# Economic Report



# Economic Report of the President



### Transmitted to the Congress February 1985

TOGETHER WITH

THE ANNUAL REPORT

OF THE

**COUNCIL OF ECONOMIC ADVISERS** 

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<sup>\*</sup> For a detailed table of contents of the Council's Report, see page 15.



## ECONOMIC REPORT OF THE PRESIDENT



#### ECONOMIC REPORT OF THE PRESIDENT

To the Congress of the United States:

In 1981, when I first assumed the duties of the Presidency, our Nation was suffering from declining productivity and the highest inflation in the postwar period—the legacy of years of government overspending, overtaxing, and overregulation.

We bent all of our efforts to correct these problems, not by unsustainable short-run measures, but by measures that would increase long-term growth without renewed inflation. We removed unnecessary regulations, cut taxes, and slowed the growth of Federal spending, freeing the private sector to develop markets, create jobs, and increase productivity. With conviction in our principles, with patience and hard work, we restored the economy to a condition of healthy growth without substantial inflation.

Although employment is now rising, business opportunities are expanding, and interest rates and inflation are under control, we cannot relax our economic vigilance. A return to the policies of excessive government spending and control that led to the economic "malaise" of the late seventies would quickly draw us back into that same disastrous pattern of inflation and recession. Now is the time to recommit ourselves to the policies that broke that awful pattern: policies of reduced Federal spending, lower tax rates, and less regulation to free the creative energy of our people and lead us to an even better economic future through strong and sustained economic growth.

Major Economic Developments 1981-1984

The Program for Economic Recovery that we initiated in February 1981 had four key elements:

- Budget reform to cut the rate of growth in Federal spending,
- Reductions in personal and business taxes,
- A far-reaching program of regulatory relief, and
- Restoration of a stable currency and a healthy financial market through sound monetary policy.

The success of this program is now obvious—the U.S. economy is experiencing the strongest recovery in 30 years:

 Real business fixed investment in plant and equipment is higher, relative to real gross national product, than at any time in the postwar period.

- Productivity growth in the business sector has averaged 2.2 percent since the fourth quarter of 1980, compared with a rate of less than 0.3 percent over the prior 4 years.
- The inflation rate is now about one-third the rate in 1980, and short-term interest rates are less than one-half their peak 1981 levels.

But the quantitative record alone does not tell the full story. Four years ago, there was a widespread and growing anxiety about the economy. Many thought that the Nation had entered a condition of permanent economic decline, and that we would have to live with permanent double-digit inflation unless we were willing to suffer massive long-term unemployment.

We did not share this pessimism. It was clear to us that the Nation's economic problems were not the product of the economic system, but of the onerous influence of government on that system. The creative potential of the American people, choosing their own economic futures, was more constrained than helped by the increasingly heavy hand of government. Nor did we share the negative views that a reduction of inflation would increase long-term unemployment; that economic growth, by itself, would increase inflation; and that the government had to protect a "fragile" market system by regulating oil prices and interest rates.

The primary economic responsibility of the Federal Government is not to make choices for people, but to provide an environment in which people can make their own choices. The performance of the economy in the past 2 years under our Program for Economic Recovery fully justifies our faith in the Nation's basic economic health. In 1983 and 1984 the economy generated about 300,000 new jobs per month without an increase in inflation. Real gross national product increased 5.6 percent during 1984, and the unemployment rate declined from 8.1 percent to 7.1 percent. Inflation was steady at its lowest level in more than a decade, and most interest rates are now lower than a year ago. Yet while the U.S. economy grew rapidly in 1984, it maintains the potential for continued strong growth. The inventory/sales ratio is low by historical standards, and capacity utilization rates in most industries are well below prior peak rates.

Economic conditions in 1984 were more favorable than during the second year of a typical recovery, and we see none of the warning signs that usually precede the end of an expansion. The temporary slowing of economic growth starting in July—reflecting the combination of a minor adjustment of consumer spending and inventories and little growth of the basic money supply—seems to have ended in November. These conditions, plus an expectation that the Federal Reserve System will maintain sufficient money growth, support our

forecast that the present recovery will continue. The thriving venture capital market is financing a new American revolution of entrepreneurship and technological change. The American economy is once again the envy of the world.

#### The Economic Outlook

For the years 1985 through 1988, we assume real gross national product growth of 4 percent per year, slowing slightly in 1989–90. We know that economic recoveries have not been stable in either duration or magnitude, in part because monetary and fiscal policies have often been erratic. We may not be able to eliminate recessions entirely, but a sustained commitment to policies that promote long-term growth and stability can reduce their frequency and severity. Our forecast that the unemployment rate, the inflation rate, and interest rates will decline gradually in the years ahead reflects this commitment to sound, sustainable, and predictable policies.

#### The Task Ahead: A Program for Growth and Opportunity

Our 1981 Program for Economic Recovery was designed for the long run with priority attention to the major problems we faced at that time. Our second-term Program for Growth and Opportunity represents a continuation and expansion of the earlier program, with priority attention to the major problems we face in 1985 and beyond. Our objectives—economic growth, stability of the general price level, and increased individual economic opportunity—have not changed. Federal economic policy will continue to be guided by the four key elements of the earlier program. Our progress in solving the most important economic problems we inherited in 1981, however, has allowed us to refocus our attention on the remaining problems and to shift our priorities and resources toward their solution.

Several significant problems remain to be addressed. The rate of growth of Federal spending has been substantially reduced from the rate projected in the budget we inherited in fiscal 1981, but spending growth continues to outpace the economy. Spending too much has left us with a large budget deficit that must and will be reduced. In our efforts to reduce the deficit, we must not forget that the cause of the deficit is increased spending and insufficient growth, not decreased taxes. Federal tax receipts are now almost the same share of gross national product as in the late 1970s, even after the substantial reduction in tax rates that we initiated in 1981.

Another economic problem demanding resolution is unemployment and its effects on the Nation's workers and families. Despite significant progress, much remains to be done. More than 6 million more Americans are now employed than in January 1981, but the un-

employment rate is still too high. We will not be satisfied until every American who wants a job is employed at a wage that reflects the market value of his or her skills. Another aspect of this problem is that the poverty rate remains stubbornly high, despite a strong recovery and a continued increase in government assistance. Also, although the inflation rate has been reduced substantially, it is still higher than during most of our peacetime history prior to 1965. We will not be satisfied until we have totally and permanently wrung inflation out of our economy.

Work also remains to be done in the areas of regulatory and monetary policy. Many Federal regulations still impose a substantial cost to the economy. In addition, we need to strengthen the commitment to a sound monetary policy that never again retards economic growth, or reaccelerates inflation.

Our trade deficit, another area of concern, has been caused in large part by a strong dollar. Investors around the world have bid up the dollar as they have become increasingly confident in our economy. That confidence is an asset and not a liability. However, the conditions that have led to the trade deficit have increased the obstacles faced by some important industries. Agriculture, one of our most productive export sectors, has been harmed by a combination of rigid and outdated Federal agricultural policies and subsidized foreign competition as well as by the strong dollar. Some of our importcompeting industries, such as steel, have also been hurt by subsidized foreign competition and the strong dollar. In one respect the trade deficit is like the budget deficit; both are too large to be sustained, but there are both beneficial and detrimental ways to reduce them. Our goal is a system of free and fair trade in goods, services, and capital. We will work toward this goal through both bilateral and multilateral agreements.

Economic conditions during the past 4 years are best characterized as transitional—from a period of low productivity growth to a period of high productivity growth; from a period of high inflation and interest rates to a period of much lower inflation and interest rates; from a period of economic "malaise" to a period of economic opportunity. Our task is to consolidate and extend these gains.

#### Federal Spending and the Deficit

The rate of growth of Federal spending has been reduced from 14.8 percent in fiscal 1981 to an average rate of 9.1 percent in fiscal years 1982 through 1985. During this period, however, current dollar gross national product has increased at an average rate of 7.6 percent. The continued growth of the Federal spending share of gross

national product and lost revenues from the recession are the main reasons we are now faced with such large Federal deficits.

The projected Federal deficits are much too large, and they must be reduced. As explained in the accompanying report, however, the economic consequences of reducing these deficits depend critically on how they are reduced. A sustained reduction of the growth of Federal spending will contribute to economic growth, while an increase in tax rates would constrain economic growth. Federal spending on many programs is far larger than necessary, and far larger than desired by most Americans.

My fiscal 1986 budget proposal will protect the social safety net and essential programs, such as defense, for which the Federal Government has a clear constitutional responsibility, and will reform or eliminate many programs that have proven ineffective or nonessential. With no resort to a tax increase, this budget will reduce the deficit to about 4 percent of gross national product in fiscal 1986 and to a steadily lower percentage in future years. Additional spending reductions will probably be necessary in future years to achieve a balanced budget by the end of the decade.

The problems of excessive spending and deficits are not new. In the absence of fundamental reform, they may recur again and again in the future. I therefore support two important measures—one to authorize the President to veto individual line items in comprehensive spending bills, and another to constrain the Federal authority to borrow or to increase spending in the absence of broad congressional support. These structural changes are *not* substitutes for the hard fiscal choices that will be necessary in 1985 and beyond, nor for the need to simplify our tax system to stimulate greater growth; but they are important to provide the mechanisms and discipline for longer term fiscal health.

The case for a line-item veto should by now be obvious. The Governors of 43 States have used this authority effectively, and such authority has only once been withdrawn, only later to be reinstated. For over a century, Presidents of both parties have requested such authority.

The proposed constitutional amendment providing for a balanced budget and a tax limitation would constrain the long-run growth of Federal spending and the national debt. In 1982 a proposed amendment to constrain Federal authority to spend and borrow was approved by more than two-thirds of the Senate and by more than a majority of the House of Representatives; a balanced budget amendment has also been endorsed by the legislatures of 32 States. Approval of the proposed balanced budget/tax limitation amendment would ensure that fiscal decisions by future Presidents

and Members of Congress are more responsive to the broad interests of the American population.

#### Federal Taxation

The Economic Recovery Tax Act of 1981 was one of the most important accomplishments of my first term. Individual income tax rates were reduced nearly 25 percent, effective tax rates on the income from new investment were substantially reduced, and beginning this year tax brackets are adjusted for inflation.

But more needs to be done. Personal tax rates should be reduced further to encourage stronger economic growth which, in itself, is our best tool for putting deficits on a steady downward path. Our tax system needs basic reform. It is extraordinarily complicated; it leads to substantial economic inefficiency; and it is widely perceived to be unfair.

At my request, the Treasury Department has developed a comprehensive proposal to simplify and reform the Federal tax system, one that for expected economic conditions would yield about the same revenues as the present system. This proposal, by substantially broadening the tax base, would permit a significant further reduction of marginal tax rates. Shortly, I will be submitting my own proposal for tax simplification, and will urge the Congress to give serious sustained attention to tax simplification—in order to enact a program that will increase fairness and stimulate future savings, investment, and growth.

#### Federal Regulation

We have made major efforts in the past 4 years to reduce and eliminate Federal regulation of economic activity. Executive Office review of new regulations was streamlined. Oil prices were deregulated by Executive authority early in 1981. New legislation was approved to reduce regulation of banking and to largely eliminate regulation of interstate bus travel.

Regulatory reform, however, has been painfully slow. The Congress failed to approve our proposals to further deregulate banking and natural gas prices, and to reform the regulation of private pensions. In addition, the reauthorization of several major environmental laws has been delayed for several years.

I urge the Congress to consider further deregulation efforts in several areas. The experience with deregulation of oil prices makes clear that continued regulation of natural gas prices is not appropriate. Reform of nuclear licensing requirements also deserves attention. Further deregulation of the banking system should be paired with a major reform of the deposit insurance systems. Some changes in the single-employer pension law and an increased premium are necessary to preserve the pension insurance system. We should also

seriously consider eliminating the remaining Federal regulation of trucking and railroads. Finally, I remain hopeful that the Administration and the Congress can work together to reauthorize the major environmental laws in a way that serves our common environmental and economic goals.

#### Monetary Policy

The Constitution authorizes the Congress "To coin Money (and) regulate the Value thereof," and Congress has delegated this authority to the Federal Reserve System. The role of the executive branch is restricted to advising the Congress and the Federal Reserve about the conduct of monetary policy, and to nominating members of the Board of Governors as positions become vacant.

During my first term, the Federal Reserve reduced the rate of money growth relative to the high rates of the late 1970s. This change in policy, assisted by the related strong increase in the exchange value of the dollar, helped produce a substantial reduction of inflation and market interest rates. On occasion, however, the rate of money growth has been quite volatile, contributing to instability in interest rates and a decline in economic activity. The sharp reduction in money growth through mid-1982, for example, undoubtedly added to the length and severity of the 1981–1982 recession. And a similar reduction in money growth in the second half of 1984 contributed to the temporary slowing of economic growth late in the year.

We reaffirm our support for a sound monetary policy that contributes to strong, steady economic growth and price stability. Moreover, we expect to cooperate closely with the Federal Reserve in defining and carrying out a prudent and predictable monetary policy.

#### Conclusion

The Federal Government has only a few important economic responsibilities. Given a proper conduct of these important roles, additional Federal intervention is more often a part of the problem than a part of the solution. We should continue to reduce the many less-important economic activities of the Federal Government so that individuals, private institutions, and State and local governments will have more resources and more freedom to pursue their own interests. Good stewardship of our constitutional responsibilities and the creative energies of the American people will ensure a future of continued economic growth and opportunity.

Ronald Reagon

February 5, 1985

# THE ANNUAL REPORT OF THE COUNCIL OF ECONOMIC ADVISERS

#### LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS, Washington, D.C., January 19, 1985.

#### MR. PRESIDENT:

The Council of Economic Advisers herewith submits its 1985 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.

Sincerely,

William A. Niskanen

**Me**mber

William Poole Member

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#### CHAPTER 1

# Economic Policy for Growth and Stability

AS THE PRESIDENT BEGINS HIS SECOND TERM, it is time to take stock—to review the inherited conditions, policy actions, and unforeseen events that shaped the first term and established the initial conditions for the second term. Taking stock will help to define the job to be done over the next 4 years, the fundamental nature of which is to develop economic policy for growth and stability.

Looking back 4 years, it is not difficult to see why continuing emphasis on growth and stability is appropriate. Policy formulation in January 1981 was conditioned by these facts: labor productivity in the nonfarm business sector in 1980 was 2.2 percent below its 1978 level; the total unemployment rate had risen to 7.4 percent from a low of 5.5 percent in mid-1979; the 12-month inflation rate as measured by the consumer price index (CPI) was 11.7 percent, compared with only 4.8 percent in 1976; and the 13-week Treasury bill rate was 15.0 percent, up from a 1976 average of 5.0 percent.

These summary statistics understate the nature of the economic problem facing the Administration in January 1981. The economy was unsteady, only a few months into a recovery from the short, sharp recession in the first half of 1980. Both renewed recession and continued volatile inflation seemed possible. Throughout U.S. history, bouts of inflation had been regarded as temporary departures from price stability, but by 1980—after 15 years of inflation at varying rates—rising prices were coming to be regarded as normal. So also were the instabilities of output, employment, and government policy associated with inflation. In this uncertain environment, the Administration was faced with the task of introducing fundamental changes in the direction of economic policy.

It is not surprising that the economy's response to major changes in monetary and fiscal policy was not smooth. The recession that began in August 1981 occurred after only 12 months of incomplete recovery from the 1980 recession. Although the peak-to-trough decline over the 1981-82 recession was not unusually large relative to previous recessions, unemployment and excess manufacturing capacity in late 1982 reached the highest rates in the postwar period.

But the economic recovery in 1983-84 was sparkling. Employment and output gains were large, and they were achieved in an environment of stable to declining inflation. Productivity growth had resumed. Gross business fixed investment rose especially rapidly, and in real terms reached the highest share of gross national product (GNP) in the postwar period. At the end of 1984 the unemployment rate was 7.1 percent, the 12-month CPI inflation rate was 4.0 percent, and the 3-month Treasury bill rate was 8.1 percent. Numerous other indicators signaled a resumption of economic growth and vitality within an environment of greater economic stability and growing confidence on the part of most Americans.

Economic performance over the past 4 years may be best understood within this framework: The period began with a difficult set of inherited economic conditions. In 1981 the Administration and the Congress enacted major changes in the direction of fiscal policy, and the Federal Reserve System maintained a policy of substantial monetary restraint. The economy underwent a transitional period of adjustment shaped by the inherited conditions and the policy changes. Finally, the economy began to follow a course of renewed growth and stability.

