exception of medical, occupational, and supplementary rehabilitation benefits, provided that:

(a) periods of coverage have been completed or are creditable under German and United States laws; or

(b) the person eligible ordinarily resides in the territory of the United States of America; or

(c) the person eligible is a United States national ordinarily residing outside the territories of both Contracting States.

The jurisdiction of the German special institutions ("Sonderanstalten") shall not be affected.

#### ARTICLE 4

1. The Agency of the Contracting State to whose laws on compulsory coverage a person will remain subject in accordance with Article 6 of the Agreement shall issue to the person or his employer a certificate to that effect when requested to do so by the person or his employer.

(a) In the Federal Republic of Germany that certificate shall be issued by the sickness insurance agency to which pension insurance contributions are paid.

(b) In the United States of America the certificate shall be issued by the Social Security Administration.

2. In order to prove that a person is exempt from the laws on compulsory coverage of one Contracting State, it shall be necessary for the person or his employer to present the certificate referred to in paragraph 1 confirming that the person is subject to the laws on compulsory coverage of the other Contracting State.

3. Article 6.2 of the Agreement shall apply to a person if he is transferred from the territory of one Contracting State to the ter-

ritory of the other Contracting State within the context of a pre-existing employment relationship, and the transfer is not expected to be permanent as evidenced by a contract or a written notice from the employer. In cases where the United States laws on compulsory coverage apply in accordance with Article 6.2 of the Agreement, but there is no provision under United States laws for contributions with respect to such coverage, Article 6.1 of the Agreement shall apply.

4. (a) In making a determination concerning an exemption from the laws on compulsory coverage of one Contracting State pursuant to Article 6.3(c)(2) or Article 6.5 of the Agreement, the nature and circumstances of the employment shall be taken into consideration. Before making the determination, the Competent Authority of the other Contracting State shall be given an opportunity to express an opinion; the opinion shall in particular address the issue of whether the person concerned and his employer will be made subject to the laws on compulsory coverage of the other Contracting State.

(b) With regard to the Federal Republic of Germany, if the person is not employed in its territory he shall be deemed to be employed at the place of his last previous employment. If the person was not employed previously in that territory, he shall be deemed to be employed at the place where the German Competent Authority has its seat.

(c) Subparagraphs (a) and (b) shall also apply to self-employed persons.

#### ARTICLE 5

1. The crediting of earnings in any year by the United States Agency under Article 9.3 of the Agreement for periods of coverage creditable under German laws shall be subject to the maximum creditable earnings limitation under United States laws for such year.

2. In applying the Agreement, the United States Agency shall take account of German periods of coverage occurring before 1937 or earnings based on such periods of coverage in accordance with United States laws.

3. (a) In determining eligibility for cash benefits under Article 7.1 of the Agreement, the United States Agency shall credit one quarter of coverage for every three months of coverage certified as creditable by the German Competent Agency to the extent that the months do not coincide with calendar quarters already credited as quarters of coverage under United States laws. The total number of quarters of coverage to be credited for a year shall not exceed four.

(b) In determining eligibility for cash benefits and benefits-in-kind under Article 7.1 of the Agreement, the German Competent Agency shall credit three months of coverage for each quarter of coverage certified as creditable by the United States Agency to the extent that the months in any such quarter of coverage do not coincide with periods of coverage already credited as periods of coverage under German laws.

4. Regarding Article 7.3 of the Agreement, the United States Agency shall consider German periods of coverage which are less than the minimum required by Article 7.2 of the Agreement only if the person is not eligible for a benefit under United States laws without considering such periods of coverage.

5. Article 9.2 of the Agreement shall only apply in cases where eligibility for a benefit under United States laws exists by applying Article 7.1 of the Agreement.

6. Periods of coverage after the computation closing date provided in United States laws shall not be considered in determining the ratio referred to in Article 9.1 of the Agreement.

7. In cases where the theoretical primary insurance amount is determined by reference to the table of benefits contained in section 215(a) of the United States Social Security Act or deemed to be contained in such section, a pro rata primary insurance amount which is not equal to one contained in column IV of that table may be rounded to the nearest primary insurance amount appearing in such column or, if the pro rata primary insurance amount is less than the minimum primary insurance amount in such column, to a primary insurance amount as set forth in a column of amounts below the minimum primary insurance amount down to the amount of \$1.00 in increments to be determined by the United States Competent Authority.

#### ARTICLE 6

1. Benefits awarded by the United States Competent Agency under the provisions of Part II of the Agreement shall be recomputed on its own motion to take into account additional periods of coverage completed under the laws of the United States of America. Benefits awarded by the United States Competent Agency under the provisions of Part II of the Agreement shall be recomputed upon application to take into account additional periods of coverage credited under German laws. Such a recomputation shall be made in the same manner as an automatic recomputation in accordance with the laws of the United States of America. The United States Competent Agency shall recompute benefits based on an earnings record if:

(a) the additional earnings increase the theoretical primary insurance amount on which the current benefit is based, and

(b) the total amount of the benefits payable by the United States Competent Agency based on the earnings record after the recomputation is more than the total payable without the recomputation.

Such recomputation shall not be processed or increase benefit amounts until after the close of the calendar year in which the additional periods of coverage are completed.

2. When an individual is already entitled to a benefit from the United States Competent Agency under Part II of the Agreement and subsequently meets the requirements for receipt of a higher benefit amount from the United States Competent Agency without recourse to Part II of the Agreement, the higher benefit amount shall become payable from the date that the requirements are met.

#### ARTICLE 7

1. An application for cash benefits under the laws of one Contracting State shall also be treated as an application for cash benefits under the laws of the other Contracting State if the application indicates that periods of coverage under the laws of the other Contracting

State are also alleged. Article 14.2 of the Agreement shall remain unaffected.

2. In the application of Article 15 of the Agreement, additional requirements under national statutes for the protection of privacy and confidentiality of personal data shall remain unaffected.

#### ARTICLE 8

1. In the application of Article 14 of the Agreement, applications, appeals, statements, and documents necessary to establish eligibility shall be forwarded without delay by the Competent Agency of a Contracting State to which they have been presented to the liaison agency of the other Contracting State.

2. In the application of Article 9 of the Agreement the following shall apply:

(a) The German Competent Agency shall notify the United States Competent Agency upon its request of the amount of the person's covered earnings in any year during which periods of coverage were completed under German laws, together with a list of the months in the periods of coverage for which contributions were made. The amounts of earnings in a year to be reported by the German Competent Agency shall be derived from the contributions paid during periods of coverage in such year.

(b) For substitute periods (Ersatzzeiten) creditable under German laws, the United States Competent Agency shall take into account earnings which, upon request of the United States Competent Agency, have been certified by the German Competent Agency and which have been determined based on the average gross annual earnings for the year in question of all persons who are covered under the Wage Earners' Pension Insurance System and the Salaried Employees' Pension Insurance System.

(c) Excused periods (Ausfallzeiten) under German laws shall not be considered.

3. In accordance with procedures to be agreed upon pursuant to Article 2, the agencies referred to in Article 2 shall furnish each other available information or copies of documents relating to the claim of any specified individual for the purpose of administering the Agreement or the laws specified in Article 2.1 of the Agreement.

4. Each Agency shall be the final judge of the probative value of documentary evidence presented to it from whatever source. Article 12.2 of the Agreement shall not be affected by this provision.

5. The liaison agencies of the two Contracting States shall exchange statistics on the payments made to beneficiaries under the Agreement for each calendar year in a form to be agreed upon. The data shall include the number and total amount of benefits and commuted lump-sum payments, by type of benefit.

#### ARTICLE 9

The Agency of a Contracting State shall pay any cash benefits due to beneficiaries in the territory of the other Contracting State without recourse to a liaison agency of the other Contracting State.

## ARTICLE 10

1. Where administrative assistance is requested under Article 10 of the Agreement, expenses, other than postage and regular personnel and operating costs of the Competent Authorities, Agencies, and associations of the Agencies providing the assistance, shall be reimbursed.

2. Where the Agency of a Contracting State requires that a claimant or beneficiary submit to a medical examination, such examination, if requested by that Agency, shall be arranged by the Agency of the other Contracting State in which the claimant or beneficiary resides at the expense of the Agency which requests the examination.

3. The Agency of either Contracting State shall furnish to the liaison agency of the other Contracting State at its request and without expense any medical information and documentation relevant to the disability of the claimant or beneficiary which may come into its possession.

## ARTICLE 11

For the purpose of Article 11.2 of the Agreement, the text of the decision or ruling must contain a certification by a body competent to issue such a certification testifying to its enforceability under the laws of the Contracting State in whose territory the certification was issued.

## ARTICLE 12

For the purpose of Article 13.1 of the Agreement, laws governing the recourse to interpreters shall not be affected. Rulings, official notifications, or other documents may be transmitted directly to a person resident in the territory of the other Contracting State by registered letter.

## ARTICLE 13

Where an Agency of one Contracting State is required to make payments to an Agency of the other Contracting State, such payments shall be made in the currency of the other Contracting State.

## ARTICLE 14

The withholding of cash benefits in accordance with Article 18 of the Agreement shall be governed by the laws of the Contracting State whose agency is to withhold the cash benefits.

## ARTICLE 15

The use of information furnished under the Agreement by one Contracting State to another with regard to an individual shall be governed by the respective national statutes for the protection of privacy and confidentiality of personal data.

## ARTICLE 16

1. (a) Pursuant to the provisions of Article 2, paragraph 51a, subparagraphs 2 and 3 of the German Wage-Earners' Pension Insurance (Reform) Act (ArVNG) and of Article 2, paragraph 49a, subpara-



graphs 2 and 3 of the German Salaried Employees' Pension Insurance (Reform) Act (AnVNG), all of which entered into force on October 19, 1972, persons who are persecutees within the meaning of the German Federal Act concerning Compensation for Victims of National Socialist Persecution (BEG), who are United States nationals and who ordinarily reside in the territory of the United States of America may upon application pay retroactive voluntary contributions to the German pension insurance system for the period from January 1, 1956, through December 31, 1973. Such persons shall be deemed to be eligible for voluntary insurance under the German pension insurance system as if they were German nationals.

(b) An application under paragraph (a) of this section may be validly filed within one year after the date specified in the first sentence of Article 18 of this Administrative Agreement. Such an application shall be filed with the German Competent Agency to which the person's last contribution was paid or, if the last contribution was paid to the Miners' Pension Insurance system, with the liaison agency of the Salaried Employees' Pension Insurance system.

(c) The contributions shall be paid directly to the Agency specified in paragraph (b) with which the application was filed.

(d) The contributions may be accepted by the agency concerned in installments over a period of up to three years. Such contributions may be made only up to the German contribution assessment ceiling for monthly earnings of the year 1973. The calculation of the German benefit computation base applicable to the insured persons shall be based on figures for 1973.

(e) Events relevant to eligibility for a benefit under German laws which arise in the period between October 18, 1972, and the date specified in the first sentence of Article 18 of this Administrative Agreement shall not preclude payment of the contributions.

(f) The application of the provisions of this section shall in all other respects be subject to the German transitional laws which entered into force on October 19, 1972.

2. (a) Pursuant to the provisions of Section 10 and Section 10a of the German Act concerning Compensation in Social Insurance for Victims of National Socialist Injustice (WGSVG), persons who are persecutees within the meaning of the German Federal Act concerning Compensation for Victims of National Socialist Persecution (BEG), who ordinarily reside in the territory of the United States of America may upon application pay retroactive contributions to the German pension insurance system.

(b) An application under paragraph (a) of this section may be validly filed within one year after the date specified in the first sentence of Article 18 of this Administrative Agreement.

(c) In applying the provisions specified in paragraph (a) of this section, periods of coverage under United States laws shall be taken into account to the same extent as periods of coverage under German laws for the required period of coverage of 60 calendar months.

(d) Events relevant to eligibility for a benefit under German laws which arise before the end of the first twelve months after the date specified in the first sentence of Article 18 of this Administrative Agreement shall not preclude payment of the contributions.

(e) If a person specified in paragraph (a) of this section has died before the date specified in the first sentence of Article 18 of this

Administrative Agreement, Section 10 subsection 3 and Section 10a subsection 3 of the German Act concerning Compensation in Social Insurance for Victims of National Socialist Injustice (WGSVG) shall apply accordingly.

## ARTICLE 17

This Administrative Agreement shall also apply to Land Berlin, provided that the Government of the Federal Republic of Germany does not make a contrary declaration to the Government of the United States of America within three months after the date of entry into force of this Administrative Agreement.

## ARTICLE 18

This Administrative Agreement shall enter into force on the date on which both Governments will have informed each other that the steps necessary under their national statutes to enable the Administrative Agreement to take effect have been taken. It shall be effective from the date of entry into force of the Agreement.

Done at Washington on June 21, 1978, in duplicate in the English and German languages, both texts being equally authentic.