This framework, although useful, is in many ways too orderly. Over the past 4 years special problems and surprises appeared. The 1981-82 recession was of greater severity and duration than had been foreseen. The international debt crisis required rapid response. Interest rates remained surprisingly high and were often volatile. The U.S. dollar continued to amaze most observers by its almost continuous appreciation against foreign currencies. The current account deficit in the balance of payments became very large by historical standards. Finally, the Federal budget deficit turned out to be much larger than had been anticipated.

At the beginning of 1985 certain conditions—especially the budget deficit and the possibility of future monetary instability—remain as sources of uncertainty to private decisionmakers and as challenges to policymakers. The task ahead is to ensure that present policy problems are solved satisfactorily, so that 1981-84 will indeed be properly viewed as a transitional period followed by an era of substantially improved economic performance. But if the policy agenda cannot be completed and does not fulfill the promise of the gains achieved, history's interpretation of the past 4 years will be different. This period will then be properly regarded as simply another volatile episode in which gains from improved policies were later lost as the Nation was unable to finish the task of changing the direction of economic policy.

The first third of this chapter is devoted to a review of the performance of the economy under the Administration's first-term programs. Policy principles for growth and stability are explored in the middle third of the chapter, and the economic outlook for 1985-90 is discussed in the final third.

#### THE ECONOMIC RECOVERY PROGRAM

The President took office determined to redirect economic policy. On February 18, 1981, the Administration submitted its program to the Congress in a document entitled, "America's New Beginning: A Program For Economic Recovery." Quoting from that document, the key elements of the program were:

- 1. A budget reform plan to cut the rate of growth in Federal spending.
- 2. A series of proposals to reduce personal income tax rates by 10 percent a year over three years and to create jobs by accelerating depreciation for business investment in plant and equipment.
- 3. A far-reaching program of regulatory relief.
- 4. And, in cooperation with the Federal Reserve Board, a new commitment to a monetary policy that will restore a stable currency and healthy financial markets.

The fundamental goals of the program were restoration of economic growth and stability. Reduction of governmental obstacles to production and improved incentives for work, saving, and investment were essential. So also was restoration of price stability. Overall, the policy direction has been guided by a clear and consistent set of principles, of which the most important have been reliance on markets and the maintenance of a long-run policy orientation.

#### THE BACKGROUND OF POOR ECONOMIC PERFORMANCE

Numerous forces destructive to productivity and output growth were at work in the late 1970s. Measuring from one business cycle peak to another, productivity gains in the nonfarm business sector trailed off from the postwar average of 2.4 percent annual growth between 1948 and 1973 to 0.6 percent between 1973 and 1980. Real GNP growth declined from 3.8 to 2.7 percent per year over the same two periods. In real terms the take-home pay of workers was eroded by the slow productivity growth, by a reduction in average hours worked per week, and by rising tax burdens as inflation pushed most workers into higher tax brackets.

In early 1981, Americans still remembered the recessions of 1969-70, 1973-75, and 1980. However unwelcome this record, it was not unusual in the light of U.S. history. It was unusual, however, that the

economic recovery in the second half of 1980 seemed to have so little promise of being long sustained, primarily because the inflation rate was so high.

It is important to note, however, that more than 14 million new jobs were created between the recession trough in March 1975 and the next business cycle peak in 1980. Because employment grew more rapidly than the working-age population, the fraction of the population employed increased. In the 1970s the U.S. economy continued to be a marvelous job-creating machine.

But during the late 1970s, the inflation that accompanied the employment gains showed that economic policy was on an unsustainable course. After 1976 the inflation rate rose every year, with the annual CPI increase peaking at 13.3 percent in 1979 before falling to a still high 12.4 percent in 1980. Reflecting this inflation, between mid-1976 and mid-1980 the foreign exchange value of the dollar fell by about 20 percent on a trade-weighted basis.

Rising inflation was the most important determinant of rising interest rates in the late 1970s. Despite sharp increases in nominal interest rates, the real, or inflation-adjusted rate of interest rose relatively little. Holders of long-term bonds were especially harmed. Inflation eroded the purchasing power of annual interest payments on outstanding bonds, and rising interest rates reduced bond prices, leaving bondholders with capital losses. It has been estimated that the typical holder of long-term U.S. Government bonds suffered losses, in real terms, of about 7 percent in 1977, 9½ percent in 1978, 13 percent in 1979, and 14½ percent in 1980.

Given this experience, it is not surprising that investors became increasingly wary. Bonds—previously a safe and conservative investment—had become risky and speculative. Asset demands shifted away from productive capital in the United States toward investment in foreign assets and various speculative real and financial assets, such as precious metals.

#### THE BACKGROUND OF UNSUSTAINABLE ECONOMIC POLICIES

In the 1970s the interaction of economic events and economic policy created a growing uncertainty about the future, which was manifested most clearly in rising and increasingly volatile interest rates and a falling dollar on the foreign exchange market. Money growth, as measured by the M1 definition, was 5.0 percent in 1975 before beginning a sustained rise. In 1976 the rate was 6.1 percent; in 1977, 8.1 percent; in 1978, 8.2 percent; and in 1979, 7.5 percent. In the latter 3 years money growth exceeded the Federal Reserve's announced growth targets, contributing to market concern over monetary policy.

Rising interest rates after 1976 did not signal tight monetary policy. As actual and expected inflation rose, interest rates were bid up by rising credit demands. The stance of the Federal Reserve became more restrictive in November 1978, but money growth and inflation remained high. In October 1979 the Federal Reserve, in an effort to keep monetary growth within its targets, announced a dramatic policy shift toward greater relative emphasis on controlling the provision of reserves to the banking system and less on controlling interest rates. Unfortunately, after this change in operating procedures, both short-run money growth and interest rates became more volatile, adding to market uncertainties about monetary policy.

Fiscal policy, as reflected by the Federal deficit in the national income and product accounts, on the surface appeared on track in the late 1970s. The deficit fell from 3.1 percent of GNP in calendar year 1976 to 0.7 percent of GNP in 1979, mostly because inflation swelled tax receipts. However, with the short recession in 1980 the deficit rose to 2.3 percent of GNP in that year. Total Federal receipts as a fraction of GNP increased continuously throughout this period, eventually reaching an all-time high of 21.1 percent in 1981. Personal income tax receipts grew by 77.2 percent between 1976 and 1980, compared with nominal GNP growth of 53.2 percent, as inflation pushed individuals into higher tax brackets.

Federal regulatory policy was a source of difficulty. Three manifestations of a general reliance on regulation instead of market forces to solve economic problems deserve special attention.

First, in the late 1970s the Federal Government attempted to rely on wage and price guidelines to control inflation, despite the lack of success with guidelines in the 1960s and the disruptive failure of comprehensive wage and price controls in the early 1970s. In late 1978 voluntary standards for pay and price increases were announced. In March 1980 a credit control program was introduced that contributed to an increase in the unemployment rate from 6.2 percent to 7.7 percent between March and July 1980. Moreover, during 1980 the GNP price deflator continued to rise at a rate in excess of 10 percent, a rate somewhat above the 8.2 percent rate throughout the four quarters of 1979.

Second, specific controls on oil and gas prices, production, and distribution created significant distortions in the markets for petroleum and petroleum products. Following both the 1973-74 and 1979-80 increases in world oil prices, the effects of price controls and their accompanying allocation regulations were severe. Widespread shortages of gasoline and other products and numerous changes and exceptions to the regulations made business planning more difficult.

Finally, throughout the 1970s inefficient regulatory approaches to environmental, health, and safety problems raised production costs and created considerable uncertainty as rules and regulations shifted and changed. One outcome of these policies was a substantial increase in the cost of new business investment with a corresponding reduction in the expected rate of return, reducing business fixed investment and productivity growth.

#### FISCAL POLICY 1981-84

The cornerstone of the Administration's tax policy, the Economic Recovery Tax Act (ERTA), was signed into law in August 1981. This Act legislated sweeping changes in both the individual and corporation income tax systems.

This Act provided for an across-the-board reduction in individual income tax rates amounting to 23 percent at the end of 3 years, and an immediate cut in the top bracket rate from 70 to 50 percent. The new law also established that, beginning in 1985, the tax brackets, exemption amounts, and the zero-bracket amount would be indexed annually for inflation. This change ensured that inflation would not erode the ERTA tax reductions by pushing individuals into higher tax brackets.

Reduced marginal tax rates were designed to increase incentives for supplying labor and acquiring training and education. There was a shift in emphasis away from using the tax system to redistribute income and toward the creation of national income through economic growth.

Responding to a widely held concern that the pace of capital formation had been insufficient, ERTA allowed accelerated depreciation of new capital assets and a system of expanded investment tax credits. Both of these provisions decreased the effective tax burden on new investment, and thus provided an incentive for increased capital formation. To encourage saving, ERTA extended the individual retirement account program to individuals covered by employer-sponsored retirement plans and increased the maximum annual contribution from \$1,500 to \$2,000.

The Tax Equity and Fiscal Responsibility Act of 1982 modified some of the effective tax reductions granted to businesses under ERTA. One of the objectives was to reduce the tax benefits of the investment tax credit and the accelerated cost recovery system so that they would not be more generous than an immediate writeoff. Although this Act repealed further accelerations of depreciation allowances scheduled for 1985 and 1986, the ERTA depreciation schedules for 1981-84 were left basically intact. The 1982 Act also contained provisions relating to "Safe Harbor Leasing," compliance, in-

surance, excise taxes, and other matters. The revenue provisions of the Social Security Amendments of 1983 apply predominantly to years after 1984, and therefore had little revenue impact before that time. The Deficit Reduction Act of 1984 contained numerous tax code changes, most of which were individually small and designed to make existing tax laws more effective.

The 1981-84 changes in tax law reduced receipts as a share of GNP to the range that had existed over most of the 1970s—from 21.1 percent in 1981 to an estimated 19.2 percent in 1984. Without these changes, Federal receipts would have risen further—to an estimated 22.0 percent of GNP in 1984 given actual 1984 economic conditions. However, in the absence of tax law changes, GNP growth during the recovery would probably have been lower.

The changing composition of Federal expenditure since 1980 clearly reflects the objectives of the Administration. As a share of GNP, defense purchases grew from 5.0 percent in 1980 to 6.0 percent in 1984, while total spending less defense purchases and net interest payments declined from 15.9 percent in 1980 to 14.8 percent in 1984. However, total Federal expenditure increased from 22.9 percent of GNP in 1980 to 24.0 percent in 1984. The Federal deficit rose from 2.3 percent of GNP in 1980 to 4.8 percent in 1984.

#### **MONETARY POLICY 1981-84**

There were three major phases to monetary policy over the 1981-84 period. In the first phase, extending to mid-1982, the Federal Reserve's main concern was to restore credibility in the markets by pursuing a restrictive monetary policy designed to reduce inflation. Although the 1980 credit control program was a contributing factor, monetary policy procedures introduced in October 1979 quite generally yielded both volatile interest rates and volatile money growth. Moreover, as the recession developed, the average rate of money growth in 1981 and the first half of 1982 was substantially lower than it had been over the previous several years. Money growth did not decline gradually and predictably as advocated by the Administration.

The second monetary policy phase began in the late summer of 1982. Prompted by the international debt crisis and accumulating evidence that the recession would be deeper and more protracted than had been expected, the Federal Reserve abandoned the short-run operating procedures introduced in October 1979 and turned to procedures that were similar to those pursued before 1979.

Interest rates fell sharply as money growth accelerated starting in August 1982. The Federal Reserve permitted money growth to remain high as deregulation allowed depository institutions to introduce new types of deposit accounts in December 1982 and January

1983, temporarily clouding the interpretation of the monetary aggregates data. However, as the economy revived in the winter and spring of 1983, both the Federal Reserve and the Administration became more concerned about the continuing high rate of money growth.

The third phase of monetary policy began in the late spring of 1983. Controlling money growth again became an important objective of Federal Reserve policy, and money-market interest rates were permitted to rise. From the middle of 1983 through mid-1984, money growth was substantially below the rate from mid-1982 to mid-1983. In the second half of 1984 money growth declined even further.

#### REVIEW OF 1981-84 ECONOMIC PERFORMANCE

Shortly after this Administration took office it was faced with a recession. At the end of 1981 and into early 1982, however, there were reasons to believe that the recession would not be particularly deep. In 1982 the *initially* reported data showed that in the first quarter real final sales grew at a 1.9 percent annual rate—the data now show a decline of 1.0 percent—and that in the second quarter real GNP rose at a 1.7 percent rate—the data now show a decline of 0.8 percent. However, later in the year incoming data indicated that the economy was weaker than had been thought.

Late 1982 was a very uncomfortable time for economic policymakers. Although the classic signs of recovery were accumulating, many observers remained pessimistic. By the end of 1982 the recession had run its course, however. The unemployment rate peaked at 10.6 percent in November and December. By early 1983, the probable resumption of economic growth was signaled by a number of indicators including the beginning of strong growth in real final sales that, from data now available, rose at a 5.5 percent annual rate in the fourth quarter of the year. With final sales rising while total output was about flat, there was a substantial reduction of inventory stocks, which helped to provide the conditions for a resumption of output growth.

It appears that monetary conditions on both the demand and supply sides contributed to the depth of the recession. Money demand—measured by the quantity of money held relative to GNP—rose to an unusual degree, probably reflecting both the reduced cost of holding money balances as market interest rates fell and the spread of interest-bearing negotiable order of withdrawal (NOW) accounts nationwide. Uncertainty attributable to volatile economic and financial conditions may also have raised the demand for money. In addition, from early 1981 through mid-1982 the Federal Reserve per-

mitted substantially lower M1 money growth than had prevailed over the previous several years. This contributed downward pressure on the economy as well.

Fiscal policy may have provided some support to aggregate demand as the ERTA tax cuts gradually took effect and national defense purchases grew, but the stimulus was probably small. The ERTA investment incentives cushioned the decline in business fixed investment, but high real interest rates tended to depress housing construction, inventory investment, and expenditure on consumer durables. High real rates of interest were also important to the strengthening of the dollar and consequent decline of net exports.

The 1981-82 recession was a painful experience for many. The unemployment and bankruptcy rates were high. The protracted recession was an unexpected and unwanted part of the economy's transition to lower inflation. The severity of the recession should serve to emphasize the importance of avoiding the economic conditions that created it.

#### THE 1983-84 RECOVERY

The recovery in employment and output has been brisk. Even with the slowdown in real GNP growth in the second half of 1984, the present recovery through the first eight quarters is still the strongest since the Korean war. By the end of 1984 the unemployment rate had declined by 3.5 percentage points, and industrial production had risen by more than 23 percent from the recession trough. Table 1-1 provides comparative data on postwar expansions.

TABLE 1-1.—Real GNP growth over first eight quarters of business cycle recoveries
[Percent]

	Average	Average annual growth over		
Business cycle trough quarter	First four quarters	Second four quarters	First eight quarters	
Present recovery:				
1982 IV	6.3	5.6	6.0	
Previous postwar recoveries:			İ	
1949 IV	13.3	5.9	9.6	
1954 II	. 8.4	5.9 2.6 1.7 3.3	5.0 5.0 5.1	
1961 L	. 4./	7.0	5.8 5.8 5.8	
1975	1 40	4.4 -3.0	5.5	
Average of five recoveries 1	6.8	3.8 3.1	5.3	

<sup>&</sup>lt;sup>1</sup> Excludes 1949 and 1980.

Note.—Business cycle troughs are as determined by the National Bureau of Economic Research.

Source: Department of Commerce, Bureau of Economic Analysis, except as noted.

Some of the major characteristics of the present expansion are revealed in Table 1-2, which reports the percentage point contributions of various demand components to the total increase in real GNP and compares them with a "typical" expansion. The typical expansion is defined as the average of postwar expansions excluding those beginning in the fourth quarter of 1949 and the third quarter of 1980; the former was distorted by the Korean war and the latter lasted only four quarters.

TABLE 1-2.—Sector contribution to real GNP growth: typical and current recovery

ltem	Annual rate over first eight quarters	
	Typical recovery 1	Current recovery *
REAL GNP GROWTH (percent change)	5.3	6.0
Sector contribution to GNP growth (percentage points):		
Personal consumption expenditures	3.2 .9	3.3 1.2
Nonresidential fixed investment Producers' durable equipment Structures.	.6 .5 .1	1.5 1.5
Residential investment	.5	.6
Change in business inventories	.7	1.3
Net exports of goods and services	.4	-1.3 1.6
Government purchases of goods and services Federal Federal excluding CCC purchases State and local	l	.i
Final sales:  Total *.  Excluding OCC purchases *.  To domestic purchasers *.  Domestic excluding CCC purchases 7.	4.6 4.6	4.7 4.9 6.0 6.2

Average of recoveries following business cycle troughs in 1954 II, 1958 II, 1961 I, 1970 IV, and 1975 I.
Calculated from 1982 IV business cycle trough to 1984 IV; data for 1984 IV are preliminary.
Negative contribution to GRP growth.
GRP less change in business inventories.
CCC purchases removed because inversely related to change in business inventories with dollar for dollar offset for payment-

Final sales less net exports of goods and services.
 Final sales less net exports of goods and services and CCC purchases.