For the Government of the United States of America:      For the Government of the Federal Republic of Germany:

*Joseph A. Califano Jr.*

*Boris Linder*

(ANNEX A)

U.S.-FRG TOTALIZATION AGREEMENT

AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE FEDERAL REPUBLIC OF GERMANY ON SOCIAL SECURITY

The United States of America and the Federal Republic of Germany,

Being desirous of regulating the relationship between them in the area of social security,

Have agreed as follows:

(27)

ANNOTATIONS AND COMMENTS

The document is described as an "Agreement" with the understanding that it would enter into force for the Federal Republic of Germany (FRG) as a formal treaty subject to parliamentary ratification and for the United States as an executive agreement under authority of section 233 of the Social Security Act. When ratified by both parties, the Agreement would have the effect of law in both countries and would be binding on both countries.

PART I. GENERAL PROVISIONS

ARTICLE 1

For the purpose of this Agreement

1. "Territory" means, as regards the United States of America, the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam and American Samoa, and as regards the Federal Republic of

Article 1 defines the key terms used in the Agreement.

The definition of United States "territory" is identical to the definition of the U.S. in section 210(i) of the Social Security Act.

The FRG "territory" is defined as the area in which the Basic Law of the FRG is in force. The Basic Law is in the nature of a constitution. The territory covered would be

## U.S.-FRG TOTALIZATION AGREEMENT

Germany, the area in which the Basic Law (Grundgesetz) of the Federal Republic of Germany is in force;

2. "Laws" means the laws and regulations concerning the systems of social security specified in Article 2, paragraph 1;

3. "Competent Authority" means, as regards the United States of America, the Secretary of Health, Education, and Welfare, and as regards the Federal Republic of Germany, the Federal Minister of Labor and Social Affairs (Bundesminister für Arbeit und Sozialordnung);

4. "Agency" ("Träger") means the institution or authority responsible for implementing laws specified in Article 2, paragraph 1;

## ANNOTATIONS AND COMMENTS

what is now geographically the Federal Republic of Germany. Under Article 22 the Agreement would apply to West Berlin unless the FRG Government declares otherwise within 3 months of the entry into force of the Agreement.

The term "laws" as used in the Agreement refers specifically to the laws and regulations of each country dealing with social security. Paragraph 2(a) of the Final Protocol makes clear that the Agreement applies to title II of the U.S. Social Security Act and the corresponding tax laws (the Self-Employment Contributions Act of 1954 and the Federal Insurance Contributions Act) and any regulations pertaining to those laws. However, the Agreement would not apply to Medicare provisions (section 226 of the Social Security Act) or provisions for so-called Prouty payments (special payments to uninsured individuals aged 72 or over under section 228 of the Social Security Act). Persons to whom the Agreement applies who qualify independently for Medicare hospital insurance benefits would be entitled to receive such benefits. See also comments on Article 2.1 and paragraphs 1 and 2 of the Final Protocol.

"Competent Authority" as used throughout this Agreement, refers to the Government official in each country who has the ultimate responsibility for administering the social security program, including the provisions of the Agreement.

There are several dozen agencies which are responsible for administering the applicable laws in the FRG. These agencies operate in accordance with FRG law, however,

they are managed not by the Government but by democratically elected boards representing the insured community and employers. Under Article 16.2 of the Agreement, four of these institutions would be responsible for implementing the Agreement on behalf of the Federal Republic of Germany. SSA would be responsible for implementing the agreement on behalf of the United States. However, the U.S. Internal Revenue Service's responsibility for determining social security tax liability in light of SSA coverage determinations under the Agreement would not be affected.

The "competent agency" for each country is the agency which has responsibility for a specific case.

Employment is defined to include both employment and self-employment as they are defined under the laws of each country.

The term "period of coverage" includes any period which is credited under the laws of either country for purposes of determining insured status or benefit eligibility. The term includes periods of covered employment or self-employment as well as any periods of noncontributory or gratuitous coverage.

"Benefit" refers to old-age, survivors, and disability benefits or pensions provided under the social security laws of either country, including the lump-sum death payment under U.S. law, but excluding \* \* \* so-called "Prouty payments" for the uninsured under section 228 of the Social Security Act.

The term "cash benefit" includes a benefit as defined above, and a number of other cash payments provided for under the FRG social security laws.

5. "Competent Agency" means the agency responsible for applying the laws in a specific case.

6. "Employment" means employment or self-employment as defined by the applicable laws;

7. "Period of coverage" ("Versicherungszeit") means a period of payment of contributions or a period of earnings from employment, as defined or recognized as a period of coverage by the laws under which such period has been completed, or any similar period insofar as it is recognized by such laws as equivalent to a period of coverage;

8. "Benefit" ("Rente") means an old-age, dependent, survivor, or disability insurance benefit provided by the applicable laws;

9. "Cash benefit" ("Geldleistung") means a benefit ("Rente") and any other cash payment provided by the applicable laws; and

10. "Benefit-in-kind" ("Sachleistung") means a rehabilitation benefit-in-kind provided by the applicable laws.

## ARTICLE 2

1. For the purpose of this Agreement, the applicable laws are:

(a) As regards the Federal Republic of Germany, laws governing—

Wage Earners' Pension Insurance

Salaries' Pension Insurance

Miners' Pension Insurance

Steelworkers' Supplementary Pension Insurance

Farmers' Old Age Benefits; and

(b) As regards the United States of America, laws covering—

The Federal Old-Age, Survivors and Disability Insurance Program.

2. Laws within the meaning of paragraph 1 of this Article shall not include laws resulting from one Contracting State from other international treaties or supranational legislation, or from laws promulgated for their implementation.

The term "benefit-in-kind" refers to rehabilitation services which are provided under FRG law.

Article 2 specifies the statutory social security systems to which the Agreement would apply. Subsequent articles would provide limitations or exceptions in applying the Agreement to certain laws. For example, the provisions regarding equal treatment would apply to the steelworkers' supplementary pension insurance and farmers' old-age benefits systems of the FRG, but the benefit totalization provisions would not. The laws to which the Agreement would apply are enumerated in this article by description only because the laws of the FRG are too numerous to cite. The applicable laws of the United States are cited specifically in paragraph 2 of the Final Protocol.

The laws to which the Agreement would apply do not include treaties and other supranational legislation (or laws implementing them)—for example, either country's social security agreements with third countries or the European Community or other multilateral agreements to which either country might be a party. The purpose of this provision, which was suggested by the FRG, is to ensure that in cases where a person has periods of coverage in the United States and the FRG and periods of coverage in a third country with which either the United States or the FRG has a social security agreement, periods from all three countries could not be totalized to meet U.S. or FRG benefit eligibility requirements.

Unless otherwise provided, the present Agreement shall apply to:

- (a) nationals of a Contracting State within the meaning of Article XXV, paragraph 6, of the Treaty of Friendship, Commerce and Navigation between the United States of America and the Federal Republic of Germany of October 29, 1954, and of paragraph 22 of the Protocol thereto, with the proviso that henceforth the term "Certificate of Residence" (Heimatschein) shall be replaced by the term "Certificate of Nationality" (Staatsangehörigkeitsschein),
- (b) refugees within the meaning of Article 1 of the Convention on the Status of Refugees dated July 28, 1951 and the Protocol to that Convention dated January 31, 1967,
- (c) stateless persons within the meaning of Article 1 of the Convention on the Status of Stateless Persons dated September 28, 1954,
- (d) other persons with respect to the rights they derive from a national of either Contracting State, from a refugee or a stateless person within the meaning of this Article, and
- (e) nationals of a State other than a Contracting State who are not included among the persons referred to in paragraph (d) of this Article.

## ARTICLE 4

1. Unless otherwise specified in the present Agreement, the persons designated in Article 3 (a), (b), (c) and (d)

Article 3 specifies five categories of persons to whom various provisions of the Agreement would apply: (1) U.S. or FRG nationals, (2) refugees, (3) stateless persons, (4) persons regardless of nationality who derive rights through any of the above, and (5) nationals of other countries.

(For purposes of the Agreement, a "national of a Contracting State" means any persons who is claimed as a national by the U.S. or FRG including, but not limited to, a person who carries the valid passport of that country or other valid identity document designating the person as a national of that country.)

In general, the Agreement would apply to all five categories. However, there would be exceptions to the application of the Agreement with respect to third country nationals under the equal treatment provisions of articles 4 and 5, under paragraph 7 of the Final Protocol, and under article 16 of the Administrative Agreement. The exceptions are discussed under those articles.

Article 4 would provide that the persons specified in article 3 as those to whom the Agreement applies (with the exception of the fifth category) who ordinarily reside in either country would be treated by each country in the

who ordinarily reside in the territory of either Contracting State shall in the application of the laws of one Contracting State receive equal treatment with the nationals of that Contracting State.

2. Nationals of one Contracting State who ordinarily reside outside of the territories of both Contracting States shall be granted the cash benefits and benefits-in-kind provided by the laws of the other Contracting State under the same conditions which the other Contracting State applies to its own nationals who ordinarily reside outside of the territories of both Contracting States.

## ARTICLE 5

Unless otherwise provided in this Agreement, the laws of one Contracting State which require that entitlement to or payment of cash benefits be dependent on residence in the territory of that Contracting State, shall not be applicable to the persons designated in Article 3(a), (b), (c), and (d) who ordinarily reside in the territory of the other Contracting State.

same way as it treats its own nationals. (However, see article 6 for the special rules regarding coverage of employment or self-employment.) If a country treats its nationals abroad differently from its nationals at home, it could treat other persons subject to the Agreement in the same manner.

Also, with respect to benefits each country would treat nationals of the other who live outside both countries the same as it treats its own nationals who live outside both countries.

Article 5 contains provisions relating to payment of benefits outside the paying country. It would provide for benefit payments without any restrictions based on non-residence in the paying country to otherwise qualified residents of the other country who are U.S. or FRG nationals, refugees, stateless persons, or third-country nationals entitled on the record of such nationals, refugees or stateless persons. However, see the limitation in paragraph 4(a) of the Final Protocol. Nationality would no longer affect the payment of benefits, as it now does under U.S. law, with respect to third country nationals residing in the FRG who derive rights from nationals, refugees, or stateless persons. No change would be made by this Agreement in the present U.S. foreign payment provisions applicable



to residents of third countries. Paragraph 4(c) of the Final Protocol extends the application of this article to U.S. laws (such as section 202(t) of the Social Security Act), which make payment of cash benefits dependent on physical presence in U.S. territory.

Article 6 is intended to eliminate dual coverage, i.e., situations where a worker is covered under the laws of both countries with respect to the same services. In cases of dual coverage the service would generally be exempt from coverage under the laws of the country with less direct connection with the worker.

Article 6.1 would establish the territorial basis of compulsory coverage. A person working in one country in employment compulsory covered under that country's system ordinarily would remain covered under that system and would be exempt from coverage under the system of the other country. The balance of the article contains exceptions of this rule.

Under article 6.2 a worker who enters into a contract of employment in one country and later is transferred to work in the other country for the same employer would continue to be covered in the country where the contract of employment was entered into. The place of business of the employer (including his foreign subsidiaries) and the nationality of the worker would be immaterial. The exact duration of the transfer would not have to be specified, but under article 4.3 of the Administrative Agreement, in order for Article 6.2 to apply the transfer would have to be of a temporary nature, as evidenced by a contract or a written notice from the employer. Article 4.3 of the Administrative Agreement also makes clear that Arti-

#### ARTICLE 6

1. Except as otherwise provided in this article, persons who have employment within the territory of one of the Contracting States shall be subject to the laws on compulsory coverage of only that Contracting State even when the employer is located in the territory of the other Contracting State.

2. The employment of a person in the territory of one Contracting State to which he was sent from the territory of the other Contracting State by his employer in that territory shall continue to be subject to the laws on compulsory coverage of only the other Contracting State, as if he were still employed in the territory of the other Contracting State, even when the employer also has a place of business (*Zweigniederlassung*) in the territory of the Contracting State of Employment.

3. In the case of the employment of a person as an officer or member of a crew of a sea-going vessel which has been granted the right to fly the flag of the Federal Republic of Germany, a German aircraft, an American vessel, an American aircraft, a vessel which has been granted the right to fly the flag of the Federal Republic of Germany and is at the same time an American vessel under United States laws, or of an aircraft which is a German aircraft but which is treated as an American aircraft under United States laws, the following rules shall apply with regard to the laws of compulsory coverage:

(a) If the person is subject to the laws of only one of the Contracting States, he shall remain subject to those laws.

(b) If the person is a national of one of the Contracting States and subject to the laws of both Contracting States, he shall be subject only to the laws of the Contracting State of which he is a national.

(c) (1) If the person is a national of both Contracting States or is a member of a group specified in Article 3 (b), (c) or (e) and is subject to the laws of both Contracting States, he shall be subject only to the laws of the Contracting State in whose territory he ordinarily resides.