Note.—Business cycle troughs are as determined by the National Bureau of Economic Research. Detail may not add to totals due to rounding.

Source: Department of Commerce, Bureau of Economic Analysis, except as noted.

#### Consumption and Residential Investment

Throughout the present expansion, both total consumption expenditure and its durables consumption component have increased at quite typical rates. Real disposable income grew at a 5.5 percent rate over the first eight quarters, somewhat above the typical rate of 4.6 percent. The personal saving rate has been somewhat below the 1947-80 average of 6.6 percent. Residential investment was about on track in comparison with the typical recovery.

### Business Fixed Investment

Over the first eight quarters of the expansion, gross business fixed investment contributed 1.8 percentage points of real GNP growth, about three times the typical contribution. The strength of investment has been concentrated in durable equipment; structures investment has grown at a more typical rate. The rapid growth of investment from the recession trough has taken the share of real GNP devoted to real gross business fixed investment to 12.5 percent in 1984. By the fourth quarter of 1984 this share had climbed to 12.9 percent. Net business fixed investment as a share of GNP has not set a new high as has gross investment, partly because recent investment has been strong in relatively short-lived components.

A number of conditions have increased the prospective rate of return on new investment, and have thereby been responsible for the investment boom. The ERTA tax incentives and lower inflation have been important. The vigorous recovery has absorbed a significant amount of excess capacity. Prices of investment goods have been unusually well-contained; in fact, the deflator for nonresidential investment in the fourth quarter of 1984 was slightly below its level 2 years earlier. To a considerable extent, this development reflects the strong dollar and the competition from foreign producers of capital goods.

The effects on rates of return in the nonfinancial corporate sector operating through the cost side can be summarized by examining the unit costs of production. Cost increases have been moderate. Unit costs rose at an annual rate of only 0.2 percent over the first seven quarters of the recovery. A 3.4 percent rate of increase of hourly compensation combined with 2.7 percent labor productivity growth resulted in a rise of unit labor costs of about 0.7 percent, while other unit costs dropped at a 1.0 percent rate. The increase in hourly compensation was the lowest of any recovery since the data became available in 1958.

## Inventory Investment

Given the large role of inventories in the 1981-82 recession, it is not surprising that a snapback of inventory investment has been a major contributor to the current expansion, especially in its first year. Despite the growth of inventory investment, inventory-sales ratios in late 1984 were still low by historical standards, suggesting that the economy has not developed any serious inventory imbalances.

## Net Exports

The decline in the net export balance is one of the striking features of the present expansion. Exports have grown in typical fashion, but imports have grown very rapidly.

It is a mistake to believe that GNP would necessarily have grown more rapidly if imports had grown less rapidly; lower imports would probably not have been entirely replaced by U.S. production of competing goods. The decline in the net export balance was closely related to the appreciation of the dollar, which was caused by efforts to move capital into the United States to take advantage of the attractive investment climate. There would have been a variety of repercussions if the U.S. investment climate had been less attractive and if the dollar had not appreciated so much. With less dollar appreciation the inflation rate would not have declined as much; more of the growth in nominal GNP would have reflected inflation and less would have reflected growth in real output. Although net exports would have been higher, interest-sensitive spending including business investment would have been lower.

# Government Purchases of Goods and Services

Government purchases in the national income and product accounts are not the same as government outlays; purchases exclude the transfers component of outlays and reflect certain other differences in concepts from those used in reporting government budgets. As can be seen in Table 1-2, government purchases of goods and services in the present expansion have a contribution to GNP growth that is quite typical of previous expansions. Excluding purchases of the Commodity Credit Corporation (CCC), the Federal Government contribution has been larger than typical.

## THE 1981-84 LABOR MARKET

Following declines during the recession, employment increased by 3.6 percent over the first year of the recovery and by 3.1 percent over the second year; both of these increases were well above the average rate for postwar recoveries. During both the recession and the recovery, money wage increases moderated substantially. Virtually all measures of labor compensation were rising at around 9 percent in 1980, but in 1983 and 1984 most of these measures were rising only about half as rapidly. The hourly earnings index, for example, rose by 9.3 percent in 1980 but by only 3.3 percent in 1984, the lowest increase since 1965.

Union wages began decelerating before nonunion wages and the deceleration of union wages has been greater than that for nonunion wages. This development may reflect cyclical pressures on certain industries and also longer run market forces tending to reduce the gap between union and nonunion wages.

Some recent union wage settlements have involved an actual reduction in wages or fringes, a relaxation of work rules, or wage

freezes. Concessions have occurred in previous recessions, but the scale of recent concessions is unprecedented.

It is possible to pinpoint some forces that have led to these new bargaining patterns. Industries face increased competition from foreign and domestic producers. Imports have increased dramatically in the apparel, textiles, and footwear industries. Concession bargaining has dominated wage settlements in construction over the past year as the market position of firms employing nonunion workers has grown. Older trucking and airline firms have faced new competitors as deregulation reduced barriers to entry.

Despite the dramatic deceleration in money wages starting in 1982, rising productivity has permitted real wages to rise without eroding business profits. Other forces that reduced total take-home pay in the seventies were reversed as well. Real hourly compensation has increased since 1981, hours per week have risen, and average tax rates have fallen.

#### INFLATION AND INTEREST RATES

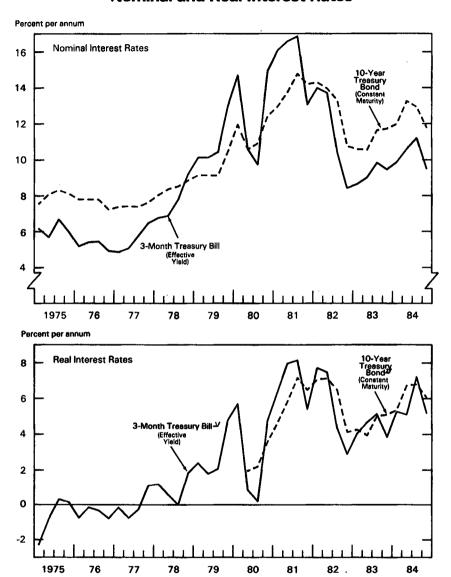
Between 1981 and 1984 the inflation rate declined more rapidly than even most optimists had expected. Inflation, as measured by the GNP deflator, declined from about 9.0 percent in 1981, to 4.3 percent in 1982, 3.8 percent in 1983, and 3.5 percent in 1984. Anticipated inflation, as recorded in a regular survey, was above actual inflation in every quarter except the first and third quarters of 1981.

Although it is common for inflation to fall somewhat during the early stages of business cycle recoveries, few observers anticipated that the inflation rate would remain so low during a recovery as rapid as that experienced in 1983–84. The inflation rate rose slightly in the second half of 1983 and early 1984, but there was no apparent tendency for the rate to rise further. Indeed, over the course of 1984 the inflation rate declined somewhat. However, inflation is still higher than desirable, and it is worth noting that the services component of the CPI in 1984 showed some signs of slightly rising inflation.

Chart 1-1 provides a perspective on interest rate behavior after the mid-1970s. Nominal interest rates were extremely volatile in the early 1980s, and on average remained unusually and surprisingly high. Rates finally fell significantly in the summer of 1982 and thereafter remained below their 1981 peaks. By the fourth quarter of 1982, short and long real rates were about 3 and 4 percent, respectively, based on survey information reporting short-term anticipated inflation of about 5.5 percent and long-term anticipated inflation of about 6.5 percent.

From the end of 1982 to mid-1984 short and long nominal interest rates rose by almost 3 percentage points; short and long real rates

# **Nominal and Real Interest Rates**



<sup>&</sup>lt;sup>1</sup> Nominal yield less anticipated rate of inflation (as measured by change in GNP implicit price deflator) over period to maturity from National Bureau of Economic Research/American Statistical Association Economic Outlook Survey.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, American Statistical Association, National Bureau of Economic Research, and Richard B. Hoey.

Nominal yield less anticipated rate of inflation (as measured by change in consumer price index) over period to maturity from *Decision-Makers' Poll* by Richard B. Hoey.

rose roughly 4 and 3 percentage points, respectively. But by the end of 1984 nominal rates had fallen about halfway back to their 1982-83 lows. Inflation anticipations seem to have declined still further in late 1984.

By historical standards, the persistently high level of real interest rates over the past few years is one of the most unusual features of the period. The initial increase seems associated with the change in monetary policy in October 1979. Since 1981 the continuing high level of real interest rates has been linked by many observers to the large Federal budget deficit. The ensuing controversy concerned the magnitude rather than the direction of the effect of the deficit on real interest rates. A number of studies have found the effect to be quite small, although some studies using different methods have found significant effects. In any event, as the economic recovery proceeded, neither the monetary explanation nor the budget deficit explanation of high real rates of interest was satisfactory as both explanations were inconsistent with the strength of investment during the recovery.

It appears that the high level of real interest rates is in large part attributable to the major change in business depreciation allowances for tax purposes enacted in 1981, which raised the real after-tax internal rate of return on new business investment. With a higher rate of return on new investment, it is worthwhile for businesses with little cash but good investment opportunities to borrow at higher interest rates to finance investment. It is also profitable for businesses with good cash flow to invest in real assets—business plant and equipment—rather than in financial assets or investments abroad. The substantial increase in the prospective rate of return on business investment has therefore pulled up the real rate of interest in the financial markets. If returns to investment had been lower, both investment and the real rate of interest in the financial markets would probably have been lower.

It is difficult to sort out the relative magnitudes of the effects on real interest rates of monetary restriction, large budget deficits, and high real rates of return on new business investment. It seems likely, however, that over the 1981-84 period as a whole, and certainly over the recovery years of 1983 and 1984, the effect flowing from a higher rate of return on new business investment has dominated. The evidence for that proposition is the coexistence of a high real rate of interest and great strength of business investment. If the monetary or budget deficit effects had dominated, then high interest rates for these reasons would have overwhelmed the new incentives to invest, making business investment relatively weak instead of relatively strong.

#### **EXCHANGE RATES, INTERNATIONAL TRADE, AND CAPITAL FLOWS**

Economic policy has had important consequences for U.S. international trade, international financial flows, and the value of the dollar. After 1980, demand in international markets for dollar-denominated assets increased markedly, lifting the dollar's average 1984 value in terms of a weighted measure of other major currencies almost 60 percent above the dollar's 1980 average value. The dollar's impressive and continuing strength is consistent with high real rates of return on U.S. investment relative to returns abroad and lower U.S. inflation relative to inflation abroad.

As a result, the U.S. current account balance shifted from a small surplus of \$1.9 billion in 1980 to an estimated deficit of \$103.8 billion, or about 2.8 percent of GNP in 1984. Of the various components of the current account, an increase in the merchandise trade deficit made the largest contribution to the swing in the current account balance. These international economic developments are discussed in more detail in Chapter 3.

### SPECIAL PROBLEMS

A number of special problems appeared over the past 4 years; perhaps the most serious were the near defaults on international debts, the strains in agriculture, and the instabilities of U.S. financial institutions. This third problem was partly the result of the first two. A discussion of the international debt problem is contained in Chapter 3; a brief discussion of the other two areas follows.

# Agriculture

Over the 1970s, global economic growth, a depreciating dollar, changes in Soviet import policy, and several crop failures around the world all contributed to more than a fivefold increase in U.S. agricultural exports. These conditions together with inflation dramatically raised farm incomes and, with expectations of inflation and low real interest rates, set in motion huge investments to expand the productive capacity of U.S. farming and agribusiness. Total U.S. farm debt rose from \$49 billion to \$155 billion during the 1970s and the average price of farmland grew more than threefold. By the end of the 1970s, American agriculture had become a very capital-intensive, export-dependent sector of the U.S. economy, and the industry was much more sensitive to interest rates and exchange rates than it had been.

After 1981 the global recession depressed world agricultural trade, and the rising dollar made it increasingly difficult for U.S. agriculture to compete in world markets. The problem was exacerbated by the

Agriculture and Food Act of 1981, which established rigid price supports that tended to price U.S. commodities out of the world market.

The combined effect of these changes reduced the aggregate value of U.S. farm exports by 16.7 percent between 1981 and 1983. As a result of price support activities in the face of weak export demand and bumper crops in 1981 and 1982, burdensome inventories accumulated in the Commodity Credit Corporation and Farmer Owned Reserve. In January 1983 the Administration announced the payment-in-kind program to work off surplus inventories by inducing farmers to reduce their planted acreage. In the 1980s U.S. agricultural policies have in effect supported world market prices for the benefit of other exporting countries, which have been able to expand their farm exports. Farming and agribusiness in the United States have been left with substantial excess capacity as U.S. farm exports have become less competitive on world markets.

Adjustments within the agricultural sector and in U.S. farm policies have been difficult given the rapidity with which market conditions changed in the early 1980s. Farmers who had borrowed too much and paid too much for land in the late 1970s found themselves in difficulty. Because farmland prices have fallen between 1981 and 1984—by 7 percent on average nationally and by as much as 28 percent for some States—some highly leveraged farmers now find their loan principal larger than the market value of their land. As a result, the rate of farm failures has risen significantly. The failure rate of rural banks and agribusiness firms has also increased.

Despite record high income transfers to farmers through price and income support programs, at the end of 1983 American agriculture found itself with the lowest real net income in five decades. Returns can be expected to improve over time through a combination of improving market conditions and a reduction of excess capacity. Change in agriculture policies can also help by restoring the growth of agricultural exports.

## Financial Institutions

The prolonged period of rising interest rates in the late 1970s, culminating in sustained high levels in the early 1980s, has been a key cause of the weakness of many depository institutions in recent years. For thrift institutions the problem arose principally from borrowing on a short-term basis to make longer term loans. As rates rose, the thrifts had to pay higher rates immediately to retain deposits, but they could only earn the higher yields as their longer term assets gradually matured and the funds were invested in higher yielding assets. For commercial banks the main problem has been losses from loan defaults or near defaults, especially on international loans, energy development loans, and agricultural loans.

The seriousness of the current difficulties should not be underestimated. From 1950 to 1979, 184 banks failed—an average of 6 per year. Between 1980 and 1984, 189 banks failed—an average of 38 per year. As for the savings and loan industry, from 1981 through 1984 the number of institutions insured by the Federal Savings and Loan Insurance Corporation fell by about 20 percent, largely because of mergers of weakened institutions with stronger ones.

In mid-1984 one of the Nation's largest banks had to be rescued by a multibillion dollar package arranged by the Federal regulatory agencies. A few weeks later, one of the Nation's largest savings and loan associations ran into trouble. Never before in the postwar period had the largest class of depository institutions suffered depost "runs" requiring support from the Federal regulatory agencies.

Longstanding policy mechanisms have been used to deal with these problems. With only a few exceptions, runs on financial institutions have been avoided because public confidence in the financial system has been maintained through deposit insurance and the activities of the Federal regulatory agencies. The Federal Reserve has provided appropriate assistance through its discount window, and the regulatory agencies have closed weak institutions or arranged orderly mergers with stronger ones. Beyond these traditional measures, the Garn-St Germain Depository Institutions Act of 1982 has allowed the Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation to purchase net worth certificates from qualified institutions to maintain their regulatory net worth positions high enough for them to continue operating.

With continuing economic growth, declining inflation and interest rates, and time for adjustment, depository institutions are strengthening their financial positions. Structural problems in the industry are being addressed. The Garn-St Germain Act granted thrifts new powers to diversify their portfolios away from long-term, fixed-rate mortgages. In 1984 the Federal regulatory agencies began to take steps to require banks to raise more capital as a precaution against future difficulties, and the Administration and Federal regulatory agencies began a study to reassess Federal deposit insurance. Despite recent progress, however, many depository institutions do not as yet have the resources to deal with a sustained period of higher interest rates or the loan defaults that might occur if the United States and world economies were to weaken significantly.