(2) If he does not ordinarily reside in the territory of either Contracting State, he and his employer may apply for an exemption from the laws on compulsory

coverage and dual liability for contributions would otherwise apply.

Article 6.3 would provide the following special rules for officers and crew of vessels or aircraft which are either German or American or both:

(a) A worker subject to only one country's laws would remain so, regardless of nationality.

(b) A worker who is a national of one country and who would otherwise be subject to both countries' laws would be subject only to the laws of the country of which he is a national.

(c) A worker who is a dual national, refugee, stateless person, or third country national and who ordinarily resides in one of the countries and would otherwise be covered under the laws of both countries would be covered only under the laws of the country of residence.

If he does not ordinarily reside in either country, he and his employer could apply for an exemption from the laws of one country under the procedure in paragraph 5.

coverage of one of the Contracting States under the procedure provided in paragraph 5 of this Article.

(d) A person who is a national of one Contracting State employed on the vessel or aircraft of the other Contracting State and who is not otherwise subject to the laws on compulsory coverage of either Contracting State shall be subject to the laws on compulsory coverage of the other Contracting State.

4. (a) A national of one of the Contracting States employed by that Contracting State in the territory of the other Contracting State shall be subject to the laws on compulsory coverage of only the first Contracting State.

(d) A national of one country employed on the vessel or aircraft of the other country but not subject to the laws of either country could be covered under the laws of the country of nationality of the vessel or aircraft if that country enacts specific legislation authorizing such coverage.

Article 6.4 would provide special rules for government workers of one country working in the other country. Under paragraph 5 (b) and (c) of the Final Protocol, the special rules would apply, in the case of the FRG, to employees of all public employers and, in the case of the United States, to employees of only the Federal Government and its instrumentalities. A national of one country employed by his government in the other country would remain subject to the laws of only the employing country. This general rule would maintain the existing laws of both countries. This means that in a case where an employing country's social security law does not cover an employee, the country would not be obligated to extend social security coverage to the employees, although it could do so. Thus, U.S. Federal Government employees who are covered under the civil service retirement system, the Foreign Service retirement system, or one of the other U.S. Government staff-retirement systems would remain covered under those systems rather than social security.

(b) Where a government employee described in (a) employs a national of his own country who does not ordinarily reside in the country where the employment occurs,

(b) A person who is a national of one of the Contracting States employed in the territory of the other Contracting State, where he does not ordinarily reside, by an em-

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ployee of the first Contracting State who is a national of the first Contracting State shall be subject to the laws on compulsory coverage of only the first Contracting State.

(c) A person who is a national of one of the Contracting States employed in the territory of the other Contracting State where he ordinarily resides, by an employee of the first Contracting State who is a national of the first Contracting State shall be subject to the laws on compulsory coverage of only the other Contracting State.

5. Upon application of a person specified in the preceding paragraphs of this Article, except paragraph 3(c) (2), and his employer, or upon application of a self-employed person, the Competent Authority of the Contracting State from whose laws on compulsory coverage the exemption is desired may grant the exemption, if the person and his employer, or the self-employed person, will be subject to the laws on compulsory coverage of the other Contracting State.

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only the law of the country of nationality would apply. This rule also would generally maintain national law.

(c) If the employee of a government employee of one country is employed in and ordinarily resides in the other country, he would be subject to the laws of the country where he works and resides.

Both paragraphs 4(b) and 4(c) will apply almost exclusively to domestic employment.

Under article 6.5 either country could at its discretion grant an exemption from coverage under its system to any worker (other than a worker to whom article 6.3(c) (2) applies and for whom an identical election procedure would be provided) if both the employee and his employer (or a self-employed person) requests the exemption, and if the worker and employer would both be subject to the laws on compulsory coverage of the other country. Under paragraph 5(d) of the Final Protocol such an election would not be available to U.S. nationals who reside in the United States. Article 4.4 of the Administrative Agreement would provide additional guidelines for the granting of an exemption under articles 6.3(c) (2) and 6.5 of the Agreement.

Part II establishes the basic rules for determining entitlement when an individual has worked in both countries, and the rules for determining benefit amounts where benefit eligibility is based on combined credits.

Article 7 would provide for totalization of periods of coverage where a worker is credited with periods of coverage in both countries. In determining eligibility for bene-

## PART II. BENEFIT INSURANCE SYSTEM

### ARTICLE 7

1. Where periods of coverage have been completed under the laws of both Contracting States, the Agency which determines the entitlement to cash benefits and benefits-in-

fits each country would take into account periods of coverage which are creditable under the laws of the other country and which were not already credited under its own laws. No determination would be made whether a period of coverage based on work in one country would have been a period of coverage in the same country if the work had been performed there. See article 5.3 of the Administrative Agreement for additional rules on how a country would credit periods of coverage from the other country.

A benefit based on totalized credits would not be granted by a country under the agreement unless a minimum period of coverage had been completed under that country's laws (6 quarters of coverage under U.S. law or 18 months under FRG law). A benefit based on totalization also would not be granted if a worker's periods of coverage under that country's system alone entitled him to a benefit under that system. (This provision is based on the great probability that pro rata benefits which result from totalization would not be advantageous to anyone who is insured under national law.) However, see the exception to this rule with respect to the FRG in article 7.3.

Under article 7.3(a), if a worker meets the minimum period of coverage requirement (as described in article 7.2) in one country but not the other, the country in which

coverage credited under its own laws.

2. This Agreement shall not result in entitlement to a benefit under the laws of a Contracting State unless a minimum period of coverage has been completed by a person under its laws and the completed period of coverage alone does not result in entitlement to benefits. In the application of United States laws, periods of coverage totaling 6 quarters of coverage shall be the required minimum, and, in the application of German laws, periods of coverage totaling 18 months shall be the required minimum.

3. Where a person's periods of coverage are less than the minimum period required by paragraph 2 of this Article under the laws on one Contracting State, those periods of coverage, whether or not consecutive, shall nevertheless be considered by the Agency of the other Contracting State for purposes of the computation of a benefit, as if they were periods of coverage under its own laws, provided that

(a) the person has the minimum period required by paragraph 2 under the laws of the other Contracting State and has entitlement for benefits with or without

the application of paragraph 1 of this Article under the laws of the other Contracting State, or

(b) the person is entitled to benefits under the laws of the other Contracting State with less than the minimum period required by paragraph 2.

he meets the minimum requirement must consider any periods acquired in the other for purposes of computing benefits. This provision, taken in conjunction with article 8.2, would permit the FRG to add U.S. periods of less than 6 quarters of coverage to the FRG months of coverage in determining the percentage of final average indexed earnings that would be payable under the FRG system. (See the annotation to article 8.2 for a description of the FRG benefit formula.) This paragraph would have no effect under U.S. law. Under article 5.4 of the Administrative Agreement the provision would not apply with respect to the United States in cases where a person is entitled to a benefit under U.S. law without the application of article 7.1, i.e., without totalization of coverage credits. Where a person needs the application of paragraph 1 of article 7 to become entitled to U.S. benefits, that paragraph itself already provides for the taking into account of FRG periods of coverage without regard to their duration.

Under article 7.3(b), if a worker has less than the minimum required in both countries, but is nevertheless entitled to benefits in one country, that country would take into account the periods in the other country which are less than the minimum. A worker can be entitled to FRG benefits with less than 18 months of coverage. Since under paragraph 6(c) of the Final Protocol this provision would not apply in the case of a worker entitled to transitional benefits under section 227 of the Social Security Act, and others cannot become entitled with less than 6 quarters of coverage, it would have no effect on U.S. law. These provisions were included at the request of the FRG.

The following provisions shall apply to the Federal Republic of Germany:

1. The periods of coverage to be considered in accordance with Article 7 shall be taken into account by the insurance system whose Agency is competent for determining a person's benefit if only the German laws were applied. If under this provision the Competent Agency is the Miners' Pension Insurance system, the periods of coverage completed under United States laws shall be taken into account by the Miners' Pension Insurance system if the periods were completed underground in a mine.

2. Periods of coverage completed under United States laws which are to be considered by the Competent Agency for the computation of the benefit payable by it, in accordance with Article 7, paragraph 3, shall only increase the number of creditable insurance years under German laws.

Article 8 contains special rules on the implementation of article 7 which would apply only to the FRG. These rules, as well as those contained in article 9, which would apply only to the United States, were developed to accommodate basic differences in the social security systems of the two countries.

Under FRG law, the particular FRG social security system—white collar, blue collar, miner's, etc.—which has jurisdiction over a specific claim is generally the one under which the person was last covered. This rule would also apply under the Agreement. The miners' pension insurance system would only take account of periods of coverage in the U.S. that were completed underground in a mine. It would be the claimant's responsibility to satisfy the miners' system that the periods completed in the U.S. met this requirement; the U.S. system would not be expected to assist the claimant in obtaining this information. If a worker fails to qualify for a miner's pension after totalization, his U.S. and FRG credits would be transferable to one of the two general FRG systems. (The FRG has given assurance that under FRG law, any claim referred to an agency not competent to deal with that claim would be referred by that agency to the proper agency.)

Under the FRG system, benefit amounts are generally computed by multiplying lifetime average indexed earnings times a fixed percentage (1.5% for retirement or total disability benefits, 1% for occupational disability benefits) for every year of coverage. For example, if a worker retires with average indexed earnings of DM 20,000 after 40 years of coverage his annual retirement benefit at age 65 would equal  $DM\ 20,000 \times 1.5\% \times 40 = DM\ 12,000$ . Paragraph 2 explains how article 7.3 will be applied in relation to this

benefit formula. In any case where article 7.3 applies, a period of less than 6 quarters of coverage in the U.S. would be used by the FRG only to increase the percent of final average indexed earnings payable as benefits, but not to increase the amount of the average. See article 8.3 below for an explanation of the general rule for use of U.S. periods of coverage by the FRG.

Under article 8.3, in determining the final average indexed earnings for an individual under the FRG benefit formula (see preceding paragraph); the FRG would consider only German periods of coverage and German covered earnings in those periods. Under the FRG benefit formula, which has no weighting of benefits paid at lower earnings levels and no minimum benefit, a computation based on the actual work record in the FRG results in a fair reflection of what would be achieved by prorating a benefit based on combined records and is a much simpler operation.

Under FRG law if a person becomes disabled before reaching age 55, benefits are computed using deemed periods of coverage from the date of disability onset to age 55. Under article 8.4, if a person is only insured under FRG law by using U.S. periods of coverage under the provisions of article 7.1, the FRG would only be required to give credit for half the deemed periods of coverage.

The FRG system pays children's supplements equal to a flat percentage of the national average annual covered wage. Under article 7.5, if a child's benefit is payable under FRG law without taking account of U.S. coverage and no child's benefit is payable under U.S. law, the FRG would pay the full child's supplement. If a child's benefit is pay-

3. In determining the benefit computation base (Rentenebensungsgrundlage), only periods of coverage considered under German laws shall be taken into account.

4. If the requirements for entitlement to a benefit are met only by applying the provisions of Article 7, paragraph 1, only half of the benefit amount which is attributable to deemed periods of coverage (Zurechnungszeit) shall be payable.

5. The following rules shall apply where an amount is payable as a supplement to a child; these rules shall also apply if the child's supplement is an integral part of the orphan's pension:

(a) If a supplement is payable under German laws without the application of Article 7, paragraph 1, but



no child's insurance benefit is payable under United States laws, the supplement shall be payable in full.

(b) If a supplement is payable under German laws with or without the application of Article 7, paragraph 1, and a child's insurance benefit is payable under United States laws, one-half of the supplement shall be payable.

(c) If a supplement is payable under German laws only with the application of Article 7, paragraph 1, and no child's insurance benefit is payable under United States laws, one-half of the supplement shall be payable.

6. For purposes of terminating the right to the compensatory cash benefit for a miner who has been separated from his mining occupation (Knappschaftsausgleichsleistung), a United States mining establishment shall be treated as equivalent to a German mining establishment.

7. In the case of a self-employed craftsman, whose liability status for compulsory coverage is conditional upon payment of a minimum number of contributions, periods of coverage completed under United States laws shall be taken into account to determine whether the craftsman is liable.

ARTICLE 9

The following provisions shall apply to the United States of America:

1. Where there is eligibility for a benefit under United States laws by applying Article 7, paragraph 1, the competent Agency shall first compute a theoretical Primary

able under U.S. law and an FRG child's supplement is payable with or without totalization, the FRG would pay one-half of the child's supplement. If a supplement is payable under FRG law only by totalizing with U.S. periods of coverage and no child's benefit is payable under U.S. law, the FRG would also pay one-half of the child's supplement.

Under article 8.6, employment in a U.S. mine would be treated as employment in an FRG mine for determining continued eligibility of a worker for special benefits provided for FRG miners who have become unemployed.