### The Common Element

It is worth reflecting on the fact that the 1970s rise and the 1980s fall of inflation are elements common to these special problems. Many decisions made during the late 1970s, based on the expectation of continuing inflation, turned sour in the early 1980s as inflation

fell. This pattern has recurred often throughout U.S. history. The specifics differ from one episode to another, but a feature common to all of them is that loans made to finance projects based on the assumption of continuing high inflation tend to go bad when inflation comes down.

### POLICIES FOR SUSTAINED ECONOMIC GROWTH

What policies will best avoid the traumas of low growth, recession, and inflation? The subject of long-run economic growth is taken up first; issues concerning output and employment stability around the growth trend and those concerning price stability are discussed in the next section.

Almost every government spending program, every provision in the tax law, and every regulation has some effect on growth. Most of the effects are individually small, but their sum total is not. The purpose of this section is not to provide a detailed examination of all the effects of government on growth—an impossible task—but rather to sketch a framework for analyzing those effects. Some of the policy issues are illustrated through specific examples. Chapter 2 contains a general analysis of the costs of government expenditure and the effects of the tax system on economic efficiency.

#### GROWTH AS A GOAL

Growth of real GNP has long been a national policy goal. Clearly, although the welfare of a society depends very importantly on the size of its real GNP, economic welfare is not measured solely by the quantity of goods and services produced; a single-minded devotion to more output is entirely inappropriate.

A substantial part of the growth in the potential output of goods and services has historically been taken not in the form of greater actual output but in increased leisure. People work shorter hours and take longer vacations than their forebears. They stay in school longer and enjoy earlier retirement. They invest in themselves and accumulate knowledge in ways that do not show up as entries in statistical tables. These changes are as much a part of the economic growth process as is the growth of real GNP measured in the national income and product accounts.

Moreover, even with respect to the goods and services component of economic welfare, the goal is consumption and not simply production. Saving and investment are important parts of the growth process, but greater current saving and investment for a given level of GNP generally mean less current consumption. At least in the absence of borrowing, current consumption must be forgone to achieve higher future output and consumption.

Throughout U.S. history, choices between work and leisure and between present consumption and future consumption were determined almost entirely within a relatively unconstrained market economy. Over the past 50 years, however, these decisions have increasingly been influenced by government. Government itself has saved or dissaved, and has determined the extent to which its own expenditures are oriented toward consumption or investment. Taxes, subsidies, and regulations have affected substantially the choices made by individuals and firms. In general, government policies have tilted individual decisions toward more leisure and less work, and toward more consumption and less saving.

Few government policies were explicitly intended to reduce work or saving and investment, but policies introduced for other reasons have often had these effects. With growing recognition of the importance of economic growth, all government policies need to be reexamined to determine whether their original aims are still valid or can be met through revised policies that have less negative impact on growth.

Some of the most difficult policy issues arise from the need to reconcile economic growth and economic security for individuals. The growth process creates risks for individuals; growth requires that both labor and capital resources be continuously reallocated to their most efficient uses. Entrepreneurs take risks and are often rewarded. Over time the economy as a whole benefits as new industries replace old established industries and production is shifted from one region or nation to another. In this process some people lose jobs and some firms go bankrupt, changes that are often wrenching for those involved.

Individuals absorb many risks themselves, through their occupational choices, savings, insurance, and other mechanisms. But over the years the United States and other industrial countries have sought to soften the shock to individuals resulting from the growth process. Some of these policies, however, come at the cost of reduced growth.

Careful attention to incentive issues is central to understanding the relation between growth and security. Although compensating individuals for losses suffered through no fault of their own often seems fair and just, such government policies inevitably affect choices of occupations and activities. People will be more likely to engage in activities for which the probability of loss is rather high and prospective returns low if they know that unfortunate outcomes will bring compensation from government. Long-continuing compensation may pre-

vent resources from moving out of declining industries to growing ones. Public policy must weigh the value of compensating individuals for unfortunate outcomes after the fact against the incentive created for people to assume risky positions before the fact and to remain in uneconomic occupations and industries. It is simply not possible to have a systematic public policy of compensation without creating adverse incentive effects. Government policymakers have often underappreciated the importance of the disincentives sometimes inadvertently built into policy.

#### PRODUCTIVITY

Productivity is at the core of the growth process. By increasing output per hour worked, it is possible to enjoy both more consumption and more leisure. Despite its importance, productivity growth is incompletely understood at a quantitative level. Qualitatively, however, it is clear that both formal schooling and on-the-job training are important sources of increases in productivity, as are capital formation and technical change.

Historically, productivity increases have involved the long-term improvement of labor skills, increases in the capital available to each worker, and the reallocation of resources from lower valued to higher valued uses. The process of "capital deepening"—increasing the capital per worker—involves not only an increase in the quantity of capital but also an improved character or quality of capital. To be used efficiently, more sophisticated and complicated capital must be maintained and operated by a more highly skilled labor force; the type of capital that can be used productively in the United States, with its highly skilled labor force, is quite different from the type of capital that can be used productively in developing nations. To maximize economic growth, investment in human skills and physical capital must proceed in appropriate proportions.

Productivity is influenced by technical change. Invention and innovation improve both skills in the labor force and features of the capital with which the labor force works. The scientific aspect of technical change is obviously important, but so also is the success with which an economy moves laboratory discoveries into the production process.

Numerous public policies influence economic growth through their effects on saving, investment, and the degree to which innovators may be encouraged through patent and copyright protection. The latter is but one example within the broad topic of the definition and limitation of property rights and their effects on the creation and use of resources. Budgetary allocations to subsidize education and research are obviously relevant, as are tax policies that affect the oper-

ating costs of scientific, educational, and research institutions and the incentive for private individuals to make charitable gifts to them. The vigorously competitive and open environment in the United States has proven especially fertile to scientific and educational endeavors.

The productivity of the economy is related to the efficiency with which it allocates its resources. The United States has been particularly successful in permitting and encouraging resources to move to their highest valued uses. The Nation has seen enormous reallocations of resources; out of agriculture and into other industries; from the Northeast to the South and West; from older manufacturing industries into newer high-technology industries. Labor is highly mobile. Young people frequently move from one job to another and from one region to another, searching out their most productive and personally satisfying employments. Unfortunately, the efficiency with which government itself uses resources has often been neglected; some government expenditures appear in the national income and product accounts as output but are in fact largely waste.

A major issue concerns the government role in allocating resources. Government subsidies and regulatory constraints affect the allocation of resources in many parts of the economy. Some of these policies are constructive but others waste resources, distort the mix of production, and reduce incentives to allocate resources to their most efficient uses. The use of tariffs and quotas to protect domestic industries from foreign competition, and thereby to prevent or slow the transfer of resources out of the affected industries, has been controversial from the earliest days under the Constitution.

### THE DETERMINANTS OF TOTAL GNP GROWTH

Fluctuations in the growth of GNP over periods of 5 or 10 years have been mostly attributable to changes in productivity growth, with the important exception of the Great Depression, when a large and long-maintained increase in unemployment depressed output. However, determinants of total output growth other than productivity are affected by public policy and so deserve a brief discussion.

Partitioning the growth of total real GNP into components reflecting the growth of output per hour worked and the growth of total labor hours provides a convenient analytical framework. The growth of total hours worked can be further partitioned into population growth, changes in the fraction of the working-age population that is in the labor force (the participation rate), changes in the percent of the labor force employed (the employment rate), and changes in average hours worked per employed member of the labor force.

Table 1-3 provides information structured according to this framework. To avoid complications arising from business cycle fluctua-

tions, the entries in the first two columns are calculated from one business cycle peak to another. The third column reports data from the 1981 cycle peak through 1984, and the fourth column reflects the Administration's projections for 1984-90.

Table 1-3.—Accounting for growth in real GNP, 1948-90 [Average annual percent change]

Item		1973 IV	1981 III	1984 IV
		to	to	to
		1981 III	1984 IV <sup>1</sup>	1990 IV
GROWTH IN:				
Civilian noninstitutional population aged 16 and over     PLUS: Civilian labor force participation rate	1.5	1.8	1.2	.9
	.2	.5	.4	.6
3) EQUALS: Civilian labor force	1.8	2.4	1.6	1.6
	1	4	.1	.3
5) EQUALS: Civilian employment	1.7	2.0	1.6	1.8
	.1	.2	2	.6
7) EQUALS: NFB employment	1.8	2.1	1.5	2.4
	—.4	6	.1	2
9) EQUALS: Hours of all persons (NFB)	1.4	1.5	1.6	2.2
	2.0	.7	1.9	2.0
11) EQUALS: NFB Output	3.4	2.2	3.5	<b>4.2</b>
12) LESS: NFB output as a share of real GNP.	—.1	2	.7	.3
13) EQUALS: Real GNP	1	2.4	2.7	3.9

Data for 1984 IV are preliminary.

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

# Population Growth

The first row of Table 1-3 reports Bureau of the Census estimates of population growth over the periods indicated, together with the Census projection for 1984-90. Growth in the working-age population, of course, is an important determinant of the size of the labor force. As can be seen from the first and last columns of the table, population growth in the second half of the 1980s is projected at 0.9 percent per year compared with 1.5 percent per year over the 1948-81 period.

# The Participation Rate

The participation rate, the fraction of the working-age population in the labor force, is determined by a variety of factors. Retirement decisions determine the labor force participation of older workers and decisions concerning the length of schooling determine the participation of young people. Over the past 15 years women have entered the labor force in large numbers, reflecting changes in attitudes toward work and home. Finally, some people despair of finding jobs and so cease their job search; these "discouraged workers" would

Note.—NFB refers to nonfarm business sector. Based on seasonally adjusted data. Detail may not add to totals due to rounding.

like jobs but, because they have ceased job search, are not counted in the labor force.

As shown in Table 1-3, the participation rate grew by 0.5 percent per year between 1973 and 1981 as large numbers of women entered the labor force. The projected 0.6 percent growth rate for 1984 to 1990 reflects both a projected continuation of rising female labor force participation and the movement of the baby-boom generation into older age groups that traditionally have a higher participation rate.

A wide variety of important and controversial public policy issues involve the participation rate. One is whether public policy should encourage, discourage, or remain neutral with respect to the choice of retirement age. Another concerns the effects of public policy on the decisions of young people to remain in school; while longer schooling keeps a person out of the labor force, thereby reducing the participation rate, it also improves labor skills, raising productivity growth.

Of special relevance to the debate over tax reform is the fact that lower marginal tax rates can be expected to increase labor force participation, especially of married women. There is substantial evidence that the labor force participation of these people is particularly sensitive to their after-tax wage rates.

Together, the growth of population and the growth of participation determine the growth of the labor force. Thus, row 3 in Table 1-3 is the sum of rows 1 and 2. The 1984-90 projection of 1.6 percent per year growth in the civilian labor force is slightly below the 1948-81 average of 1.8 percent and well below the 2.4 percent rate from 1973 to 1981.

## The Employment Rate

The employment rate is the percent of the labor force employed, or 100 percent minus the unemployment rate. Numerous public policies affect the average employment rate over time. Income maintenance programs, including the unemployment insurance system, are known to be important. The higher the level of unemployment benefits compared with after-tax earnings available from employment, and the longer such benefits can be received, the lower the incentive to accept employment. This effect is offset to some degree by business taxes on firms to support the unemployment insurance system; these taxes are based in part on a firm's experience in laying off workers and so provide an incentive for firms to maintain employment stability. More complete experience-rating in assessing taxes on firms might lower the average unemployment rate, while maintaining the present insurance function for those who become involuntarily unemployed.

Lower average employment for reasons of job search does not necessarily mean lower national output. If longer periods of job search lead to more productive matching of employees and employers, then the net loss in output from higher average unemployment may be offset by greater productivity when people are employed. Public policy might be based on the view that there is no prima facie case that individuals tend to make wrong decisions with regard to job search. If this view is accepted, income maintenance programs should not provide incentives for unduly prolonging job search.

Another public policy that affects the average unemployment rate is the minimum wage—its level and coverage. It is not profitable for business firms to hire people whose productivity is below their wage, and in highly competitive markets businesses will not be able to hire such people. In the absence of a minimum wage, some of these low-skilled people would be voluntarily employed and would have an opportunity to enhance their job skills. The Administration's proposal to permit a youth employment opportunity wage in the summertime reflects these considerations.

Row 4 in Table 1-3 shows the growth in the employment rate for various past periods together with the Administration's projection for 1984-90. The increase in unemployment between 1973 and 1981 was sufficient to lower the employment rate by an average of 0.4 percent (not percentage point) per year. Under the Administration's economic projections, 1984-90 will see an increase averaging 0.3 percent per year. Rows 3 and 4 sum to row 5, the rate of growth of the number of people in civilian employment. The 1984-90 projection of 1.8 percent per year is slightly above the 1948-81 average of 1.7 percent per year.

(A technical note: To study productivity, information on the hours of work rather than just the number of people working is required. Reasonably accurate data on total hours worked are not available for the entire economy, but are available for the nonfarm business sector. Row 6 reports annual growth in nonfarm business employment as a share of total civilian employment. Row 7 reports annual employment growth in the nonfarm business economy. The 2.4 percent per year growth rate over the 1984–90 period is higher than that for the whole economy because the farm and government sectors are expected to grow relatively slowly.)

# Average Hours Worked

As can be seen from row 8 in Table 1-3, average hours worked have declined at 0.4 percent over the postwar period, and the decline is projected to continue to 1990 at a 0.2 percent rate. Average hours can change for reasons other than the obvious ones such as longer vacations. For example, an influx of young workers, who often hold

part-time jobs, will reduce average hours for all workers taken together. Policy issues that arise in this context concern such matters as legislated premiums for overtime work and rules governing taxes on firms for unemployment and workers' compensation funds. These taxes, depending on their design, may encourage or discourage firms from hiring part-time employees.

# **Productivity**

General considerations relating to productivity have already been discussed. Row 10 in Table 1-3 shows that the estimate of productivity change over the postwar period and the projection for 1984-90 are identical at 2.0 percent per year growth. In contrast, productivity growth averaged only 0.7 percent per year from 1973 to 1981.

Productivity growth estimates in row 10 apply to the nonfarm business economy. Row 12 shows the rate of change of the ratio of nonfarm business output to real GNP; that ratio is projected to rise over 1984-90 as the farm and government sectors experience relatively low growth. Row 13 shows the rate of growth of total real GNP; the Administration's projection is for average growth of 3.9 percent per year for 1984-90.

### THE IMPORTANCE OF PRICE STABILITY TO ECONOMIC GROWTH

The contribution of price stability to economic growth is important if behavior based on economic incentives is to direct resources reliably to their most efficient uses. In periods of general inflation, price signals are often distorted. High inflation is also usually more variable and less predictable than low inflation, which makes it more difficult to compare the profitability of a project investigated carefully last month with an alternative project investigated carefully this month, and to separate transitory and inconsequential changes in individual prices from fundamental changes. Inflation also tends to bias decisions toward short-run payoffs and consumption. Contractual income from some long-term investments is eroded by long-continuing inflation, while other investments yield great rewards because they happen to benefit from inflation. For all these reasons, inflation often causes allocative inefficiencies that in the aggregate reduce economic growth.

### THE OUTLOOK FOR ECONOMIC GROWTH

Prospects for a long-term revival of economic growth in the United States are excellent. Growth in employment should continue. Productivity performance has already improved; as indicated by the 1.9 percent growth rate between the business cycle peak in the third quarter of 1981 and the fourth quarter of 1984. This 13-quarter period encompasses both the 1981-82 recession and the 1983-84 recovery, so

the higher productivity growth is not simply a feature of the recovery phase of the business cycle. By way of comparison, over the 13-quarter period following the cycle peak in the fourth quarter of 1973, productivity rose at an average rate of 1.4 percent per year.

Productivity performance higher than the 1984-90 projection is clearly possible. Reasons for optimism include the acquisition of skills by the baby-boom generation that entered the labor force in the 1970s, the high rate of business investment, a lower and more stable inflation rate, and a phasing out of some inefficient government programs and regulations. But there is also ample reason to be cautious. Federal expenditure as a share of GNP is now higher than in the 1970s, many potential regulatory reforms have yet to be made, and continuing progress on the budget deficit is necessary.

### POLICIES FOR EMPLOYMENT AND PRICE LEVEL STABILITY

The Great Depression clearly demonstrated the paramount importance of stabilizing employment at a high level. The previous section on economic growth contained a brief discussion of how changes in public policy might contribute to a higher average level of employment than experienced over the past decade. The subject of this section is stability around the average level.

Macroeconomic policies to increase employment are often advocated on the grounds that they will increase long-term growth. It is certainly better, other things being equal, to reduce unemployment sooner rather than later, but unless the long-run average rate of unemployment can be continuously lowered, or productivity growth increased, a quick reduction of unemployment will have little effect on the long-run rate of growth. Indeed, some policies to reduce unemployment quickly may have adverse effects on long-run growth. For example, a public employment program might reduce short-run unemployment but at the same time reduce long-run productivity growth through the inefficiencies of such programs. Some argue that such a tradeoff is worthwhile, but certainly there should be no automatic assumption that every policy to reduce unemployment will increase long-term growth.

Even if feasible, it would not necessarily be desirable to eliminate all fluctuations in employment. Agricultural output and employment are inherently seasonal. Some unemployment is frictional: People quit their jobs and take time to look for better ones; firms discharge employees, who must then search for new jobs.

Because some unemployment is voluntary and desirable, and some unavoidable, it is difficult to assess the general significance of fluctuations in employment. Clearly, unemployment associated with reces-

sions leads to great distress for many. Avoiding such unemployment by avoiding the conditions that cause recessions is a major goal of public policy.

As with employment and output, seasonal fluctuations in prices are normal. But the distinction between stability of the general price level and stability of individual prices is most important. Stability of the general price level is fully consistent with constantly changing individual prices. These fluctuations in individual prices serve to reallocate the economy's resources as market demand and supply conditions change. Direct control of individual prices is not an appropriate strategy for stabilizing the general price level in a market economy because of the distortions and inefficiencies caused by such controls.

The most important part of the goal of price stability is not constancy of the general price level but predictability. Many feel cheated by unanticipated changes in the price level. Citizens who acted cautiously and conservatively by placing funds in traditionally safe investments, such as bonds and ordinary life insurance, find the real value of their savings eroded by unanticipated inflation. Conversely, unanticipated inflation may reward those who place their savings in risky and speculative investments or who assume heavy long-term debts at a fixed rate of interest.

Because unanticipated inflation upsets normal investment calculations, it tends to amplify fluctuations in output and employment and to misallocate resources across different sectors of the economy. Problems in the agricultural and financial sectors caused by the 1970s inflation and 1980s disinflation were discussed earlier in this chapter. The boom and bust cycle in economic activity has almost always been associated with instability in the general price level.

As a purely economic matter, there is little advantage to a fully predictable rate of inflation of zero as compared with a fully predictable moderate rate of inflation, once the economy has fully adjusted. But the converse proposition is also true; inflation of, say, 5 percent per year has no economic advantage compared to complete price stability. Moreover, accepting some inflation has the great disadvantage of promoting distrust of the government's commitment to maintain control over inflation. As a political matter, an inflation target other than zero is not entirely credible. If 5 percent inflation is acceptable, most would say, why not 6 percent, or 8 percent, or 10 percent inflation?

This question arises not only from doubts raised by historical experience but also because there may be short-run gains from pursuing inflationary policies. The initial effects of such policies include temporary increases in output and employment; the costly inflation comes later. Public reaction to inflation and insistence that inflation-

ary policies be changed may be one of the reasons why in the United States, and across the world, higher inflation has generally been less stable and less predictable. To avoid these instabilities the short-run inflationary bias must be resisted by building in a firm commitment to noninflationary policies. Reducing inflation and in time achieving full price stability—zero inflation—is a major goal of this Administration.

#### MONETARY POLICY

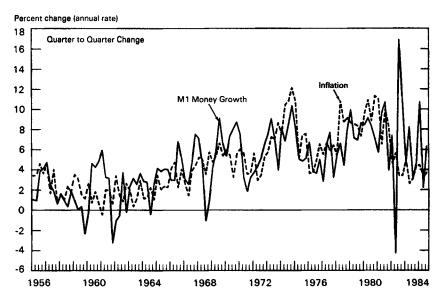
Long-continuing inflation is fundamentally a monetary phenomenon. Other things being equal, creating more money creates a higher general level of prices. As is the case with other economic relationships, the one between money growth and inflation is not precise. This is responsible for the prevalence of nonmonetary theories of inflation. These nonmonetary theories have a ring of plausibility to them, and they have often led to government policies to combat inflation that are totally ineffective, or worse, positively harmful.

Many observers attributed the rise in inflation in 1973 and again in 1979 to the two oil price shocks. That view is fundamentally incorrect, although it is certainly true that the oil price shocks did provide further upward boosts to inflation in environments that were already marked by substantial inflationary pressures. The pattern of rising inflation was established before both of the oil price shocks. These shocks would have had much less impact on inflation had they occurred in an environment of market confidence in underlying price stability.

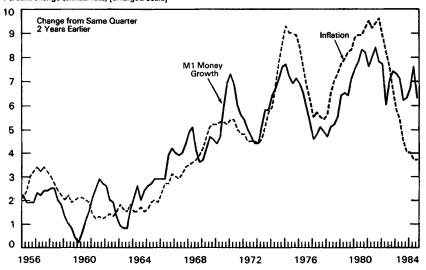
Chart 1-2 demonstrates both the looseness of the short-run relation between money growth and inflation and the strength of the underlying long-run relation. Based on studies indicating that the average lag between money growth and inflation has been about eight quarters, the top panel of the chart relates the inflation rate in a given quarter to the rate of growth of money (M1 definition) eight quarters earlier. Panel B of the chart relates the 2-year moving average rate of inflation to the 2-year moving average rate of money growth eight quarters earlier. More complex specifications yield somewhat closer relationships between money growth and inflation, but the basic proposition stands: quarter-by-quarter inflation is only loosely related to money growth, while inflation over longer intervals is more closely related to money growth.

There are good economic reasons for the rather loose short-run relation between money and prices. Expectations can be extremely important: the effect of a change in the money stock on demand and supply conditions in markets, and therefore on prices, depends on whether the money stock change is viewed as temporary and subject

# Money Growth and Inflation Money Growth Lagged 8 Quarters



#### Percent change (annual rate) [enlarged scale]



Note.—Inflation measured by change in GNP implicit price deflator. Based on seasonally adjusted data.

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

to reversal, or the beginning of a new trend. Over the longer run, such effects are of much less relative importance as incorrect expectations are adjusted in the light of subsequent experience.

The short-run inflation rate can also be affected by numerous non-monetary conditions. But these conditions are ordinarily temporary and self-reversing, or at least not repetitive and cumulative. For example, a bad harvest might raise food prices and the general price level one year, but these effects are reversed when normal harvests resume.

Over the long run, inflation can be affected by economic growth. Because the economy uses money to transact the sale of goods and services, for a given rate of money growth, higher real GNP growth will yield a lower inflation rate. Historically, though, from one decade to another average real GNP growth in the United States has rarely varied by more than a few percentage points and can, therefore, account for only a small part of the variation in inflation.

Monetary policy is frequently judged by the behavior of interest rates rather than by the behavior of money growth. Central banks, including the Federal Reserve, have generally pursued monetary policy objectives through close control over interest rates in the short run. The tendency for central banks to follow this approach is reinforced by the fact that interest rate information is continuously available and most directly affects the behavior of market participants.

Data on the money stock, on the other hand, are available with a lag. More importantly, the aggregate money stock is relevant to individuals and firms only insofar as it has implications for economic conditions that directly affect them. Businesses, for example, are concerned with the prices of the goods they buy and sell, the wage rates they pay, and the interest rates they pay or receive. Although the aggregate money stock is of great relevance for variables of this kind, it is easily overlooked as an abstraction when compared with interest rates, which have great visibility and immediacy.

For these reasons, and others, policymakers and market participants have most often viewed monetary policy primarily in terms of control of, or influence over, interest rates. This view may lead to dangerous misinterpretations. Sometimes, rising interest rates reflect a restrictive monetary policy as the monetary authority reduces the supply of money in the short run. At other times, rising interest rates reflect a rising demand for funds in the private market with a steady or even increasing rate of money growth. The course of the economy is likely to be quite different when interest rates rise temporarily because of falling money growth, compared with its course when rates rise from growing private credit market demands.

Changes in inflation expectations have been particularly important over the past 20 years. After the fact, it became obvious that rising interest rates in the late 1960s reflected growing fears of inflation. Lenders increasingly insisted on higher interest rates to protect themselves from rising inflation, and borrowers were willing to pay these higher interest rates because they anticipated repaying loans in depreciated dollars. In 1967-68, 1972-73, and 1977-78, rising interest rates were accompanied by high money growth; monetary policy was inflationary rather than restrictive.

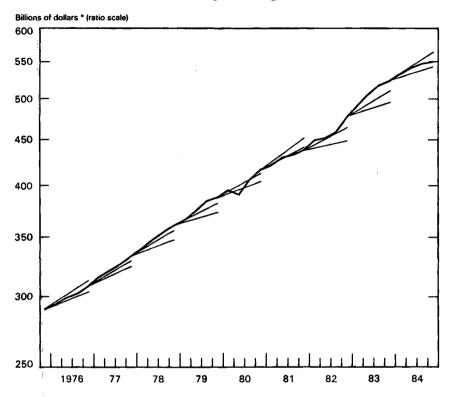
When inflation expectations fall, interest rates also fall. If money growth remains well controlled, declining interest rates reflect not an easier monetary policy but the success of disciplined monetary policy in reducing both actual and expected inflation. Under these conditions, if the central bank resists downward pressure on interest rates by reducing money growth, the outcome may be a recession.

Over the past two decades, professional and public understanding of the importance of controlling money growth, and of the dangers of focusing on interest rates, has grown. In January 1970 the Federal Reserve's main policymaking body, the Federal Open Market Committee, adopted a money growth target for the first time. In 1975 the Congress passed Joint Congressional Resolution 133 requiring the Federal Reserve to adopt and announce 1-year money growth targets. In October 1979 the Federal Reserve changed its policy procedures with the intent of controlling money growth more precisely.

Chart 1-3 shows the M1 measure of the money stock over the period 1975-84. The announced target ranges for the four quarters of each year are also shown. (Not shown are other announced target ranges that in some cases modified or superseded the ranges shown in the chart.) Because M1 has been redefined, the target growth ranges in the chart have been adjusted to reflect the difference between M1 as now reported and as originally reported in February or March of the following year. However, differences between actual and targeted money growth shown in the chart are the same as the differences reported originally.

In the late 1970s money growth exceeded the announced target for 3 years in a row. These overruns were a consequence of the Federal Reserve's policy of maintaining a narrow short-run target range for the federal funds rate—a key interest rate in the money markets—and of failure to adjust the federal funds range up rapidly enough in the face of the upward pressures on interest rates that characterized the 1977-79 period. Although targeting the federal funds rate, or interest rates in general, has been advocated as a device to cushion interest rate pressures arising from temporary disturbances in the credit markets, the late-1970s experience, which is not unique, demon-

# M1 Money Stock and Federal Reserve Target Ranges



<sup>\*</sup> Averages of daily figures, seasonally adjusted.

Note.—Targets are fourth quarter to fourth quarter wedges as described in the text.

Sources: Federal Reserve and Council of Economic Advisers.

strates that this policy runs the risk of permitting excessive money growth and thereby contributing to inflation.

After the business cycle peak in July 1981, interest rates were generally declining. At that time the policy of cushioning downward interest rate pressures led to a decline in money growth. At the end of 1981 the money stock was below the target range announced at the beginning of the year.

The variability of money growth has led some observers to conclude that it is not technically possible for the Federal Reserve to control money growth accurately. That conclusion is incorrect; adjustments in the way reserve requirement regulations are written and in the way Federal Reserve open market operations are conducted

could achieve much more accurate money stock control. The real issues are different; they concern the effects on interest rates and the economy of adhering more closely to a money growth target. Although these matters are controversial, the position taken here is that adhering more closely to moderate money growth targets would increase rather than decrease the stability of interest rates and employment, and contribute very substantially to restoring and then maintaining price stability.

An additional feature of Chart 1-3 deserves mention. The Federal Reserve has defined the target growth range each year on a base equal to the actual level of the money stock in the fourth quarter of the previous year. For several years in a row in the late 1970s, above-target money growth one year was built into the next year's target. In 1981 below-target money growth was built into the target for 1982. If the base were the midpoint of a year's fourth-quarter target range, then differences between the actual money stock and the midpoint would not be built into the money growth target for the next year. "Base drift" would not occur.

In addition to M1, the Federal Reserve has announced targets for broader definitions of the money stock, M2 and M3, and usually for a bank credit or total credit measure as well. However, the evidence suggests that of the available monetary aggregates and credit measures, M1 is the most closely and reliably related to economic activity and inflation. The M1 target might best be regarded as primary and the others as supplemental.

Despite the fact that short-run changes in money growth have often inadvertently been poorly timed with respect to unpredictable fluctuations in the economy, monetary policy has been considered by many to be a valuable policy tool to stabilize output and employment. Activist use of monetary policy to stabilize employment, however, tended to be inflationary over the 1965–80 period. The reason is that higher money growth for a time must be offset by lower money growth at some other time. Otherwise, the average rate of money growth over time will rise, as will the long-run rate of inflation. Central banks, including the Federal Reserve, have usually found it much easier to increase the rate of money growth than to achieve the offsetting decrease at some later time.

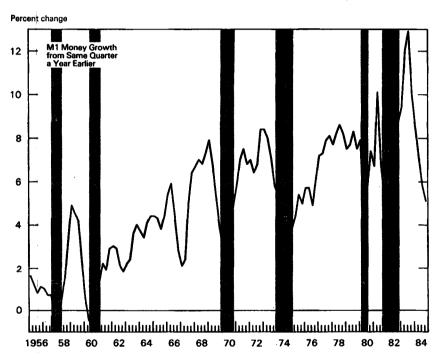
The discussion so far has concentrated on the relation of money growth to inflation. Fluctuations in money growth are also related to fluctuations in employment and output, although the reasons for this relation are less well understood.

It appears that *changes* in money growth, rather than the rate of growth itself, are correlated with the business cycle. Since 1907—the first year for which monthly money stock data are available—there

has never been a recession when money growth was rising. Historically, money growth has usually declined before the beginning of a recession, and the lower rate of money growth has most often extended into the recession. Less often, money growth has declined about the time a recession begins, and the lower growth has extended into the recession. Money growth has typically stabilized, or risen, before a recession has ended and a recovery begun. Chart 1-4, showing money growth from the same quarter a year earlier and shaded areas to indicate recessions, illustrates these relationships.

Chart 1-3

# Money Growth and the Business Cycle



Note.—Shaded areas indicate recessions (peak to trough) as defined by the National Bureau of Economic Research.

Source: Board of Governors of the Federal Reserve System (except as noted).

Fluctuations in money growth have been related in part to the emphasis on interest rates in the conduct of monetary policy. When the economy is unexpectedly weak, and before economists' forecasts adjust to a changing business outlook, credit demands and interest rates tend to decline. If the monetary authority cushions the decline, then money growth falls. Under these circumstances, the decline in money growth is not appropriate; money growth should be maintained and interest rates permitted to fall more rapidly to provide support for a weakening economy. Similarly, if interest rates are held down in the face of unexpected strength in the economy, money growth may rise, contributing to the development of inflation. Steady money growth tends to act as an automatic stabilizer: interest rates rise automatically when the economy strengthens and fall when the economy weakens.

Once it has become clear that inflationary or recessionary pressures are developing, the monetary authority usually adjusts interest rates fairly aggressively, and money growth changes. But because of the lag in the effects of policy, a changed rate of money growth does not act quickly to slow inflation or to resist developing unemployment.

The importance of avoiding outbreaks of inflation in order to avoid subsequent recession is well illustrated by events since 1965. Rising rates of money growth in 1967-68, 1972-73, and 1977-78 were followed in each case by lower rates of money growth and recessions. If periods of lower money growth had not followed the periods of higher money growth, then the average rate of money growth and the average rate of inflation would have been higher than they actually were.

It has been emphasized that the relationships between money growth and inflation and between changes in money growth and the business cycle are not precise. To the extent that changes in these relationships can be reliably forecast, there may be reason to depart from previously announced money growth targets. From the evidence now available, the sharply higher money growth from mid-1982 to mid-1983 is a prime example of a case in which money growth far in excess of the target range did not re-ignite inflation. The case for monetary targeting, however, is not overthrown by this one episode in which abandoning targets worked well, especially given that M1 growth was below target as the recession developed in 1981. There is no reason to believe that the regularities exhibited in the charts in this section, regularities that also characterize U.S. experience before World War II and the experience of other countries, have broken down.

The fact that monetary regularities are not precise makes clear that there are unavoidable risks. What the record suggests is that more stable money growth will manage the risks better and reduce the chance that monetary policy will itself be a source of disturbance to the economy.