Social security coverage of self-employed craftsmen under FRG law is not compulsory after they have made 16 monthly contributions. Under article 8.7 the FRG would take into account periods of coverage under U.S. law for the purpose of determining whether the required number of contributions has been made.

Article 9 would provide special rules for the United States for computing benefits on the basis of totalization. Where a worker is insured for a benefit under U.S. law, he would not be given an option to receive a benefit under totalization.

Where totalization is necessary to establish eligibility, the United States would compute a theoretical Primary Insurance Amount (PIA) taking account of earnings

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Insurance Amount taking into consideration the periods of coverage completed under the laws of the two Contracting States as if all these periods of coverage had been completed under United States laws. The Competent Agency shall then compute a pro rata Primary Insurance Amount based on the ratio of the total periods of coverage completed under United States laws to the total periods of coverage completed under the laws of the two Contracting States. Any benefits payable under United States laws on the basis of an earnings record where a pro rata Primary Insurance Amount has been computed will be paid on the basis of that pro rata Primary Insurance Amount.

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covered under the U.S. system and the dollar equivalent of earnings resulting from periods of coverage completed under the laws of the FRG. (There would be excluded from the calculation of a U.S. theoretical benefit amount any periods not actually completed under FRG law but considered under it for computation or insurance purposes, e.g., periods completed at places outside the present territory of the FRG.) The theoretical PIA would then be prorated, for purposes of determining the amount of the U.S. payment, on the basis of the ratio of periods completed in the United States to the total periods completed in both countries. The pro rata PIA would be the basis of all social security benefits payable under the Agreement on a worker's record by the U.S. See also articles 5.6 and 8.2 of the Administrative Agreement for additional procedures for the computation of the pro rata benefits by the United States.

This pro rata benefit computation formula is necessary to insure the payment of benefits that accurately reflect the proportion of a worker's total work in both countries that was completed in the United States. If the United States took into account only earnings and periods of coverage in the U.S. to determine benefit amounts under the agreement (following the simplified FRG procedure) the worker's average credited earnings would be artificially low. Excessive benefits would result because of the weighting under U.S. law of benefits that are based on low earnings levels and the provision in the U.S. law for minimum benefits.

Under article 9.2 a period of total disability under FRG law would be treated the same as a period of disability under U.S. law for determining the number of quarters of coverage a worker needs to be fully or currently insured under the U.S. system. Also, a period of total disability under FRG law would be excluded on the same basis as a period of disability under U.S. law in determining a worker's average earnings for benefit computation purposes. However, under Article 5.5 of the Administrative Agreement a German period of disability will be given the effect specified in Article 9.2 only if the person is eligible for U.S. benefits based on totalization.

In computing the theoretical PIA provided in article 9.1, the U.S. would take into account the dollar equivalent of a worker's covered earnings in the FRG together with covered U.S. earnings. Under article 5.1 of the Administrative Agreement the crediting of German earnings would be subject to the maximum creditable earnings limitation under U.S. law for the year.

Article 10 would provide authority for nonreimbursable reciprocal assistance between the countries in applying the Agreement and each country's laws. This article is subject to any exceptions in administrative agreements concluded by the parties under article 16.1. See, for example, article 10 of the Administrative Agreement for additional provisions on the reimbursement of expenses incurred in providing interagency assistance.

2. Periods during which a person was determined by a Competent German Agency to be totally disabled under German laws shall, when it is to his advantage, be excluded in determining whether he meets the insured status requirements under United States laws and in computing a Primary Insurance Amount under this Agreement.

3. For the purposes of computing a person's theoretical Primary Insurance Amount, the Competent Agency shall take into account, if it is to his advantage, his earnings in any year during periods of coverage completed under German laws, as if they had been completed under United States laws.

### PART III. MISCELLANEOUS PROVISIONS

#### Chapter 1—Administrative Cooperation

##### ARTICLE 10

The Competent Authorities, Agencies and associations of the Agencies of the Contracting States shall assist each other in applying this Agreement and in implementing each other's laws as if they were applying their own laws. This assistance shall be free of charge subject to exceptions to be agreed upon by the Contracting States.

## ARTICLE 11

1. A final decision of a Court or a ruling by a Competent Authority or an Agency of a Contracting State, concerning a matter arising under its laws, which is enforceable under its laws, shall be recognized by the other Contracting State. A Contracting State may refuse recognition if the decision or ruling is contrary to its public policy including its requirements for due process of law.

2. The final decisions and rulings referred to in paragraph 1 shall be enforced under the laws specified in Article 2, paragraph 1, in the territory of the Contracting State in which the decisions or rulings are recognized.

## ARTICLE 12

1. Where the laws of a Contracting State provide that any document which is submitted to the Competent Authority or an Agency of that Contracting State shall be exempted, wholly or partly, from fees or charges, including consular and administrative fees, the exemption shall also apply to documents which are submitted to the Competent Authority or an Agency of the other Contracting State in accordance with the laws.

2. A document or a copy of a document certified as authentic which is accepted as authentic by the Competent

Article 11 would require each country to recognize the validity of the judicial and administrative decisions of the other country involving the other country's social security laws specified in article 2.1, unless such decisions are contrary to its own public policy.

Paragraph 2 is intended to guarantee to each country the right to seek enforcement of its social security decisions through the courts of the other country. Under U.S. law and court procedures, foreign governments already have access to the courts, though each court decides (and under the Agreement would continue to decide) who has standing to bring suit before it. See article 11 of the Administrative Agreement requiring a certification of enforceability on the text of the decision or ruling.

Article 12 concerns the treatment of documents which are transmitted from one country to the other by or on behalf of a claimant or beneficiary. If the laws of one country exempt documents from legal fees, this exemption would also apply to any documents which are sent to the other country or by or on behalf of a claimant or beneficiary.

If an agency of one country certifies that a document is authentic, the other country would accept it as authentic

Authority or an Agency of one Contracting State shall be accepted as authentic by the Competent Authority or an Agency of the other Contracting State without further certification.

#### ARTICLE 13

1. The Competent Authorities and the Agencies of the Contracting States may correspond directly with each other and with any person wherever he may reside whenever it is necessary for the administration of this Agreement. The correspondence may be in the writer's official language.

2. An application or document may not be rejected by a Competent Authority or an Agency because it is in the official language of the other Contracting State.

#### ARTICLE 14

1. An application in writing or other document presented to the Competent Authority or an Agency of a Contracting State shall have the same effect as if it were presented to the Competent Authority or an Agency of the other Contracting State.

2. A person who files an application for cash benefits under the laws of a Contracting State may request that it not be treated as an application for cash benefits under the laws of the other Contracting State, or that it be effective on a different date in the other Contracting State,

without further certification. However, under Article 8.4 of the Administrative Agreement, the fact that a country accepts the authenticity of a document would not necessarily mean that it accepts the factual accuracy of the document. Rather, the agency of each country would remain the final judge of the probative value of documents submitted to it from whatever source.

Article 13 would provide for direct correspondence between the administrative agencies of the two countries and between the administrative agencies and any person with whom they may need to communicate.

The agencies of each country would accept applications or documents in either English or German.

Under article 14, a written application or other document submitted to one country would be given the same effect as if it had been submitted simultaneously to both countries. Under article 7.1 of the Administrative Agreement, an application for benefits with one country would be considered an application for benefits from both countries, only if a claimant alleges periods of coverage under the laws of both countries.

A claimant would be permitted to specify that his application to one country not be considered an application to the other or that the application be given a different effective date in the other country within the limits of the other country's laws.

within the limitations of and in conformity with the laws of the other Contracting State.

## ARTICLE 15

The consular officers of a Contracting State at diplomatic or consular posts in the territory of the other Contracting State, at the request of a person who is a national of the first Contracting State, may take measures necessary to safeguard and maintain the rights of that person. The person's authorization need not be proven.

## Chapter 2—Implementation of the Agreement

## ARTICLE 16

1. The Competent Authorities of the Contracting States shall, by mutual agreement, establish administrative procedures which are required to implement this Agreement. They shall inform each other of any amendments or additions to their laws.

2. Liaison agencies designated for the implementation of this Agreement are:

- (a) In the Federal Republic of Germany—  
 (1) for the Wage Earners' Pension Insurance system, the Landesversicherungsanstalt Freie und Hansestadt Hamburg (Regional Insurance Institution for Hamburg), Hamburg,  
 (2) for the Salaried Employees' Pension Insurance system, the Bundesversicherungsanstalt für

Article 15 would authorize diplomatic and consular authorities to deal directly with the administrative agency of the other country and to take other measures when necessary to safeguard the interests of their own nationals. See also article 7.2 of the Administrative Agreement which provide that privacy requirements of each country's law would continue to apply with respect to requests for information by these authorities.

Article 16.1 would obligate the two countries to negotiate such administrative agreements as may be necessary to implement the present Agreement and to notify each other of any changes in their social security laws or regulations.

Article 16.2 lists the liaison agencies for both countries. Claims for benefits from one country which are filed in the other country would be forwarded to a liaison agency in the other country. In general the liaison agency for a particular claim also would be the agency competent for processing the claim; however, see article 3 of the Administrative Agreement for an exception to this arrangement. For a particular case, there would be only one competent agency in each country. If a claim from the U.S. Social Security

Administration is sent to the wrong FRG liaison agency, that agency would be responsible under FRG law for forwarding it to the correct agency.

Article 17 would authorize payment of benefits by each country to beneficiaries in the other country in either U.S. dollars or German marks. Currency conversions would be made at the exchange rate in force on the day the benefit check was issued.

Article 18 would authorize recovery through adjustment of one country's benefit payments of overpayments made by the other country. Article 14 of the Administrative Agreement provides that any recovery action under this provision by one country of the other country's overpayments will be governed by the law of the recovering country. It now appears that provisions of U.S. law—particularly sections 205(i) and 207 of the Social Security Act will not permit recovery by the U.S. of any FRG overpayments. As a result this article is likely to have little effect.

- Angestellte (Federal Insurance Institution for Salaried Employees), Berlin,  
 (3) for the Miners' Pension Insurance system, the Bundesknappschaft (Federal Miners' Insurance Institution), Bochum, and  
 (4) for the Steelworkers' Supplementary Pension Insurance system, the Bundesversicherungsanstalt für das Saarland (Regional Insurance Institution for the Saarland), Saarbrücken,  
 (b) In the United States of America—the Social Security Administration.

#### ARTICLE 17

An Agency of a Contracting State may validly pay cash benefits to a person in the territory of the other Contracting State in the currency of its own State or of the other Contracting State. If the cash benefits are paid in the currency of the other Contracting State, the currency conversion shall be at the exchange rate in force on the day the remittance is made.

#### ARTICLE 18

1. (a) Where a German Agency has made an overpayment of cash benefits to a person, the amount of the overpayment *may be* withheld for the account of the German Agency by the United States Agency from a cash benefit payable by it on the earnings record of the same person, within the limits of the United States laws.  
 (b) In case of payment of an advance or provisional cash benefit to a person by a German Agency which is more than the amount due, the United States Agency shall

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withhold for the account of the Germany Agency an amount equal to the excess amount paid from any cash benefits payable by it on the earnings record of this same person.

2. (a) Where the United States Agency has made an overpayment of cash benefits on the earnings record (Versicherungskonto) of a person, the amount of the overpayment may be withheld for the account of the United States Agency by a German Agency from a cash benefit payable by it to the same person, within the limits of the German laws.

(b) In case of payment of an advance or provisional cash benefit on the earnings record (Versicherungskonto) of a person by the United States Agency which is more than the amount due, a German Agency shall withhold for the account of the United States Agency an amount equal to the excess amount paid from any cash benefits payable by it to the same person.

### ARTICLE 19

1. Disagreements between the two Contracting States regarding the interpretation or implementation of this Agreement shall, as far as possible, be settled by the Competent Authorities.

2. If a disagreement cannot be resolved by the Competent Authorities it shall, at the request by either Contracting State, be submitted for arbitration in accordance with the following procedures:

Article 19.1 would obligate each country to attempt to resolve any dispute between them regarding the Agreement through direct consultation or negotiation.

Article 19.2 would provide for the establishment of a binding arbitral body in any case where disagreements could not be resolved by the countries. The arbitral body would be composed of one member appointed by each



country and a chairman agreed upon by both who would be a citizen of a third NATO country. If one country fails to make the necessary appointments within the prescribed time period, the other country could request the Secretary General of NATO to make the appointments. The decisions of the arbitral body would be binding only on the administrative agencies of both countries (and only for purposes of the question referred to the arbitral body) so that the right of a claimant to seek judicial review provided under the national law of either country would not be impaired.

(a) An arbitration board shall be established on an ad hoc basis with each Contracting State appointing one member, and both members agreeing on a citizen from a third North Atlantic Treaty Organization member state as chairman who shall be appointed by the governments of the two Contracting States. The members shall be appointed within two months, and the chairman within three months, after one Contracting State has informed the other that it will refer the dispute to an arbitration board.