The present task is to complete the agenda of restoring full price stability. The Nation has just gone through a difficult period of adjustment to lower inflation—indeed, the adjustment is still incomplete. It is important that gains achieved in reducing inflation not be lost. Success will require permitting enough money growth to allow vigorous economic expansion, while at the same time maintaining downward pressure on the inflation rate to build confidence in the achievement of long-run price stability. To achieve these goals, the Administration supports a policy of gradually reducing the average rate of money growth over time and of stabilizing short-run money growth to the maximum extent possible.

#### FISCAL POLICY

Over the postwar period, until relatively recently, most economists were optimistic that fiscal policy, through a combination of automatic stabilizers and discretionary adjustments, could be used to dampen business cycle fluctuations. The automatic stabilizers have worked reasonably well to reduce the variability of disposable personal income, but discretionary policy adjustments have often been ill timed.

When the economy weakens, tax receipts fall and certain expenditures, such as those for unemployment benefits, rise. These automatic stabilizers do not require congressional action. Moreover, they do not upset private planning because their characteristics are known to private decisionmakers in advance.

The Bureau of Economic Analysis (BEA) has provided estimates of the cyclically adjusted Federal budget deficit on a national income and product accounts basis. Although any such estimates are subject to certain conceptual and estimation difficulties, BEA estimates provide a rough sense of the quantitative importance of the automatic stabilizers. For example, from the cycle peak in the third quarter of 1981 to the cycle trough in the fourth quarter of 1982, the total budget deficit rose by \$147.5 billion; BEA estimates that \$65.8 billion of the increase was attributable to the automatic stabilizers.

Beyond issues of forecast accuracy and policy lags, there is increasing doubt about the effectiveness of discretionary fiscal policy even if it could be changed in a timely fashion. Fiscal policy does not appear to have the large impacts on aggregate economic activity through demand side effects that were once thought to exist. Because con-

sumption behavior depends on households' average income, changes in individual income taxes for countercyclical purposes seem to have especially small effects. If taxpayers expect income tax changes to be temporary—and changes for countercyclical stabilization should be interpreted in a temporary context because recessions and booms are not permanent—then the tax changes are likely to have relatively little effect on consumption behavior.

Temporary changes in transfer payments seem to have little value for stabilization purposes, for the same reason that temporary tax changes have little value. The evidence suggests, however, that temporary changes in government purchases of goods and services may have somewhat greater, though still relatively small, effects on total GNP in the short run.

A problem with increasing government purchases for countercyclical purposes is that such increases run directly counter to the long-run goal of constraining government expenditure to reduce waste and promote growth. It often proves difficult to reverse spending increases—even those adopted initially as temporary. Proposals to increase expenditure for any purpose—including countercyclical stabilization—should be examined very carefully, for reasons discussed in Chapter 2 of this *Report*.

Finally, activist fiscal policy—whether on the spending or the tax side—can be upsetting to private decisionmaking. Changes in jobs, place of residence, and business investment in plant and equipment are based on long-term expectations and plans; frequent changes in government tax and spending policy make efficient decisions more difficult. Fiscal policy adjustments are often unpredictable, and this uncertainty complicates both business and consumer planning. Indeed, because business cycle fluctuations themselves have proven so difficult to forecast, government responses to business fluctuations are necessarily difficult to forecast. To avoid these problems, the purpose of fiscal policy changes should be long-run reform to improve efficiency and equity while establishing a stable and predictable fiscal framework.

#### THE OUTLOOK FOR 1985-90

Americans have every reason to look forward to continuing economic expansion. The base has been established: Inflation is down, interest rates are down, employment and output growth has been strong, productivity growth is up, and domestic business investment is strong. The major item of unfinished business is the establishment of long-run fiscal equilibrium, which requires a much lower budget deficit and assurance that the government expenditure share of GNP does not continue to increase. Economic expansion will not be perfectly steady, as the past few quarters have illustrated once again, but the prospects for continuing growth are excellent.

Some observers, however, are already discussing the prospect for a new recession beginning in late 1985 or 1986. Policy mistakes can yield such a result, but there is no reason why such mistakes need occur. Activist policy, always subject to misreading of the data and forecast errors, is not required to avoid recession. What is required are sustainable, predictable, and noninflationary monetary and fiscal policies. If policy is not itself a source of disturbance, there is no reason to believe that a recession, when one finally occurs, need be anything other than a mild and temporary interruption of sustained economic expansion.

Many of those who predict another recession starting this year or next seem to do so from the view that a business expansion has a natural life, after which the economy will inevitably turn down. This view is probably wrong. If business expansions die of old age, the probability that a recession will begin rises as the expansion ages. In fact, the evidence suggests that the probability of the onset of a recession is only weakly related to the age of the expansion.

The economic process that has led to the termination of most expansions seems quite different from old age. Recessions, and especially the more recent recessions, have been associated with prior outbreaks of inflation. Imbalances arise during periods of rising inflation that make continuing expansion difficult or impossible. Public policy responses to rising inflation add downward pressure on output and employment. The business cycle peaks in December 1969, November 1973, January 1980, and July 1981 are all quite clearly related to prior outbreaks of inflation and subsequent declines in the rate of money growth.

#### MONETARY AND FISCAL POLICY ASSUMPTIONS

In July 1984, in its Midyear Report to Congress, the Federal Reserve announced a tentative M1 growth target range for 1985 of 4 to 7 percent. The Federal Reserve also announced tentative targets for M2 and M3, and an "associated range" for the growth of nonfinancial debt.

By reducing the upper side of the M1 range from 8 percent for 1984 to 7 percent for 1985, the Federal Reserve makes clear its intention to avoid excessive money growth. Bringing down the rate of money growth over time is essential to restoring full price stability. Also, the reduction in the width of the target range from 4 percentage points in 1984 to 3 percentage points in 1985 gives the market a clearer definition of monetary policy objectives.

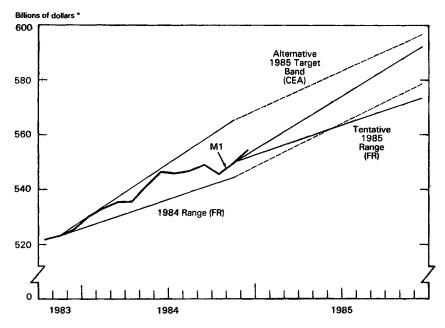
An issue is the base upon which the 1985 M1 growth target is to be calculated. Historically, the money growth targets for a given year have been calculated from a base equal to the average level of the money stock in the fourth quarter of the previous year. This practice has permitted base drift, as discussed in connection with Chart 1-3, and also leads to revisions in the target path with every revision of the M1 data for the fourth quarter of the year. Of course, the target growth ranges could be adjusted to offset base drift and data revisions, but the problem with such an approach is that the announced ranges might vary from one year to the next in a way that would confuse the public. The money growth target is a statement of policy that should not be blurred by the vagaries of short-run money growth.

A second issue raised by the Federal Reserve's traditional method of defining the base for the money growth targets is that on occasion, as in early 1982, the money stock has started off a new year substantially above or below the announced target range, raising uncertainties in the financial markets as to whether and how quickly the Federal Reserve might bring M1 back into its range. Both of these issues could be resolved satisfactorily by defining the fourth quarter base as the midpoint of that year's target range rather than as the actual fourth quarter level of the money stock. The Federal Reserve's tentative 1985 target range of 4 to 7 percent growth of M1 could then be restated as a band around a central target of 5½ percent growth—a rate halfway between 4 and 7 percent growth. Under this interpretation, the target for 1985 would be to keep M1 within the dashed band shown in Chart 1-5 instead of within the wedge defined by the solid lines in the chart.

Growth of M1 within the dashed band of Chart 1-5 is expected to be consistent with the Administration's economic assumptions. In the postwar period the income velocity of M1—the ratio of nominal GNP to M1—has historically increased at an average rate of about 3 percent per year, although with substantial variability around that average. Abstracting from the variability by averaging over 2 years, the Administration expects nominal GNP growth to average about 8.9 percent per year over 1984 and 1985. If M1 in the fourth quarter of 1985 is at the center of the dashed band in Chart 1-5, then M1 growth will average 5% percent over 1984 and 1985, yielding annual velocity growth slightly above 3 percent. Beyond 1985 the Administration's economic assumptions are based on the view that monetary policy should maintain steady money growth at a rate that declines gradually over time.

As emphasized earlier in this chapter and in Chapter 2, the fiscal policy goals for 1985 are to establish a sound fiscal framework for

# **Alternative M1 Target Ranges for 1985**



<sup>\*</sup> Averages of daily figures; seasonally adjusted.

Sources: Federal Reserve (FR) and Council of Economic Advisers (CEA).

the long run by reducing the growth of Federal expenditure and the level of the budget deficit, and by reforming the tax system to foster long-run economic growth.

The Administration's budget proposals provide for a phased reduction of expenditure from the current services baseline. The proposed reduction in the growth of Federal purchases of goods and services is spread over 3 years, starting in fiscal 1986, providing considerable time for the private sector to adjust. Moreover, total Federal purchases will continue to grow, albeit at a slower rate than the baseline current services projection.

Finally, two points deserve mention. First, private sector activity depends importantly on expectations concerning economic policy. Clearly, the sooner fiscal policy changes are enacted, the smaller will be any effect on economic activity from uncertainty over the actions

to be taken. Second, changes in fiscal policy might have significant immediate effects on interest rates; cushioning those effects through monetary policy actions might be counterproductive. Rates may fall due to the resolution of the fiscal uncertainties and the expectation of lower inflation. A monetary policy directed toward stable money growth will ensure that interest rates can adjust readily to changed market conditions.

## THE OUTLOOK FOR 1985

The Full Employment and Balanced Growth Act of 1978 requires that the Economic Report of the President, together with the Annual Report of the Council of Economic Advisers, include an Investment Policy Report and review of progress in achieving the national economic goals specified in the Act.

Investment issues are discussed in a wide range of contexts in this Annual Report. The role of high investment in the 1983-84 recovery is discussed earlier in this chapter, as are the economic conditions that contributed to strong investment and the relation of investment to productivity growth. Chapter 2 contains a discussion of the relationship between proposals for revising the tax laws and investment issues. International aspects of U.S. investment are examined in Chapter 3; these include the capital inflow from abroad and its impact on U.S. capital formation. Chapter 6 contains an analysis of how corporate takeovers, mergers, and acquisitions can promote allocation of capital to more productive uses.

The Administration's economic assumptions included in Tables 1-4 and 1-5 show substantial progress toward achieving the goals specified in the Act. Table 1-4 reports the major features of the Administration's 1985 economic assumptions. The expected 4 percent rise in real GNP over the four quarters of the year is slightly higher than the 3.7 percent in the third year of the typical recovery. Labor productivity showed little growth over the second half of 1984 but is expected to grow by 1.7 percent over the four quarters of 1985. Employment growth of 2.3 million persons is projected for 1985, compared with 3.5 million in 1984, leading to a decline in the unemployment rate over 1985.

The inflation outlook for 1985 is good. With moderate expansion in the money aggregates and continuing real growth, the inflation rate, as measured by the GNP deflator, is expected to average 4.3 percent over the four quarters of 1985. Hourly compensation is projected to grow at about 5 percent. Unit labor costs are expected to increase by about 3.5 percent. Business profits should show moderate growth over the year.

TABLE 1-4.—Economic outlook for 1985

Item	1984 1	1985 forecast	
ercent change (fourth quarter to fourth quarter):			
Real gross national product	5.6	4.0	
Personal consumption expenditures  Nonresidential fixed investment Residential investment Federal purchases of goods and services.  State and local purchases of goods and services.	4.2 16.6 3.5 14.2 3.5	4 6.! 1 2 2	
GNP implicit price deflator	3.5	4.	
Compensation per hour 2	4.2	5.	
Oùtput per hour 2	2.2	1.	
evel in fourth quarter: 3			
Unemployment rate (percent) 4	7.1	6.	
Housing starts (millions of units, annual rate)	1.6	1.	

Supported by continuing growth in real disposable income, personal consumption expenditures are expected to increase 4.3 percent this year compared with 4.2 percent in 1984. Residential construction activity is expected to be fairly strong with housing starts of about 1.7 million units. Business fixed investment is expected to continue to grow faster than GNP. As a result, real investment as a share of GNP should continue at record levels next year.

Projected growth in real Federal purchases over the four quarters of 1985 is low due to assumed cuts in purchases in the fourth quarter of 1985 (the first quarter of fiscal 1986). State and local purchases are expected to grow at a slower rate in 1985 than in 1984 in order to maintain a balance with revenues. Real net exports of goods and services are expected to increase in 1985; however, the trade balance is projected to remain in deficit.

### THE OUTLOOK FOR 1986-90

Table 1-5 reports the Administration's economic assumptions for selected economic indicators for 1986-90. These economic assumptions reflect projected trends and should not be interpreted as yearto-year forecasts. Table 1-3, discussed earlier in the section on economic growth reports the Administration's projection of the supply side of the economy in a consistent growth accounting framework.

The three sections of this chapter have discussed economic performance, principles, and prospects. Principles are the most important. Without them, the reasons the U.S. economy has performed as

<sup>Preliminary.
Nonfarm business, all persons.
Seasonally adjusted.
Unemployed as percent of labor force including resident Armed Forces.</sup> 

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

Table 1-5.—Administration economic assumptions, 1985-90 (Calendar years)

item	1985	1986	1987	1988	1989	1990		
υ	Level							
Employment (millions) 1	109.1	111.3	113.5	115.8	117.7	119.4		
Unemployment rate (percent) *	7.0	6.9	6.6	6.3	6.1	5.8		
		<del></del> -	Percent o	hange				
Consumer prices 3	4.1	4.3	4.2	3.9	3.6	3.3		
Real GNP	3.7	4.0	4.0	4.0	3.9	3.6		
Real compensation per hour 4	.3	1.3	1.8	2.7	2.9	3.1		
Output per hour 4	1.5	1.6	1.7	1.8	2.2	2.4		

it has cannot be understood. Without policy principles, the prospects for the future are uncertain because sustained public support for good economic policy depends on public understanding. The performance of the U.S. economy over the past 2 years suggests that the Administration's policies are beginning to pay off. A continuing commitment to these policies can produce strong and sustained economic growth.

Employment series includes resident Armed Forces.
 Unemployed as percent of labor force. See footnote 1.
 For urban wage earners and clerical workers
 Nonfarm business, all persons.

Source: Council of Economic Advisers.

### **CHAPTER 2**

# The Federal Budget and the Economy

CONTINUED GROWTH OF THE FEDERAL GOVERNMENT may be the most serious problem facing the American economy. The growth of Federal spending and the debt are the most visible manifestations of this problem. The first is a longstanding condition; Federal expenditure has generally increased relative to gross national product (GNP) for more than 50 years. The second condition is more recent; after declining for most of the postwar period, the outstanding Federal debt as a share of GNP has increased sharply in the past 5 years. These conditions are closely related. Reducing the growth of Federal spending would reduce both the spending and debt shares. Increasing taxes would not reduce the spending share and would reduce the debt share only if spending were also restrained relative to the tax increase.

Table 2-1 summarizes the long-term trends in the relationship of Federal expenditure, receipts, and borrowing to GNP. The Federal expenditure share of GNP has increased each decade since 1929 and, unless the near-term growth is reduced substantially, the expenditure share will also increase in this decade. Almost all the growth in the expenditure share since 1949 reflects the increase in Federal spending for nondefense programs. The receipts share increased rapidly through 1959 and has been roughly constant, except for cyclical variations, since that time. Federal borrowing as a share of GNP varied within a narrow range, except during World War II and recessions, until the past several years. The ratio of the outstanding debt to GNP increased sharply during the Great Depression and World War II, declined substantially through the 1970s, and has since increased sharply.

This chapter describes the primary relationships between the Federal budget and the U.S. economy. These relationships operate in both directions. Changes in economic conditions affect the budget for a given set of fiscal policies and they affect the policies selected. Changes in the budget also affect the economy, in ways that depend critically on the type of expenditure and the detailed characteristics of the tax code. For any meaningful evaluation of the effects of the Federal budget on the economy, fiscal policy should be defined in

terms of the levels of government services, the eligibility conditions and payment rates for transfer programs, and the statutory tax rates on private activity. The first section of this chapter addresses the effects of Federal expenditure and the deficit. The second addresses the effects of the major types of Federal taxes. The concluding section discusses several proposals for change in budget concepts, the budget process, and the fiscal authority.

TABLE 2-1.—Federal expenditures, receipts, and borrowing as a share of GNP, selected years, 1929-84

#### [Percent of GNP]

Calendar year	Expenditures			Danatata	Borrowing	
	Total	Defense 1	Other	Receipts	Deficit	Debt =
1929	2.5	(°)	(°)	3.7	-1.2	16.1
1939	9.8	1.4	8.5	7.4	2.4	42.8
1949	16.0	5.1	10.9	15.0	1.0	75.
1959	18.6	9.3	9.3	18.4	.2	42.8
1969	20.0	8.1	11.9	20.9	9	23.
1979	21.1	4.6	16.5	20.4	7	21.
1984 4	24.0	6.0	18.0	19.2	4.8	30.

Purchases of goods and services.
Federal debt held by private investors, end of June.

Not available.
 Preliminary estimates.

Note.—Expenditures, receipts, and the deficit are on a national income and product accounts basis. Sources: Department of Commerce (Bureau of Economic Analysis) and Department of the Treasury,

## MAJOR CURRENT FISCAL ISSUES

The Federal Government, like all other institutions, faces two longrun constraints: Expenditure and the outstanding debt cannot grow indefinitely relative to potential receipts. The Federal Government differs from other institutions in two major ways. First, because of its size it has a major impact on private incentives and, therefore, the level and allocation of economic activity. Second, the Federal Government has a monopoly on the right to inflate its nominal receipts by creating money.

Federal expenditure must be financed by tax receipts. The substitution of borrowing for current tax receipts only defers the inevitable-additional taxation. An increase in the expenditure share, moreover, should face an increasingly stringent test, because the cost of additional Federal expenditure increases rapidly with the level and variance of marginal tax rates.

An increase in the debt share may be justified if Federal expenditure is temporarily high or receipts are temporarily low, in order to reduce the variation of tax rates over time. If Federal expenditure excluding interest payments grows proportionately with GNP, however, an increase in the debt share also requires an increase in future average tax rates to finance the increased future interest payments. An increase in the debt share, thus, must be financed by some combination of reducing the growth of noninterest expenditures below the growth of GNP, by higher future tax rates, or by inflation. Federal borrowing, in summary, is ultimately limited by the same conditions that limit Federal expenditure.

The current deficit is a crude measure of the present value of the amount by which future noninterest expenditures must be reduced or future tax receipts increased. The correct measure is the increase in the real market value of the net debt held by private investors. This requires adjusting the reported deficit for the differences between par and market value of the publicly held Federal debt, the loan portfolio, and other Federal financial assets. For many years, these adjustments substantially offset reported deficits, which is one reason why the reported deficit has provided little useful information about either Federal fiscal conditions or its effects on the economy. In recent years, however, these adjustments still leave a substantial increase in the real net debt.

In the absence of a change in fiscal policy, the prospective Federal deficits, however measured, are clearly too large. This conclusion is based less on the short-run effects of the deficit on the economy than on the effects of the deficit on the Federal budget. Many expected short-run effects of large Federal deficits on the economy have not occurred. Deficits were expected to increase inflation; in fact, inflation has been reduced by about two-thirds since 1980. Deficits were expected to increase interest rates; in fact, short-term interest rates are now less than one-half their peak levels in 1981. Deficits were expected to lead to weak investment and a weak recovery; in fact both real business investment and real GNP growth in the current recovery have been stronger than in any prior peacetime recovery. These developments do not indicate that the deficit had no effect, only that other conditions dominated. One important economic effect of fiscal policy in this period appears to have been the large increase in the trade deficit, but the magnitude of this effect was not widely anticipated. Given the longstanding concern about the Federal deficit, the short-run effects of the deficit on the economy have been surprisingly difficult to estimate.

Whatever the effects on the economy, the effects of the deficit on the Federal budget are clear: Federal borrowing increases future interest payments that must be financed by either reducing future noninterest expenditures or increasing taxes. The first priority of nearterm fiscal policy should be to stabilize the ratio of outstanding Federal debt to GNP; the alternative is either a progressive reduction in the noninterest expenditure share of GNP or a progressive increase in tax rates. Only when this ratio is stabilized will the country have the luxury of addressing whether a further reduction in Federal borrowing would be desirable to increase net saving and investment.

This goal can be accomplished by either reduced growth of expenditure or by increased tax receipts. Reducing the growth of total Federal expenditure may require a substantial reduction in expenditure for some programs and the termination of others. Economic analysis does not provide a sufficient basis to make this choice. The decision to reduce expenditure or increase taxes is fundamentally a political choice. If the American people prefer that Federal expenditure be restrained to about 20 percent of GNP, no increase in taxes is necessary; if they prefer the current share of about 24 percent, a substantial increase in tax receipts is necessary at some time.

If constraining the growth of Federal expenditure is important, reducing Federal borrowing is urgent. The President has articulated a clear strategy to meet both of these objectives:

- 1. Maintain economic growth with declining inflation.
- 2. Reduce the growth of noninterest expenditure, to a rate below the growth of the economy, until a level is reached that is broadly supported by the American people.
  - 3. Broaden the tax base to permit a further reduction in tax rates.
- 4. Only as a last resort, increase tax revenues if necessary to finance the level of government that is broadly supported.

This year will provide the critical test of whether the Congress prefers to restrain spending or increase taxes. The next election will provide the first test of whether that choice is supported by the American people.

#### EFFECTS OF THE ECONOMY ON THE FEDERAL BUDGET

The economy influences the Federal budget through two processes. Changes in real income, inflation, and interest rates affect both Federal spending and receipts without any change in current fiscal policy. Estimates of these effects are prepared as part of the budget process, and the current estimates are summarized below. Changes in economic conditions also affect the demand for Federal spending. For example, an increase in real income reduces government outlays, increases receipts, and reduces the deficit by the sum of these two effects. An increase in real income, however, may also increase the demand for new or current Federal services and transfers, so the net effect of higher real income may lead to higher Federal expenditure.

Economic cycles also affect the budget. Over the postwar period, business cycles have induced changes in expenditures and receipts

that typically have a reinforcing effect on the change in the budget deficit. For example, the cyclical effect of the downturn that began in the third quarter of 1981 is estimated to have increased expenditures by about \$12 billion at an annual rate and reduced receipts by about \$54 billion at the trough in the fourth quarter of 1982. As a result of these estimated cyclical effects on expenditures and receipts, the deficit was increased by about \$66 billion at an annual rate in the trough quarter. Of course, cyclical effects that increase deficits during contractions in economic activity can be expected to reduce deficits in the ensuing economic expansion.

Table 2-2 shows the estimated effects on outlays, receipts, and the deficit from changes in real GNP growth, inflation, the unemployment rate, and interest rates, assuming each change occurs beginning January 1986. The table shows the independent effect on the budget from a change in each variable; of course, a change in one would normally be associated with changes in the others.

TABLE 2-2.—Sensitivity of the budget to changes in economic conditions, fiscal 1986 and 1987 <sup>1</sup>
[Billions of dollars]

ltem	Fiscal year	
	1986	1987
t percentage point reduction in real GNP growth:		
Change in outlays	0.2 -3.4 3.6	1.1 13.6 14.7
percentage point reduction in inflation:		
Change in outlays	-3.5 3.5	-1.5 -13.3 11.8
L percentage point higher unemployment rate:		
Change in outlays	2.8 0 2.8	4.4 ( 4.4
1 percentage point increase in interest rates:		
Change in outlays	3.3 .5 2.8	9.7 1.1 8.6

<sup>&</sup>lt;sup>1</sup> Change assumed to begin in January 1986.

Source: Office of Management and Budget and Council of Economic Advisers.

Clearly, changes in real growth and inflation can have large effects on outlays, receipts, and the deficit without any change in policy. Policy can, however, affect the sensitivity of the budget to economic conditions. For example, the indexation of individual income tax brackets reduces the sensitivity of receipts to changes in the inflation rate. A greater proportion of outlays are also now indexed. As a result, the budget deficit is now much less sensitive to a change in the inflation rate.

Economic conditions also affect the choice of fiscal policies, and these effects may augment or offset the effect of these conditions on the budget, given current policies. A recent study of the major determinants of the Federal expenditure share of GNP in the years since World War II provides a basis for estimating these combined effects. Almost all the variation in the expenditure share during this period can be attributed to three conditions—the level of real GNP per capita, the unemployment rate, and the number of armed forces overseas. These conditions, of course, also reflect the effects of many other conditions with which they are related. Still other conditions affect the composition of Federal expenditure. The complex interaction of policy decisions and economic conditions that leads to total Federal expenditure, however, can be summarized by this simple relationship.

The major conclusion of this study is that, after controlling for cyclical conditions and the deployment of armed forces, the demand for Federal expenditures, as revealed by the political processes, has increased faster than the increase in GNP. This effect would lead to a continued increase in the Federal expenditure share of GNP unless there is a reduced popular demand for Federal services and transfers, a change in the political processes, or a constitutional restraint on Federal expenditure. It is not clear how much this relation reflects popular preferences or a bias in political processes. In any case, these preferences and processes are not inexorable.

Another recent study has estimated the major determinants of the tax receipt share of GNP. The major conclusion of this study is that the historical increase in the share is best explained by an independent increase in the amount of taxable activities, the most important of which are reflected by the increase in female labor force participation and the decline in the relative number of the self-employed. In the short run, the tax receipt share of GNP appears to be determined more by the supply of taxable activity than by the demand for governmental expenditure.

These studies suggest that the government expenditure and tax receipt share of GNP in the short run are determined by fundamentally different conditions; the deficit share is determined by the differences in these conditions. Over time, the present value of government expenditure is limited to the present value of tax receipts, but it is less clear what limits the level of the deficit in the short run.

#### EFFECTS OF THE FEDERAL BUDGET ON THE ECONOMY

For several decades, the Federal budget has been evaluated on the basis of its effects on total demand, the allocation of resources, and the distribution of benefits and taxes among income classes. Different criteria were usually applied to evaluate each effect. For several reasons, this approach is probably not as valuable as was once believed.

Changes in Federal expenditure, tax receipts, and the deficit appear to have little effect on total demand, as measured by nominal GNP, except in times of war. The primary effects of the Federal budget on the economy appear to operate through the "supply side" of the economy by affecting incentives to work, save, and invest, although this conclusion is controversial.

A distinction between the allocative and distributive effects of the Federal budget continues to be valuable, but it is not clear that these effects should be evaluated by different criteria. A good case can be made that changes in Federal services and transfer payments should be judged by the same standard, that is, whether the sum of the value to the direct beneficiaries plus the value to other taxpayers is higher or lower than the additional cost to the economy. Any other criterion for evaluating distributive effects seems inherently arbitrary.

The effects of the Federal budget on the economy operate through specific Federal expenditure programs and the detailed provisions of the tax code. These elements of fiscal policy affect the behavior of households, businesses, other private institutions, and State and local governments in varied ways. For this reason, changes in the budget totals provide little useful information about the effects of the budget on the economy.

Changing one component of the budget, in turn, has quite different effects depending on how other components are changed. An increase in government purchases, for example, must be offset by an equal reduction in other expenditures, an increase in tax receipts, or an increase in the deficit; the net effect on the economy depends on how much each of these other components is changed. An evaluation of the effects of changes in one part of the budget, thus, must specify the amounts by which other parts of the budget are also changed.

# Cost of Government Spending

Government purchases of goods and services and transfers cost the economy a good bit more than the direct increase in the budget. The cost of additional government activities is the sum of the increase in expenditure, the additional cost of tax compliance, and the additional cost from the misallocation of private activities that accompanies the expenditure and the taxes needed to pay for it.

One study estimates that the average private compliance cost of Federal and State personal income taxes is 5 to 7 percent of the revenue they raise. Total compliance costs also include government enforcement and the private compliance cost of other types of taxes. The additional compliance cost attributable to an increase in tax

receipts is likely to be lower than the average cost but is probably still substantial.

A change in government expenditure and tax rates also leads to a change in the allocation of private activity. For example, an increase in unemployment compensation appears to increase the unemployment rate, and an increase in social security benefits may lead to earlier retirement. Similarly, an increase in personal income tax rates appears to reduce employment, and an increase in the effective tax rate on the income from investment reduces new investment. The economic literature uses the term "marginal excess burden" to describe the additional costs of misallocation of resources per additional dollar of expenditure and tax receipts. This burden differs by the type of expenditure and tax and increases sharply as a function of marginal tax rates. Several recent studies provide similar estimates of the magnitude of this marginal excess burden as a function of the effective marginal tax rate and the responsiveness of the labor supply to after-tax wage rates.

Table 2-3 summarizes estimates of the allocative costs of different types of government expenditure. Most recent studies of labor supply are more consistent with a moderate response of the labor supply to after-tax wages. These estimates are based on the range of the combined Federal, State, and local marginal tax rates during the past decade. The implications of these estimates are:

- The cost of additional government services is probably around 1.43 times the additional budget cost, plus the additional cost of tax compliance.
- The cost of additional government transfer payments is probably around 1.57 times the additional budget cost, plus the additional cost of tax compliance. Transfer payments are more "expensive" than services because they reduce labor supply and saving.
- These estimates increase sharply with the responsiveness of the labor supply to after-tax wage rates and with the effective marginal tax rate.

The primary policy implication is that government services and transfer payments are desirable only if their value is substantially higher than their budget cost. Government activities that fail this test should be eliminated or scaled back.

What limits the relative size of government? As the above estimates indicate, the cost of government expenditure increases as the responsiveness of labor to its after-tax return increases. This suggests that the size of government may be constrained by the extent to which taxable activity is a function of tax rates; for example, income earners may change location to reduce their tax burden. A centralization of government finance, for example, such as from local government

TABLE 2-3.—Allocative cost of government expenditure
[Allocative cost per dollar]

item	Responsiveness of labor supply	
	Zero	Moderate
Goods and services		
Marginal tax rate		
43 percent	\$0.07	\$0.43
46 percent	.09	.53
Transfer payments		
Marginal tax rate		
43 percent	.21	.57
46 percent	.24	.72

Source: Charles Stuart, American Economic Review, June 1984.

ments to the State or from States to the Federal Government, diminishes the opportunity to avoid taxation by moving, and therefore is likely to increase the combined size of the government sector.

The cost of government expenditure is also a function of the marginal tax rate. The relative size of government, in turn, may be a function of this cost. This suggests that a broad-base, low-rate tax system is more likely to lead to an increase in the size of government than would a narrower base, higher rate tax system. During the past 20 years, much of the growth in government spending has been financed by the value-added tax in Europe and by the social security tax in the United States—both of which are broad-based taxes. This illustrates an important dilemma in public finance. Lower tax rates would reduce the allocative costs of the tax system for a given level of government expenditure, but they may also lead to an increase in the size of government. If the size of government is already too large as a result of biases in the political process, then a tax reform that lowers tax rates should probably be accompanied by constitutional restraint on government expenditure.

## Effects on Consumption and Investment

Government expenditure and receipts also affect the level and distribution of private expenditure. There is substantial agreement among the recent studies concerning the effects of government purchases of goods and services and of transfer payments. For a given level of government expenditure, there is considerable disagreement about the relative effects of tax receipts and borrowing.

For a given level of total output, government expenditure for goods and services must "crowd out" an equal amount of private expenditure. The amount by which an increase in government expenditure reduces a specific component of private expenditure depends

on the degree of substitution between government services and that component. Transfer payments change the composition of private expenditure if the combined effect of transfers and taxes redistributes income among groups with different propensities to consume and save.

For a given level of total government expenditure, the effects of changing current tax receipts and the deficit by offsetting amounts are much less clear. A reduction in current tax receipts must be offset by an increase in future tax receipts, and the deficit is a crude measure of the present value of these future tax receipts. For several decades, conventional economic theory has assumed that people overlook the future tax receipts necessary to finance the debt service on current deficits; in this case, a reduction in current taxes and an offsetting increase in the deficit would increase consumption expenditure and reduce investment. Renewed attention is now being given to an older economic theory that assumes that people recognize the existence of the future liability and save for the future tax payments necessary to finance current deficits: in this case, different combinations of current tax receipts and deficits would have little effect on the level of current consumption and investment. For example, an individual taxpayer facing a reduction in taxes in one year and a certain increase in taxes the next year is most likely to save the current tax reduction to pay for the future liability. It is much less clear how a group of taxpayers would react to a current tax reduction if the timing and distribution of future tax increases, some of which might be borne by the next generation, were uncertain.