(b) If the deadlines mentioned in paragraph 2(a) are not met, each Contracting State may, in the absence of other agreements, as the Secretary General of the North Atlantic Treaty Organization to make the necessary appointments. If the Secretary General is a national of one of the Contracting States or is prevented from acting for another reason, the Deputy Secretary General shall make the appointments. In case the Deputy Secretary General also is a national of one of the two Contracting States or is prevented from acting for another reason, the next Assistant Secretary General following in rank by protocol who is not a national of one the two Contracting States and who is not prevented from acting for another reason, shall make the appointments.

(c) The arbitration board shall make its decision by majority vote on the basis of the agreements existing between the parties and general international law. Its decisions shall be binding on both Contracting States. Each Contracting State shall bear the cost for its member, as well as for its representation in the proceedings before the arbitration board; the cost for

the chairman as well as other expenses, shall be shared equally between the Contracting States. The arbitration board can make a different decision concerning the allocation of expenses. In all other respects the arbitration board shall establish its own rules of procedure.

#### PART IV. TRANSITIONAL AND FINAL PROVISIONS

##### ARTICLE 20

1. This Agreement shall not establish any claim to payment of cash benefits for any period before its entry into force.

2. In the implementation of this Agreement, consideration shall also be given to periods of coverage and other events relevant under the laws occurring before the entry into force of this Agreement.

3. Determinations made before the entry into force of this Agreement shall not affect rights arising under it.

4. Cash benefits to which there was entitlement before the entry into force of this Agreement may be recomputed under its provisions. At least the amount of the cash benefits previously payable shall continue to be payable after the recomputation.

Article 20.1 would provide that no benefits would be payable under the Agreement for periods prior to its effective date.

Under article 20.2, periods of coverage and other events material to a case which occur prior to the effective date of the Agreement would be considered in applying the Agreement. However, under article 5.2 of the Administrative Agreement the crediting by the United States of FRG periods of coverage prior to 1937 would be governed by U.S. law—thus in effect excluding the crediting of such pre-1937 periods.

A determination of entitlement or a denial of a claim prior to the effective date of the Agreement would not prevent a claimant from filing a new application for benefits under the Agreement.

Since article 7.2 generally precludes the payment of benefits by a country based on totalization if a person is entitled to benefits from that country under national law, this provision would only be applicable in a few limited cases, and only with respect to FRG benefits, e.g., where the FRG can recompute benefits under article 7.3 based on periods of coverage in the U.S. which are less than the minimum (6 quarters of coverage) required to qualify for totalization by the U.S., or to include additional periods

of coverage which result from voluntary contributions under paragraph 7 of the Final Protocol. The FRG could recompute benefits in force on the effective date to take account of rights added by the agreement, but only to increase and not to reduce benefit amounts:

#### ARTICLE 21

The attached Final Protocol shall form an integral part of this Agreement.

Article 21 would make the Final Protocol an integral part of the Agreement.

#### ARTICLE 22

This Agreement shall also apply to Land Berlin, provided that the Government of the Federal Republic of Germany does not make a contrary declaration to the Government of the United States of America within three months of the date of entry into force of this Agreement.

Article 22 is a standard clause in agreements entered into by the FRG imposed by the Allied occupation authorities. The FRG must obtain approval of the West Berlin occupation authorities to apply an agreement to West Berlin.

#### ARTICLE 23

1. This Agreement shall be ratified, and the instruments of ratification shall be exchanged as soon as possible in Bonn.

Article 23 provides for the ratification of the Agreement by the two countries. Each country shall follow its own constitutional problems for approval of the Agreement. The instruments of ratification are to be exchanged in Bonn and the Agreement is to be effective with the second month following this exchange.

2. This Agreement shall enter into force on the first day of the second month following the month in which the instruments of ratification are exchanged.

#### ARTICLE 24

1. This Agreement shall remain in force and effect until the expiration of one calendar year following the year in which written notice of its denunciation is given by one of the Contracting States to the other Contracting State.

Article 24.1 would provide for the Agreement to remain in effect until the expiration of 1 calendar year after notice of termination is given by one of the countries.

Article 24.2 would provide that, in the event of termination of the Agreement, a person would retain benefit rights acquired before termination; supplementary agreements

2. If this Agreement is terminated by denunciation, rights regarding entitlement to or payment of cash benefits acquired under it shall be retained, rights in the process of being acquired shall be recognized in conformity with supplementary agreements.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed the present Agreement and affixed thereto their seals.

DONE at Washington on January 7, 1976, in duplicate in the English and German languages, both texts being equally authentic.

For the United States of America:

DAVID MATHEWS.

For the Federal Republic of Germany:

VON STADEN.

WALTER ARENDT.

FINAL PROTOCOL TO THE AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE FEDERAL REPUBLIC OF GERMANY ON SOCIAL SECURITY

At the time of signing the Agreement on Social Security concluded this day between the United States of America and the Federal Republic of Germany, the plenipotentiaries of both Contracting States stated that they are in agreement on the following points:

1. With reference to Article 1, paragraph 2, of the Agreement: The term "laws" shall include the regulations adopted by the German Agencies (Träger) relating to the

would determine the extent to which each country would recognize benefit rights in the process of being acquired at the time of termination—for example periods of coverage which had not yet resulted in a fully insured status.

The Final Protocol, which under the terms of article 21 forms an integral part of the Agreement, contains provisions which are for the most part unilateral commitments or reservations to the Agreement.

The regulations or by-laws of FRG agencies would be included in the definition of "laws" (article 1.3). Although the FRG agencies are democratically controlled organi-

systems of social security specified in Article 2, paragraph 1, of the Agreement.

2. With reference to Article 2 of the Agreement:

(a) Regarding Article 2, paragraph 1(b), of the Agreement, with respect to the United States of America, the laws governing the Federal Old-Age, Survivors and Disability Insurance Program are title II of the Social Security Act of 1935, as amended, and regulations promulgated under the authority provided therein, except sections 226 and 228 of that title and regulations pertaining to those sections, and Chapter 2 and 21 of the Internal Revenue Code of 1954 as amended.

(b) Part II of the Agreement shall not apply to the Steelworkers' Supplementary Pension Insurance system or to the Farmers' Old-Age Benefit system of the Federal Republic of Germany.

(c) If under the laws of one of the Contracting States the requirements for the application of another Convention or supranational regulation are fulfilled in addition to the requirements for the application of this Agreement, the Agency of this Contracting State shall disregard the other Convention or supranational regulation when applying this Agreement.

zations independent of the FRG government, their regulations or by-laws are an integral part of FRG laws and regulations governing the systems of social security referred to in article 2.1.

The U.S. social security laws to which the Agreement would apply are specified as title II of the Social Security Act and the corresponding tax laws (the Self-Employment Contributions Act of 1954 and the Federal Insurance Contributions Act) and any regulations pertaining to those laws. However, the Agreement would not apply to Medicare provisions or provisions for so-called Prouty payments (special payments to uninsured individuals aged 72 or over).

Totalization would not apply to the FRG supplementary pension system for steelworkers or to the FRG old-age assistance program for self-employed farmers. Steelworkers are also generally covered under the FRG general system for manual workers. Therefore, their periods of coverage under this system would still be considered for totalization. The FRG system for self-employed farmers, though contributory, is not an insurance system and payment is based on need. If a farmer has credits under a general system these could be totalized.

The Agreement would prohibit the U.S. or the FRG from totalizing credits from the other country with credits from a third country. Totalizing with third countries would seriously complicate the coordination of certain benefits which are arbitrarily reduced under the Agreement (e.g., children's supplements under article 8.5). This provision is also intended to make clear that if a person quali-

fies for a benefit under this Agreement as well as for a lower benefit under any other Agreement either the U.S. or FRG has with a third country, then the U.S. or FRG need only pay the higher benefit amount. U.S. regulations will similarly provide that if a person qualifies for a U.S. benefit under the U.S.-FRG agreement as well as a higher U.S. benefit under an agreement with a third country, only the higher benefit will be paid.

Although the Agreement generally would not apply to treaties or other supranational legislation, it would take into account any provision of treaties or supranational legislation or domestic legislation of the FRG which divided the assets and liabilities of former German social security systems among new or reestablished countries. International agreements of this kind were entered into after both World Wars.

The FRG would not be required to provide equal treatment for non-FRG nationals if this would affect the application of treaties apportioning the assets and liabilities of former German social security systems.

The provision of FRG law that limits the right to become an officer or director of a self-governing FRG social insurance system to FRG nationals would be maintained.

Under paragraph 4 (a), article 5 of the Agreement would not affect the application of those provisions of FRG law which require a person to reside in the FRG in order to receive benefits based on insurance credits considered by

(d) Article 2, paragraph 2, of the Agreement and paragraph 2(c) of this Protocol shall not apply if the social security laws resulting from the Federal Republic of Germany from international treaties or supranational law or designed to implement such treaties or law contain provisions relating to the apportionment of insurance burdens.

3. With reference to Article 4 of the Agreement:

(a) Provisions relating to the apportionment of insurance burdens that may be contained in international treaties shall not be affected.

(b) German laws which guarantee participation of the insured and of the employers in the organs of self-government of the agencies and of their associations as well as in the adjudication of social security matters shall remain unaffected.

4. With reference to Article 5 of the Agreement:

(a) The German laws regarding cash benefits in respect of periods of coverage accumulated other than under federal law shall remain unaffected.

(b) German laws concerning the granting of medical, occupational and supplementary rehabilitation measures by the Agencies of the Pension Insurance system shall remain unaffected.

(c) Article 5 of the Agreement shall also apply to United States laws under which payment of cash benefits is made dependent on physical presence in the territory of the United States.

5. With reference to Article 6 of the Agreement:

(a) Article 6 of the Agreement shall also apply to persons who are treated as employees under the laws specified in Article 2, paragraph 1(a), of the Agreement.

(b) Article 6, paragraph 4, of the Agreement shall apply to an employee of any German public employer.

(c) With respect to the United States of America, the term "employed by that Contracting State" in Article 6, paragraph 4(a), of the Agreement shall mean employed by the Federal Government or one of its instrumentalities, and the term "employee of the first Contracting State" in Article 6, paragraph 4, (b) and (c), of the Agreement shall mean an employee of the Federal Government or one of its instrumentalities.

the FRG system but not completed under FRG law (e.g., certain credits granted for employment in territory which is now under communist control).

The FRG would not be required to provide medical, occupational, or supplementary rehabilitation measures to people residing in the United States.

Paragraph 4(c) would specify that the requirement of article 5 that each country pay benefits to beneficiaries in the other country without restriction based on residence would also apply to the alien nonpayment provision of section 202(t) of the Social Security Act.

Under paragraph 5(a), the provisions of the Agreement for elimination of dual coverage would also apply to persons who are deemed to be employees under the social security laws of the FRG (for example, unpaid apprentices).

Under paragraph 5(b), article 6.4 of the Agreement (dealing with coverage of governmental employees of one country employed in the other country) would apply to employees of any FRG public employer, including government enterprises (for example, the FRG railways).

With respect to the United States, article 6.4(a) of the Agreement would apply only to employees of the U.S. Government and its instrumentalities.

## U.S.-FRG TOTALIZATION AGREEMENT

(d) Article 6, paragraph 5, of the Agreement shall not apply to exemptions from United States laws of the United States nationals who ordinarily reside in the territory of the United States of America.

### 6. With reference to Article 7 of the Agreement:

(a) Periods of coverage completed under United States laws shall not be taken into account for the grant of increments (Leistungszuschlag) provided under German laws governing the Miners' Pension Insurance system.

(b) Under German pension insurance, Article 7, paragraph 1, of the Agreement shall apply mutatis mutandis to cash benefits and benefits-in-kind which may be granted at the discretion of the Agency.

(c) Notwithstanding Article 7, paragraph 3, of the Agreement, the United States Agency shall not be required to take account of periods of coverage completed under German laws in the case of any person who is entitled to transitional benefits on the basis of Section 227 of the United States Social Security Act.

### 7. With reference to Article 8 of the Agreement:

(a) Where under German laws the receipt of benefit entails exemption from compulsory insurance and preclusion from voluntary insurance, receipt of a corresponding benefit under the laws of the United States shall have the same effect.

## ANNOTATIONS AND COMMENTS

U.S. nationals ordinarily residing in the United States would not have the right to elect coverage under the FRG system in lieu of their coverage under the U.S. system.

U.S. periods of coverage would not be taken into account in determining entitlement to supplements paid to FRG miners to encourage entry into and continued service in a mining occupation. This provision would not affect the application of totalization in determining regular pensions.

Periods of coverage in both countries would be used to determine eligibility for certain benefits which may be paid at the discretion of an FRG agency.

Under article 7.2 of the agreement the United States will not totalize a person's U.S. and FRG credits if the person is already eligible for a U.S. social security benefit or has less than 6 quarters of coverage under the U.S. program. Paragraph 6(c) of the Final Protocol makes clear that the same rule applies with respect to individuals entitled to benefits based on transitionally insured status under section 227 of the Social Security Act notwithstanding Article 7.3 of the agreement.

Receipt of a social security benefit generally excludes a person from further coverage under the FRG social security system. Receipt of a corresponding U.S. benefit would have the same effect under FRG law.



(b) United States nationals who ordinarily reside outside the territory of the Federal Republic of Germany shall be eligible for voluntary insurance in the German pension insurance system if they have validly paid contributions for at least 60 months to this system or were eligible for voluntary insurance on the basis of transitional laws in force before October 19, 1972. This rule shall also apply to the persons specified in Article 3 (b) and (c) of the Agreement who ordinarily reside in the territory of the United States of America.

(c) Upon application United States nationals may pay voluntary contributions to the German pension insurance system retroactively, if eligibility for continued voluntary insurance was abolished by the laws governing voluntary insurance which entered into force on October 19, 1972 because they were either ordinarily residing or domiciled outside the territory of the Federal Republic of Germany. Retroactive voluntary contributions may be made for periods from October 19, 1972 to the day of the entry into force of the Agreement provided that these periods are not already covered by contributions paid to the German pension insurance system. Events relevant to eligibility for a benefit (Eintritt des Versicherungsfalles) which arise within one year after the entry into force of the Agreement shall not preclude payment of retroactive voluntary contributions. An application can be validly made only during the five-years' period following the date of entry into force of this Agree-

The remainder of paragraph 7 would restore the right of U.S. nationals outside the FRG to make voluntary contributions to the FRG system to gain eligibility for or increase the amount of benefits. This right was terminated by an FRG law of October 19, 1972. The right of a U.S. national wherever he resides or of a refugee or stateless person ordinarily residing in the United States to make voluntary contributions would be restored if he has made at least 60 months' contributions to the FRG system (a requirement generally applicable under FRG law until 1972) or had been eligible to make voluntary contributions before October 19, 1972.

Under paragraph 7(c), a U.S. national who was not eligible to make voluntary contributions after October 19, 1972 because of the law of that date, would be permitted to make retroactive contributions for the period from the effective date of the law to the effective date of the present Agreement, provided that contributions were not paid to the FRG system for the same period. An application to make the retroactive contributions would have to be filed within 5 years after the effective date of the Agreement. An entitlement event, such as the attainment of retirement age or disablement, which occurred up to 1 year after the effective date of the Agreement would not preclude the payment of voluntary contributions (as it ordinarily would under FRG law).

ment. The Competent Agency may accept payments by installments for a period of up to three years.

(d) The United States nationals to whom contributions were refunded between October 19, 1972 and the date of entry into force of this Agreement, may repay such contributions upon application. Such repayment may only be made in the full amount of the contributions refunded; it shall have the effect of cancelling any entry of refund of contributions in the insurance record. Paragraph 7 (c), the last three sentences shall apply accordingly.

8. In the implementation of the Agreement, German laws to the extent that they contain more favorable provisions for persons who have suffered damages because of their political attitude or because of their race, religion or ideology, shall remain unaffected. The undersigned, being duly authorized thereto by their respective Governments, have signed the present Final Protocol and affixed thereto their seals.

DONE at Washington on January 7, 1979, in duplicate in the English and German languages, both texts being equally authentic.

For the United States of America:

DAVID MATHEWS.

For the Federal Republic of Germany:

VON STADEN.

WALTER ARENDT.

Under paragraph 7 (d), U.S. nationals who received a refund of voluntary contributions after October 19, 1972, and before the effective date of the Agreement would be permitted to repay and receive full credit for the full amount of the refunded contributions. Partial repayment would not be allowed.

Under paragraph 8, FRG laws that provide more favorable treatment for victims of political, ethnic, religious, or ideological persecution, would not be affected by the Agreement.

ADMINISTRATIVE AGREEMENT FOR THE IMPLEMENTATION OF THE AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE FEDERAL REPUBLIC OF GERMANY ON SOCIAL SECURITY OF JANUARY 7, 1976

The Government of the United States of America and the Government of the Federal Republic of Germany in application of Article 16.1, of the Agreement between the United States of America and the Federal Republic of Germany on Social Security of January 7, 1976, hereinafter referred to as the "Agreement," have agreed as follows:

ARTICLE 1

For the purposes of the application of this Administrative Agreement, terms used in the Administrative Agreement shall have the meaning they have in the Agreement.

Article 1 provides that terms used in both the main Agreement and the Administrative Agreement, whether defined in the main Agreement or not, shall have the same meaning as they have in the main Agreement.

ARTICLE 2

The liaison agencies established under Article 16.2 of the Agreement and the Competent Agencies referred to in the second sentence of Article 3 of this Administrative Agreement with the participation of the Competent Authorities shall agree jointly upon uniform administrative measures, procedures, and forms for the implementa-

Article 2 authorizes and requires the liaison agencies of the two countries to develop uniform policies and procedures for the implementation of the Agreement, including the creation of forms for the processing of claims. Two specialized agencies of the Federal Republic of Germany (FRG)—the Seaman's Insurance Fund and the Federal

tion of the Agreement. The provisions of Article 16.1 of the Agreement shall not be affected.

## ARTICLE 3

Where German laws do not already make provision to this effect, the liaison agency designated for the Wage Earner's Pension Insurance System shall be responsible within the scope of that system for the determination and award of cash benefits, with the exception of medical, occupational, and supplementary rehabilitation benefits, provided that:

- (a) periods of coverage have been completed or are creditable under German and United States laws; or
- (b) the person eligible ordinarily resides in the territory of the United States of America; or
- (c) the person eligible is a United States national ordinarily residing outside the territories of both Contracting States.

The jurisdiction of the German special institutions ("Sonderanstalten") shall not be affected.

## ARTICLE 4

1. The Agency of the Contracting State to whose laws on compulsory coverage a person will remain subject in accordance with Article 6 of the Agreement shall issue to the person or his employer a certificate to that effect when requested to do so by the person or his employer.

Railways Insurance Fund—will also participate in this development.

Article 3 applies only to the Federal Republic of Germany. Where a person's FRG social security claim is subject to the jurisdiction of that country's Wage Earner's Pension Insurance System, claims for cash benefits are normally processed by one of several regional institutes within that system or one of two special institutes, the Seamen's Insurance Fund or the Federal Railways Insurance Fund. The FRG has generally tried to centralize the processing of wage earner's pension claims under its international agreements in a single regional institute. Thus, under article 3, if the Wage Earner's Pension Insurance System has overall jurisdiction of a claim and the worker has credit in both the United States and the FRG, or the claimant is a U.S. resident or a U.S. national residing in a third country, the Hamburg Regional Insurance Institute within the system will have jurisdiction. However, if either the Seamen's or Railways Funds would otherwise have had jurisdiction, that jurisdiction will continue.

Article 4 provides the methods and procedures for the elimination of dual coverage of the same work under the systems of both countries pursuant to article 6 of the main Agreement.

Under paragraphs 1 and 2 the agency of the country whose social security coverage laws are to continue to apply to a person will issue a certificate to that effect when requested to do so by the person or his employer. When presented to the appropriate agency of the other country, the certificate will establish that an exemption from the coverage laws of the other country has existed from the time the necessary conditions were met. Retroactive recovery of U.S. contributions paid with respect to services for which a coverage exemption has been in effect would be subject to the time limitations for refunds of taxes in the Internal Revenue Code.

Under article 6.2 of the main Agreement, a person employed by an employer located in one country who is sent by that employer to work in the other country would remain subject to the social security coverage laws of the country from which he is sent and exempt from the laws of the other country. Article 4.3 of the Administrative Agreement is intended to clarify that this provision will only apply if the employment relationship arose before the employee's transfer and the transfer is expected to be temporary. Although it would not be necessary for the exact duration of the transfer to be specified, written evidence from the employer would have to be produced verifying that the transfer was not permanent. This paragraph is also intended to make clear that article 6.2 of the main Agreement will not result in an extension of U.S. social security coverage to any employment if there would be no authority in U.S. law to impose social security taxes with respect to the employment. Since there is no provision in present U.S. law for extending social security taxation under a section 233 agreement, article 6.2 would only apply

(a) In the Federal Republic of Germany that certificate shall be issued by the sickness insurance agency to which pension insurance contributions are paid.

(b) In the United States of America the certificate shall be issued by the Social Security Administration.

2. In order to prove that a person is exempt from the laws on compulsory coverage of one Contracting State, it shall be necessary for the person or his employer to present the certificate referred to in paragraph 1 confirming that the person is subject to the laws on compulsory coverage of the other Contracting State.

3. Article 6.2 of the Agreement shall apply to a person if he is transferred from the territory of one Contracting State to the territory of the other Contracting State within the context of a preexisting employment relationship, and the transfer is not expected to be permanent as evidenced by a contract or a written notice from the employer. In cases where the United States laws on compulsory coverage apply in accordance with Article 6.2 of the Agreement, but there is no provision under United States laws for contributions with respect to such coverage, Article 6.1 of the Agreement shall apply.

in cases where there would otherwise be dual coverage of the same employment under both the U.S. and FRG systems.

Article 4.4(a) provides broad guidelines for applying the coverage exemption procedures of article 6.3(c) (2) or 6.5 of the main Agreement. Those procedures would permit the Competent Authorities to grant exemptions from their social security coverage laws in order to correct anomalous situations that arise to the disadvantage of workers. One of the factors the Competent Authority of a country would have to consider in particular is whether the employment or self-employment would be subject to the laws of the other country if an exemption were granted.

Paragraph 4.4(b) establishes rules to determine which local FRG social security agency shall be responsible for collecting social security contributions in cases where, in accordance with the Agreement, a person outside the FRG is to be covered under the FRG social security system. If the person were previously employed in the FRG, contributions with respect to his employment would be payable to the agency having jurisdiction for the FRG locality where he was last employed. If he did not work previously in the FRG, contributions would be payable to the agency having jurisdiction for Bonn.

Article 5 establishes rules for the totalization of coverage credits from both countries in accordance with article 7 of the main Agreement and for the computation of pro-rata benefit amounts under the U.S. program in accordance with article 9 of the main Agreement.

4. (a) In making a determination concerning an exemption from the laws on compulsory coverage of one Contracting State pursuant to Article 6.3(c) (2) or Article 6.5 of the Agreement, the nature and circumstances of the employment shall be taken into consideration. Before making the determination, the Competent Authority of the other Contracting State shall be given an opportunity to express an opinion; the opinion shall in particular address the issue of whether the person concerned and his employer will be made subject to the laws on compulsory coverage of the other Contracting State.

(b) With regard to the Federal Republic of Germany, if the person is not employed in its territory he shall be deemed to be employed at the place of his last previous employment. If the person was not employed previously in that territory, he shall be deemed to be employed at the place where the German Competent Authority has its seat.

(c) Subparagraphs (a) and (b) shall also apply to self-employed persons.

## ARTICLE 5

Paragraph 1 makes clear that the combined amount of a worker's U.S. and FRG earnings to be credited for a year under the U.S. program shall not exceed the contribution and benefit base amount established for the year under the Social Security Act.

Paragraph 2 makes the crediting of FRG periods of coverage before the effective date of the U.S. social security program and earnings based on such periods subject to the provisions of the U.S. Social Security Act. Since the Act does not provide for the crediting of quarters of coverage before 1937 this paragraph in effect excludes pre-1937 periods under the FRG system from consideration in determining U.S. benefit eligibility or amounts under the agreements.

Paragraph 3 establishes the procedure to be followed in converting periods of coverage under one country's system into equivalent periods under the other country's system. Periods of coverage under the U.S. system are measured in terms of calendar quarters while FRG periods of coverage are measured in months.

The FRG agency would certify to the Social Security Administration a worker's total months of coverage under the FRG system as well as the dates of coverage. SSA would then credit one quarter of coverage for every 3 months (and remaining fraction) of coverage certified by the FRG agency during a calendar year to the extent the months do not coincide with calendar quarters of coverage under the U.S. program.

The FRG agency would give credit for each month in a quarter of coverage certified by the Social Security Administration, unless the month is already credited as a month of coverage under the FRG system.

1. The crediting of earnings in any year by the United States Agency under Article 9.3 of the Agreement for periods of coverage creditable under German laws shall be subject to the maximum creditable earnings limitation under United States laws for such year.

2. In applying the Agreement, the United States Agency shall take account of German periods of coverage occurring before 1937 or earnings based on such periods of coverage in accordance with United States laws.

3. (a) In determining eligibility for cash benefits under Article 7.1 of the Agreement, the United States Agency shall credit 1 quarter of coverage for every 3 months of coverage certified as creditable by the German Competent Agency to the extent that the months do not coincide with calendar quarters already credited as quarters of coverage under United States laws. The total number of quarters of coverage to be credited for a year shall not exceed 4.

(b) In determining eligibility for cash benefits and benefits-in-kind under Article 7.1 of the Agreement, the German Competent Agency shall credit 3 months of coverage for each quarter of coverage certified as creditable by the United States Agency to the extent that the months in any such quarter of coverage do not coincide with periods of coverage already credited as periods of coverage under German laws.

4. Regarding Article 7.3 of the Agreement, the United States Agency shall consider German periods of coverage which are less than the minimum required by Article 7.2 of the Agreement only if the person is not eligible for a benefit under United States laws without considering such periods of coverage.

5. Article 9.2 of the Agreement shall only apply in cases where eligibility for a benefit under United States laws exists by applying Article 7.1 of the Agreement.

6. Periods of coverage after the computation closing date provided in United States laws shall not be considered in determining the ratio referred to in Article 9.1 of the Agreement.

Article 7.3 of the main Agreement provides that each country shall take into account in determining benefit amounts any periods of coverage from the other country which total less than the minimum required for totalization in the other country (18 months in the FRG or 6 quarters of coverage in the United States). Article 5.4 of the Administrative Agreement is intended to make clear that the United States will not take account of FRG periods of less than 18 months in cases where a person is already eligible for a benefit under U.S. law without totalization. This provision is intended to avoid a considerable administrative burden that could otherwise arise with little or no advantage for the persons concerned (or in many cases with negative results for such persons).

Paragraph 5 is intended to clarify that a period of total disability under the FRG system will be recognized as a period of disability under the U.S. system in accordance with article 9.2 of the main Agreement only if the person is eligible for U.S. benefits solely by totalizing U.S. and FRG credits under article 7.1 of the main Agreement.

In the initial computation of the amount of retirement of disability benefits under the U.S. social security program, a worker's earnings through the calendar year preceding the first month of entitlement may be taken into account. In survivors cases, the worker's earnings in the year of death may be considered. Under paragraph 6, periods of coverage after these respective closing dates will not be taken into account by the United States in computing the ratio of U.S. periods of coverage to combined U.S. and FRG periods of coverage for purposes of making the



initial computation of pro rata benefits under the Agreement. This provision significantly simplified the calculation of pro rata benefits and also avoids the anomalous situations that otherwise would arise if periods of coverage after the computation closing date were taken into account in determining the pro rata ratio but the earnings in those periods were not used in determining a worker's average earnings.

Paragraph 7 permits rounding benefit amounts to amounts contained in the benefit table in the U.S. Social Security Act to facilitate computer processing of claims. This provision will not apply under the benefit formula based on indexed earnings which generally becomes applicable under U.S. law to persons whose eligibility is established after 1978.

7. In cases where the theoretical primary insurance amount is determined by reference to the table of benefits contained in section 215(a) of the United States Social Security Act or deemed to be contained in such section, a pro rata primary insurance amount which is not equal to one contained in column IV of that table may be rounded to the nearest primary insurance amount appearing in such column or, if the pro rata primary insurance amount is less than the minimum primary insurance amount in such column, to a primary insurance amount as set forth in a column of amounts below the minimum primary insurance amount down to the amount of \$1.00 in increments to be determined by the United States Competent Authority.

#### ARTICLE 6

1. Benefits awarded by the United States Competent Agency under the provisions of Part II of the Agreement shall be recomputed on its own motion to take into account additional periods of coverage completed under the laws of the United States of America. Benefits awarded by the United States Competent Agency under the provisions of Part II of the Agreement shall be recomputed upon application to take into account additional periods of

Article 6 establishes the procedures for recomputation of U.S. pro rata benefits based on earnings after entitlement. The FRG generally does not perform recomputations. The article specifies that the Social Security Administration will recompute benefits under its normal automatic procedures to take account of additional U.S. covered earnings. Since additional FRG covered earnings, unlike U.S. earnings, would not come to SSA's at-

coverage credited under German laws. Such a recomputation shall be made in the same manner as an automatic recomputation in accordance with the laws of the United States of America. The United States Competent Agency shall recompute benefits based on an earnings record if:

(a) the additional earnings increase the theoretical primary insurance amount on which the current benefit is based, and

(b) the total amount of the benefits payable by the United States Competent Agency based on the earnings record after the recomputation is more than the total payable without the recomputation.

Such recomputation shall not be processed or increase benefit amounts until after the close of the calendar year in which the additional periods of coverage are completed.

2. When an individual is already entitled to a benefit from the United States Competent Agency under Part II of the Agreement and subsequently meets the requirements for receipt of a higher benefit amount from the United States Competent Agency without recourse to Part II of the Agreement, the higher benefit amount shall become payable from the date that the requirements are met.

## ARTICLE 7

1. An application for cash benefits under the laws of one Contracting State shall also be treated as an application for cash benefits under the laws of the other Contracting

tion automatically. SSA will recompute benefits to take account of additional FRG earnings upon application. The article also provides that the United States will not recompute pro rata benefits unless the additional earnings will increase an individual's average monthly earning sufficiently to increase the theoretical primary insurance amount. (Benefits will not be recomputed if the additional periods of coverage only change the ratio of U.S. to combined U.S. and FRG periods of coverage on which the pro rata PIA is based.) The United States will not recompute benefits if the total recomputed benefits payable to all beneficiaries based on the earnings record would be equal to or less than those that were previously payable. As under present U.S. law, additional earnings after initial entitlement could only be used to increase benefits effective in years after the year in which the earnings were paid, or, in survivor cases, effective with the month of death.

Paragraph 2 provides that where insured status under U.S. national law is acquired subsequent to entitlement based on totalization, and a higher benefit is payable without recourse to totalization, the higher benefit may be paid automatically in lieu of the lower benefit effective from the date of entitlement to the higher benefit.

Article 7.1 makes clear that an application for benefits under the system of one country will only be treated as an application for benefits under the other country's system

State if the application indicates that periods of coverage under the laws of the other Contracting State are also alleged. Article 14.2 of the Agreement shall remain unaffected.

2. In the application of Article 15 of the Agreement, additional requirements under national statutes for the protection of privacy and confidentiality of personal data shall remain unaffected.

in accordance with article 14 of the main Agreement if it is indicated on the application that the applicant had periods of coverage in the other country. This provision is intended to avoid the problems that would result if article 14 of the main Agreement were interpreted to mean that all applications under one country's system were to be considered applications under the other country's system. Application forms in both countries will clearly elicit information concerning a worker's social security coverage in foreign countries.

Both the United States and the FRG have laws that safeguard the confidentiality of personal information stored in government records. Paragraph 2 provides that privacy requirements of each country's laws will continue to apply with respect to diplomatic or consular officials of the other country who seek information pertaining to their nationals under Article 15 of the main agreement. Under this paragraph, for example, an FRG consular officer would still need to present a signed authorization from a person before he could receive information pertaining to the person from the records of the Social Security Administration.

ARTICLE 8

1. In the application of Article 14 of the Agreement, applications, appeals, statements, and documents necessary to establish eligibility shall be forwarded without delay by the Competent Agency of a Contracting State to which they have been presented to the liaison agency of the other Contracting State.

Article 8 outlines the procedures to be followed by both countries for exchange of pertinent information needed to process claims or appeals.

Paragraph 1 provides that applications, appeals or other documents or evidence filed with the agency of one country which are material to a claim under the system

of the other country will be transmitted expeditiously to the other country's agency.

2. In the application of Article 9 of the Agreement the following shall apply:

(a) The German Competent Agency shall notify the United States Competent Agency upon its request of the amount of the person's covered earnings in any year during which periods of coverage were completed under German laws, together with a list of the months in the periods of coverage for which contributions were made. The amounts of earnings in a year to be reported by the German Competent Agency shall be derived from the contributions paid during periods of coverage in such year.

(b) For substitute periods (Ersatzzeiten) creditable under German laws, the United States Competent Agency shall take into account earnings which, upon request of the United States Competent Agency, have been certified by the German Competent Agency and which have been determined based on the average gross annual earnings for the year in question of all persons who are covered under the Wage Earners' Pension Insurance System and the Salaried Employees' Pension Insurance System.

(c) Excused periods (Ausfallzeiten) under German laws shall not be considered,

Paragraph 2 deals with the information in individuals' covered earnings which the FRG must furnish to the Social Security Administration for the purpose of computing U.S. benefit amounts under the Agreement. Paragraph 2(a) provides that the information will be furnished by the FRG agency upon request of the Social Security Administration. For periods of contributory coverage under the FRG system where FRG records show the amount of annual contributions but not the amount of earnings and the amount of contributions is in general directly related to the amount of an individual's earnings, the earnings amount to be reported for each year shall be based on the amount of the individual's contributions in the year.

Paragraph 2(b) provides that for any "substitute periods" under the FRG system (which are noncontributory periods of coverage generally based on periods of military service or political persecution which are used to determine both benefit eligibility and amounts), SSA will credit deemed earnings based on the average gross annual earnings of all persons covered under the FRG wage earners' and salaried employees' pension systems for the particular year.

Under paragraph (2), "excused periods" of coverage under the FRG system will not be taken into account in computing the amount of U.S. benefits. Excused periods are certain periods during which a person was prevented

from engaging in covered work on account of unemployment, sickness or disability, pregnancy, higher education, etc. These periods are considered under the FRG system in computing benefit amounts but not benefit eligibility. Therefore, under the Agreement, the excused periods could not be used to determine U.S. benefit eligibility either. Since the excused periods cannot be used to determine U.S. benefit eligibility, it would not be appropriate to use the periods to reduce the pro rata benefit amount.

Paragraph 3 authorizes the liaison agencies to exchange claims-related information or copies of documents.

Under article 12.2 of the main Agreement certification as to the authenticity of a document by one country will be accepted by the other country and no further certification will be required, but under article 8.4 of the Administrative Agreement the agency of each country will be the judge of the probative value of the document for purposes of its program.

Paragraph 5 provides for an exchange of statistics on benefits paid under the Agreement.

3. In accordance with procedures to be agreed upon pursuant to Article 2, the agencies referred to in Article 2 shall furnish each other available information or copies of documents relating to the claim of any specified individual for the purpose of administering the Agreement or the laws specified in Article 2.1 of the Agreement.

4. Each Agency shall be the final judge of the probative value of documentary evidence presented to it from whatever source. Article 12.2 of the Agreement shall not be affected by this provision.

5. The liaison agencies of the two Contracting States shall exchange statistics on the payments made to beneficiaries under the Agreement for each calendar year in a form to be agreed upon. The data shall include the number and total amount of benefits and commuted lump-sum payments, by type of benefit.

## ADMINISTRATIVE AGREEMENT

### ARTICLE 9

The Agency of a Contracting State shall pay any cash benefits due to beneficiaries in the territory of the other Contracting State without recourse to a liaison agency of the other Contracting State.

### ARTICLE 10

1. Where administrative assistance is requested under Article 10 of the Agreement, expenses, other than postage and regular personnel and operating costs of the Competent Authorities, Agencies, and associations of the Agencies providing the assistance, shall be reimbursed.

2. Where the Agency of a Contracting State requires that a claimant or beneficiary submit to a medical examination, such examination, if requested by that Agency, shall be arranged by the Agency of the other Contracting State in which the claimant or beneficiary resides at the expense of the Agency which requests the examination.

3. The Agency of either Contracting State shall furnish to the liaison agency of the other Contracting State at its request and without expense any medical information and documentation relevant to the disability of the claimant or beneficiary which may come into its possession.

### ARTICLE 11

For the purpose of Article 11.2 of the Agreement, the text of the decision or ruling must contain a certification

## ANNOTATIONS AND COMMENTS

Article 9 provides that any cash benefits payable by one country to beneficiaries in the other country will not be sent to the liaison agency of the other country for disbursement to the beneficiaries but may be paid directly to them.

Under article 10.1 expenses related to administrative assistance, such as use of interpreters, special field investigations, etc., where an agency must go outside its own organization to provide the assistance, shall be paid by the requesting agency. Expenses for postage and regular personnel and operating costs will not be reimbursed.

Where a medical examination is necessary to establish eligibility for or continuing entitlement to benefits under one country's system, and the claimant or beneficiary resides in the other country, the agency of the country of residence shall upon request arrange for the examination at the expense of the agency requesting the examination.

Where one agency requests medical information from the other agency, the other agency will send to the requesting agency any pertinent medical information it has free of charge.

Article 11 provides that judicial or administrative decisions or rulings of one country, which have been recog-

by a body competent to issue such a certification testifying to its enforceability under the laws of the Contracting State in whose territory the certification was issued.

ARTICLE 12

For the purpose of Article 13.1 of the Agreement, laws governing the recourse to interpreters shall not be affected. Rulings, official notifications, or other documents may be transmitted directly to a person resident in the territory of the other Contracting State by registered letter.

nized in accordance with article 11.1 of the main Agreement by the other country, must contain an enforceability clause in order to be enforced through the courts of the other country.

FRG law requires that in some cases claimants be given access to interpreters during personal interviews. This article is intended to ensure that this right is not impaired by article 13.1 of the main Agreement, which provides for direct communication between the social security agencies of each country and any persons with whom they may need to communicate to administer the agreements. Another provision of FRG law requires that official document, such as rulings and benefit awards and denials, be formally served on the individual. For persons residing abroad this requires transmitting the documents through consular offices. The second sentence of this article simplified this procedure by permitting such documents to be transmitted directly to the individual by registered mail. The provisions of this article will have no effect on present U.S. law or procedures.

ARTICLE 13

Where an Agency of one Contracting State is required to make payments to an Agency of the other Contracting State, such payments shall be made in the currency of the other Contracting State.

Payments which a social security agency must make to a social security agency of the other country, for example, as reimbursement for administrative assistance obtained by the other country's agency outside its organization, must be made in the other country's currency.

ARTICLE 14

The withholding of cash benefits in accordance with Article 18 of the Agreement shall be governed by the laws

Article 18 of the main Agreement provides for the withholding of benefits payable by one country to recover bene-

## ADMINISTRATIVE AGREEMENT

of the Contracting State whose agency is to withhold the cash benefits.

fit overpayments made by the other country. Under article 14 of the Administrative Agreement the withholding of benefits to recover overpayments of the other country's advance or provisional benefits would be permitted only to the extent permitted by the social security laws of the country withholding the benefits. Article 18 of the main Agreement already contains such a limitation on overpayment recovery of all types of benefits except advance or provisional benefits. It now appears that the U.S. Social Security Act—particularly section 205(i) and 207—will not permit withholding of U.S. benefits to recover any type of FRG overpayments.

## ARTICLE 15

The use of information furnished under the Agreement by one Contracting State to another with regard to an individual shall be governed by the respective national statutes for the protection of privacy and confidentiality of personal data.

Both the United States and the FRG have statutes that provide very strict safeguards for maintaining the confidentiality of personal information held by the Government. In the United States these statutes include the Privacy Act of 1974 as well as pertinent sections of the Social Security Act. Under article 15 personal information pertaining to an individual which one country furnishes to the other country would be protected by the other country's privacy and confidentiality laws.

## ARTICLE 16

1. (a) Pursuant to the provisions of Article 2, paragraph 51a, subparagraphs 2 and 3 of the German Wage-Earners' Pension Insurance (Reform) Act (ArVNG) and of Article 2, paragraph 49a, subparagraphs 2 and 3 of the

Article 16 deals with the rights of victims of National Socialist persecution who are U.S. nationals and who ordinarily reside in the United States to make retroactive contributions to the FRG social security system. These rights,



which expired on December 31, 1975, would be reestablished for one year from the entry into force of this Administrative Agreement. The article would also significantly liberalize the coverage prerequisites for exercising the rights.

Paragraph 1 makes possible the payments of retroactive voluntary contributions for the years 1956 through 1973 which was originally provided under the FRG Pension Reform Act of 1972. (Rights to make voluntary contributions after the effective date of this Act are provided by paragraph 7 of the Final Protocol to the main Agreement.)

Under subparagraph (b), applications to secure the right to make these contributions would have to be filed within one year of the date that this Administrative Agreement enters into force. Under subparagraph (c), any contributions would be paid to the agency in the FRG with which the application is filed.

Under subparagraph (d), the contributions could be paid installments over a three-year period. This subparagraph is also intended to avoid problems of equity that might arise if retroactive coverage with respect to months far in the past were paid for at present day contribution rates and subject to the present FRG contribution assessment ceiling. As a compromise the contributions would be paid at the rate and subject to the ceiling in effect for 1973 and the benefit return for any specified contribution amount would be determined as though the contributions were applicable to the year 1973. Under subparagraph (e), any benefit contingency—retirement, death or disability—which arose during the period between the effective date of the 1972 Pension Reform Act and the date this Administrative Agreement entered into force would

German Salaried Employees' Pension Insurance (Reform) Act (AnVNG), all of which entered into force on October 19, 1972, persons who are persecutees within the meaning of the German Federal Act concerning Compensation for Victims of National Socialist Persecution (BEG), who are United States nationals and who ordinarily reside in the territory of the United States of America may upon application pay retroactive voluntary contributions to the German pension insurance system for the period from January 1, 1956 through December 31, 1973. Such persons shall be deemed to be eligible for voluntary insurance under the German pension insurance system as if they were German nationals.

(b) An application under paragraph (a) of this section may be validly filed within one year after the date specified in the first sentence of Article 18 of this Administrative Agreement. Such an application shall be filed with the German Competent Agency to which the person's last contribution was paid for, if the last contribution was paid to the Miners' Pension Insurance system, with the liaison agency of the Salaried Employees' Pension Insurance system.

(c) The contributions shall be paid directly to the Agency specified in paragraph (b) with which the application was filed.

(d) The contributions may be accepted by the agency concerned in installments over a period of up to three years. Such contributions may be made only up to the German contribution assessment ceiling for monthly earnings of the year 1973. The calculation of the German benefit computation base applicable to the insured persons shall be based on the figures for 1973.

(e) Events relevant to eligibility for a benefit under German laws which arise in the period between October 18, 1972 and the date specified in the first sentence of Article 18 of this Administrative Agreement shall not preclude payment of the contributions.

(f) The application of the provisions of this section shall in all other respects be subject to the German transitional laws which entered into force on October 19, 1972.

2. (a) Pursuant to the provisions of Section 10 and Section 10a of the German Act concerning Compensation in Social Insurance for Victims of National Socialist Injustice (WGSVG), persons who are persecutees within the meaning of the German Federal Act concerning Compensation for Victims of National Socialist Persecution (BEG), who are United States nationals and who ordinarily reside in the territory of the United States of America may upon application pay retroactive contributions to the German pension insurance system.

(b) An application under paragraph (a) of this section may be validly filed within one year after the date specified in the first sentence of Article 18 of this Administrative Agreement.

(c) In applying the provisions specified in paragraph (a) of this section, periods of coverage under United States laws shall be taken into account to the same extent as periods of coverage under German laws for the required period of coverage of 60 calendar months.

not prevent payment of the retroactive contributions. Subsequent events would terminate the right; however, persons who delay their retirement under the FRG system past the normal FRG retirement age would thereby obtain additional time to establish their right to make contributions. Subparagraph (f) applies all other requirements established under the 1972 Pension Reform Act.

Paragraph 2 of this article makes possible the payment of retroactive social security contributions to the FRG system for the period during which the persecution is presumed to have taken place and the contributor was between ages 16 and 65. The period begins with 1933 and ends with various dates between May 1945 and the end of 1955 depending on whether the contributor remained in the territory of the FRG or left that territory and did not return. Persons affected include those whose compulsorily covered occupation was interrupted, those who suffered damage to their education, and surviving spouses or children entitled to orphans pensions. Under subparagraph (b), the same one-year period for filing applications to secure the right would exist as under paragraph 1.(b). Under subparagraph (c), periods of coverage under U.S. law could be used to meet or complete the normal requirements of 60 monthly contributions under FRG law (except with respect to the 12 months of voluntary contributions required of persons whose claims are based on the interruption of voluntary contributions) so that no other prior contributions under FRG law would be required for securing

(d) Events relevant to eligibility for a benefit under German laws which arise before the end of the first twelve months after the date specified in the first sentence of Article 18 of this Administrative Agreement shall not preclude payment of the contributions.

(e) If a person specified in paragraph (a) of this section has died before the date specified in the first sentence of Article 18 of this Administrative Agreement, Section 10 subsection 3 and Section 10a subsection 3 of the German Act concerning Compensation in Social Insurance for Victims of National Socialist Injustice (WGStVG) shall apply accordingly.

(f) Paragraph (d) of section (1) of this Article shall also apply to this section.

ARTICLE 17

This Administrative Agreement shall also apply to Land Berlin, provided that the Government of the Federal Republic of Germany does not make a contrary declaration to the Government of the United States of America within three months after the date of entry into force of this Administrative Agreement.

ARTICLE 18

This Administrative Agreement shall enter into force on the date on which both Governments will have informed each other that the steps necessary under their national statutes to enable the Administrative Agreement to take effect have been taken. It shall be effective from the date of entry into force of the Agreement.

this right. Voluntary contributions also could be made to the FRG system for the U.S. periods considered in this connection. Under subparagraph (d), any benefit contingency occurring before the end of the one-year application period would not affect the right to make the contributions. Subparagraph (e) assures that surviving spouses and children eligible for orphans benefits of an individual who died before the entry into force of the Administrative Agreement could make the contributions in behalf of the deceased without regard to residence or citizenship. Subparagraph (f) permits payment in installments of up to three years and establishes 1973 as the base year for determining the amount of contributions and the amount of the benefit.

Article 17, like the similar article 22 of the main Agreement, is a standard clause in agreements entered into by the FRG.

The Administrative Agreement will enter into force when the two countries notify each other that the necessary legal steps have been taken to put the Administrative Agreement into force. The FRG will have to submit the Administrative Agreement to its Parliament for approval. The United States will have to submit the Administrative

#### ADMINISTRATIVE AGREEMENT

DONE at Washington on June 21, 1978, in duplicate in the English and German languages, both texts being equally authentic.

For the Government of the United States of America:

JOSEPH A. CALIFANO, JR.

For the Government of the Federal Republic of Germany.

B. VON STADEN.

#### ANNOTATIONS AND COMMENTS

Agreement, like the main Agreement, to Congress for a 90-session-day review period in accordance with section 233 (e) of the Social Security Act. Once these steps have been completed, the two countries can exchange instruments of approval. When the Administrative Agreement enters into force, it will be coterminous with the main Agreement. If it enters into force later than the main Agreement, it will have retroactive effect from the effective date of the main Agreement.

## MEMORANDUM

NOVEMBER 30, 1978.

From: Harry C. Ballantyne.

Subject: Cost Estimates Relating to the Totalization Agreement With Germany—Information.

This memorandum presents estimates of benefit costs and reduction in contribution income resulting from the totalization agreement with Germany. Also presented are estimates of the number of persons affected by the agreement. The estimates are based on the assumption that the agreement will become effective July 1, 1979.

The following table contains our estimates of additional OASDI benefit payments, over and above payments under present law, in fiscal years 1979, 1980, and 1981. In preparing the estimates, it was assumed that the backlog of new claims would be processed by the end of fiscal year 1980, so that the estimate for fiscal year 1981 represents an "on-going" cost.

*Additional benefit payments*<sup>1</sup>

Fiscal year:	Millions
1979 -----	(\$)
1980 -----	\$2
1981 -----	1

<sup>1</sup> Less than \$500,000 will be paid to nonresidents of the United States.<sup>2</sup> Less than \$500,000.

Estimates of the amount of reduction in total tax contribution income for OASDI and HI are shown in the following table for fiscal years 1979, 1980, and 1981:

*Reduction in OASDI and HI tax contributions*

Fiscal year:	Millions
1979 -----	\$1
1980 -----	6
1981 -----	8

Estimates of the number of persons not eligible for OASDI benefits under present law who would become immediately eligible for such benefits are shown in the following table:

Total-----	4,000
Retired or disabled workers-----	2,000
Dependents and survivors-----	2,000

In addition about 45,000 persons not now eligible for benefits under the German system but eligible under the U.S. system will become eligible for totalized German benefits of about \$20 million a year. Less than 100 persons not now eligible for benefits under either system will become eligible for benefits. The number of persons now eligible for benefits under both systems who will become eligible for higher benefits because of this agreement is negligible.

A summary of the estimated effect of the total agreement with Germany on benefit payments and tax contributions in fiscal year 1980 is shown below:

	<i>Millions</i>
1. Benefit payments from the U.S. system-----	\$2
2. Reduction in tax contribution income to the U.S. system-----	6
3. Total effect on the U.S. system-----	8
4. Benefit payments from Germany to U.S. residents-----	22
5. Reduction in tax contributions paid by U.S. employers and employees to Germany-----	12
6. Net effect on U.S. balance of payments <sup>1</sup> -----	28

<sup>1</sup> Represents net total of lines 4 and 5 less line 2 and less benefit payments of under \$½ million from the U.S. system to residents of Germany.

The ongoing number of persons becoming eligible for benefits as a result of the agreement is estimated to be less than 1,000 annually.

About 2,000 employees, and their employers, will no longer make tax contributions to the OASDI and HI trust funds as a result of the agreement.

HARRY C. BALLANTYNE,  
*Acting Deputy Chief Actuary.*