Several recent empirical studies of consumption and investment reflect the range of estimates of these effects. One study of the determinants of personal consumption expenditure found that government purchases of goods and services appear to reduce personal consumption expenditure by about 25 cents per dollar of additional government purchases. Transfer payments, however, appear to increase personal consumption expenditure by a substantial amount, implying a redistribution from households with a high propensity to save to those with a high propensity to consume. A reduction in tax receipts and a corresponding increase in real government debt appears to reduce personal consumption expenditure by a small amount; this result is consistent with the hypothesis that the future tax receipts necessary to finance current government borrowing are fully anticipated. The results of this study suggest that government expenditure, not government borrowing, is the primary fiscal effect leading to a "crowding out" of private investment. These results, however, are quite different from those of many prior studies.

A direct test of the effects of government expenditure and borrowing on private investment is also useful, both to estimate the several fiscal effects on the components of private investment and to provide an independent test of the estimates of the effects on personal consumption expenditure. One recent study, for example, estimated the effect of changes in the real Federal debt on the composition of GNP, without controlling for the level and composition of Federal expenditure. Over the period since World War II, this study estimated that a \$1 increase in the real Federal debt increased private saving by about 45 cents, increased State and local saving by about 5 cents, and reduced total domestic investment by about 40 cents, including reduced business investment in plant and equipment of about 15 cents. During the recent period of floating exchange rates, a \$1 increase in the real Federal debt appears to have increased net foreign investment in the United States by about 25 cents.

Another recent study estimated the effects of total Federal, State, and local expenditure for goods and services and transfers and of the total government deficit on the composition of GNP. Gross investment including consumer durables and net exports appears to be reduced by about 50 cents per dollar of government spending for goods and services and by about 50 cents per dollar of the combined government deficit. Business fixed investment also appears to have been substantially reduced by government spending for transfer payments, but most of the fiscal effects on the composition of investment have not been stable.

The combination of economic theory and the available evidence suggests the following general conclusions:

- An increase in government expenditure on goods and services, financed by an increase in taxes, reduces the sum of personal consumption expenditure and private investment by a nearly equal amount, with the larger impact on private investment.
- An increase in government transfer payments, financed by an increase in taxes, probably increases personal consumption expenditure and reduces private investment substantially.
- For the same level of total government expenditures, an increase in government borrowing probably reduces private investment by about 50 cents per dollar, but the distribution of these effects by type of investment has not been stable.

The general policy implication of these conclusions is that a reduction in government expenditure for either services or transfer payments would increase total private investment. A reduction of the deficit by increasing tax receipts may also increase private investment if the increased taxes are not levied on the income from saving and investment.

## Effects of Intergovernmental Grants

The Federal budget includes about \$100 billion of grants-in-aid to State and local governments. State budgets, in turn, also include about \$100 billion of grants to local governments. Most of these grants are now limited dollar grants for broad purposes, such as education.

The effect of these grants on the economy depends on the response of the receiving governments. Many studies have found that limited-dollar, broad-purpose grants increase expenditure by the receiving government by about 43 cents per dollar of the grant, and by as much as 85 cents for education grants. The remainder of the grant appears to be used to reduce taxes or borrowing. In contrast, State and local government expenditure increases by only about 10 cents from an additional dollar of disposable income within their jurisdiction. The combination of grants and taxes by the higher level of government, therefore, has probably increased total government expenditure by 33 to 75 cents per dollar of the grants. Because the receiving government would not choose to finance this level of expenditure from its own tax base, the additional services financed by these grants are probably valued by taxpayers within the receiving jurisdiction at less than the cost of these services. This system of grants and taxes is desirable only if the sum of the value of these services within and outside the receiving government exceeds the cost of raising the additional taxes by the granting government. One other conclusion of these studies is that many of these grants are effectively fungible because they increase the total expenditure by the receiving government but have only a small effect on the composition of these expenditures.

The primary policy implication is that grants should be restricted to services that have substantial value to people outside the jurisdiction of the receiving government. In addition, the grants should be structured to assure that they lead to an increase in these specific services, rather than to a general increase in expenditure in the receiving jurisdiction.

# Effects of Loans and Loan Guarantees

The Federal Government now makes net loans of about \$15 billion a year, mostly at interest rates lower than necessary to recoup the sum of government borrowing and administrative costs. The intention of these loans is to reallocate capital from sectors with a high private rate of return to favored sectors with a lower private rate of return. These loans are desirable only if the sum of the return to the recipient and the taxpayer exceeds the interest rate on a private loan.

The Federal Government now makes net loan guarantees of about \$20 billion a year. The cost appears on the budget only for loans that

default. These loan guarantees also reallocate capital to favored sectors with a lower risk-adjusted private rate of return. Again, these loan guarantees are desirable only if the sum of the return to the recipient and the taxpayer exceeds the interest rate on a private loan. These loan guarantees are especially subject to abuse because no current appropriation is necessary to cover the loan origination or the guarantee.

#### THE FEDERAL TAX SYSTEM

The tax system affects the cost or return to engaging in most types of economic activity, and therefore it influences the allocation of resources. How tax revenue is collected also affects the distribution of after-tax income among various groups.

The principal sources of Federal revenue are the personal income tax, social insurance taxes, and the corporation income tax. These three taxes yielded about \$641 billion in 1984, or 91 percent of total Federal receipts. Of this total, personal income taxes were \$308 billion, social insurance taxes were \$263 billion, and corporation income taxes were \$70 billion. This section addresses only the individual and corporation income taxes; social insurance taxes and benefits are discussed in Chapters 4 and 5.

# The Economic Impact of the Tax System

Any tax system that relates tax liability to measures of economic activity, such as income or expenditure, will cause some inefficiency in economic performance. This is because it encourages activities (such as leisure) that are untaxed or relatively undertaxed at the expense of taxed activities. The result is a misallocation of resources compared with their most efficient use.

The concept of a "pure" income tax provides a useful benchmark for assessing the current tax system and proposals for tax reform. A pure income tax would subject all income to tax, regardless of source. Furthermore, tax liability would be determined with reference to income, so that taxpayers with higher income would pay more tax and taxpayers with the same income would pay the same tax.

Even a pure income tax system would have important implications for the efficient operation of the economy. Because labor earnings are subject to tax at the margin, the total amount of hours worked is inefficiently low. This represents a cost to the economy to the extent that the productivity of the labor forgone due to taxation at the margin exceeds the value of time spent not working. Because the income from capital is subject to tax at the margin, some desirable saving and investment opportunities are also passed up. These forgone opportunities will in the short run lower the rate of growth of

the economy and reduce the capital intensity of production. A lower capital intensity leads to a lower level of productivity and real wage rates.

Of course, the current income tax system is far from the pure system described above. Some sources of income are fully subject to tax, some are partially subject to tax, and others are completely exempt from tax. Deductions from income for tax purposes and special tax credits are allowed for a wide range of activities. Income from capital is not measured accurately, and the existence of a separate corporation income tax system adds an additional layer of taxation on capital income.

These divergences from a pure income tax system have arisen for a variety of reasons. In some cases they are the result of an explicit government decision to subsidize a particular activity through the tax system; the credit for residential energy conservation expenses is an example. In other cases, the tax feature is an attempt to maintain equity in the taxation of families or individuals in different situations, where income is not an adequate measure of the ability to pay taxes. The deductibility of extraordinary medical expenses and uninsured casualty losses are examples. Some features have been justified on the grounds that it is too complicated to implement the pure income tax treatment. In this category is the tax exemption of the income-in-kind provided by owner-occupied housing. Finally, many of the features of the tax law merely serve the interest of a particular group.

The result of all these special features is an extraordinarily complicated system that affects the return to labor supply, saving, investment, and myriad other activities. By altering the relative returns to various activities, the system diverts resources into less productive but more tax-favored activities. Consequently, the country wastes a substantial fraction of potential national income. Some of this waste is unavoidable under any income tax system; much of it, though, results because the system has strayed so far from a pure income tax concept.

Table 2-4 presents one set of estimates of the allocative costs of raising additional revenue from the major types of Federal and State taxes. These estimates assume a responsiveness of labor supply about midway between the two values used in Table 2-3 as well as about the same marginal tax rate.

The primary conclusions from these estimates are the following:

- The cost of additional government services and transfer payments substantially depends on the types of taxes that finance these expenditures.
- Among the major sources of tax revenue, the highest allocative costs are specific to the personal income tax and the major taxes

TABLE 2-4.—Allocative cost by type of tax

Type of tax	Allocative cost per dollar	
Personal income tax	\$0.55	
Corporate and property taxes	.49	
Social insurance taxes	.19	
Retail sales tax	.35	
Total	.48	

Source: Ballard, Shoven, and Whalley, Working Paper No. 1043, National Bureau of Economic Research, December 1982.

on the income from capital. The lowest allocative costs are specific to social insurance taxes on labor income and the retail sales tax.

These estimates suggest that the cost of additional government services and transfer payments could be reduced substantially by replacing the present tax system with broader based, lower rate taxes on either income or consumption.

## Special Problems of Taxing Income from Capital

One especially troublesome problem with the present tax system is the taxation of capital income. The present tax system, with some exceptions, taxes both saving and the income from savings, which increases the price of future consumption relative to current consumption. This reduces current saving and investment relative to the amount that would be saved and invested if taxes were levied only on consumption. Many of the changes in the Federal tax system during the past several decades represent selective measures to reduce the bias against saving and investment. Such changes include limited exclusions of retirement saving and measures to reduce effective tax rates on the income from new investment. The Economic Recovery Tax Act of 1981 further reduced the bias against saving and business investment, most importantly by extending the individual retirement accounts (IRAs) to employees and accelerating cost recovery on business investment. These measures have contributed to the rapid rate of domestic business investment, but they do not appear to have increased the personal saving rate. The substantial remaining bias against saving and investment should be a major focus of future changes in the tax structure.

The current tax system also distorts the pattern of investment spending, because the effective tax rate on new investment depends on the type of asset and the rate of inflation. These distortions have arisen partially because capital income is difficult to measure. For example, to calculate net income it is necessary to deduct the expenses incurred in earning that income, a critical component of which is the

depreciation of the capital asset. Unfortunately, "economic depreciation," a concept that measures changes in value arising from both physical deterioration and obsolescence, is extremely difficult to measure accurately.

Another problem is that the tax system is not completely indexed for inflation. Although individual income tax brackets are being adjusted annually for inflation, taxation of capital income is still affected by the inflation rate. Depreciation allowances fall in real value as the price level rises, leading to an overstatement of the real income of businesses. Increases in the value of inventories solely because of inflation may also increase taxable income. Finally, increases in the value of capital assets that merely reflect the increased price level are subject to a capital gains tax upon sale.

This problem also applies to financial assets. In a period of inflation, part of the interest rate, the "inflation premium," compensates for the fact that the principal falls in real value over time. The tax system, however, considers the full nominal interest earned on taxable securities to be income to the lender and a deductible expense to the borrower. Taxable income is thus greater than true real income for the lender. Similarly, full deductibility of nominal interest payments leads to an understatement of the borrower's real income and reduces the tax liability.

Several of the changes in the tax law during the past decade have been advocated as offsets to the unintended effects of inflation on effective tax rates. These changes include the reduction in the taxation of capital gains in 1978 and the accelerated cost recovery system of the Economic Recovery Tax Act of 1981. Although these tax changes reduced the average rate of taxation on the income from new investment, they did not successfully deal with the problem that the effective tax rate varies widely depending on the type of investment and the financing method.

The effective tax rate measures the difference between the before-tax and after-tax real rate of return on an investment, expressed as a percentage of the before-tax real rate of return. Table 2-5 shows that the effective Federal corporate tax rate on the income from equity-financed investment is lower for equipment than for structures. The table also shows how the effective tax rate depends critically on the rate of inflation. Because different industries utilize different mixes of capital goods, differential taxation of assets results in differential taxation of capital income by industry. Table 2-6 indicates that the average effective Federal corporate tax rate on fixed investment varies widely by industry, and that the divergence in tax rates is higher at lower rates of inflation.

Nonuniform taxation of capital income causes misallocation of capital. One estimate of the cost of this misallocation of corporate cap-

TABLE 2-5.—Effective Federal corporate tax rates on equity-financed investments in equipment and structures

#### [Percent]

Asset class by depreciable life	Inflatio	Inflation rate	
	5 percent	10 percent	
uipment:			
3 years	_8	22	
5 years	_3	19	
10 years	20	3.	
ructures:			
15 years	35	4	
18 years	. 40	4	

Source: Tax Reform for Fairness, Simplicity, and Economic Growth, The Treasury Department Report to the President, Volume 1, p. 107.

ital is that it is equivalent to wasting 1½ percent of the present stock of capital, or more than \$5 billion worth of output annually.

Another important feature of the present tax system is the presence of a separate tax on corporate income. There is no necessary role for a separate corporate income tax in a pure income tax system. The income generated by corporations could be directly attributed to stockholders and taxed under the individual income tax system in the way that partnership income is treated. The primary justification for a separate corporate tax is to ensure that retained corporate income is subject to tax. However, the corporate income tax achieves this end only at the cost of introducing a number of distortions to economic behavior. Corporate earnings distributed as dividends are taxed more heavily than other forms of capital income because they are subject first to the corporation income tax and then to the individual income tax. Earnings retained by the corporation may be overtaxed relative to noncorporate business income if the corporate tax rate is greater than the shareholder's marginal individual income tax rate. Thus, the present system can impose a higher effective tax rate on activities carried out by corporations compared with activities performed outside of the corporate sector.

Because interest payments are deductible while dividend payments to shareholders are not, the corporation income tax system provides an incentive to use debt rather than equity financing. This leads to more debt finance than the market would otherwise choose, increasing the vulnerability of corporations to bankruptcy. Because earnings paid out as dividends are taxed more heavily than earnings retained within the corporation, there is a tax incentive for corporations to retain earnings. This may lead to inefficient investment of retained earnings at rates of return lower than those available to the stockholder.

TABLE 2-6.—Effective Federal corporate tax rates on equity-financed investments in equipment and structures for selected industries

#### (Percent)

A-4A	Inflation rate	
Industry	5 percent	10 percent
Highest		
Service and trade Leather Agriculture Apparel Utilities	31 30 29 28 28	40 40 37 38 38
Lowest		
Mining Pulp and paper Petroleum refining Transport services Motor vehicles	13 12 12 9 8	31 26 26 26 26 26

Source: Tax Reform for Fairness, Simplicity, and Economic Growth, The Treasury Department Report to the President, Volume 1, p. 108.

#### PROPOSALS FOR REFORM OF THE FEDERAL TAX SYSTEM

Dissatisfaction with the tax system has recently generated interest in fundamental tax reform. Reform proposals can be grouped into two categories: those aimed at improving the current system and those that would substitute a new system. A common objective of the tax reform proposals of both types is to redress such problems as the erosion of the tax base, the overtaxation of capital income, and the undue complexity of the system.

A critical issue in the evaluation of tax reform options is the degree to which the income tax concept should be set aside in order to reduce the taxation of saving and investment. If the tax base were consumption rather than income, taxation of the return to saving and investment would be eliminated. The present income tax system has many special features, such as the treatment of pension contributions and earnings, that reduce the taxation of saving and investment. The tension between retaining the income tax concept, which does not differentiate between income from labor and income from capital, and the desire to reduce disincentives to saving and investment is a recurring theme in the discussion of tax reform options that follows.

## Reforming the Income Tax

The Treasury Department proposal, introduced in late 1984, and other similar proposals rest on the belief that the income tax concept is sound, and that the deterioration in the performance of the current system is caused primarily by its departure from the framework of a pure income tax. The basic elements of these reform plans are simplification of the tax system, a broadened tax base, and lower marginal tax rates. In some cases, however, there is a conflict between simplification and base-broadening, as there is between adher-

ence to a pure income tax ideal and other goals, such as reducing the disincentives to saving and investment.

Broadening the tax base would eliminate many sources of misallocation. In addition, because it also allows lower marginal tax rates for the same revenue raised, it would further reduce the inefficiencies arising from the tax system by reducing the differential between the return to taxed activities and the return to activities that are untaxed even under base-broadening. Exceptions to the principle of base-broadening should be justified either as incentive programs that promote the efficient use of resources or as measures to improve the equity of the system.

One element of base-broadening is the reduction of itemized deductions. The largest category of itemized deductions is interest expense. In an income tax system it is proper to deduct interest expenses' incurred in order to earn income. Real interest payments should therefore be netted against real interest receipts. Arguments in favor of limiting or eliminating the interest paid deduction usually rely on the observation that many kinds of capital income are either partially or completely exempt from taxation. The primary example of this treatment is the deduction for mortgage interest, which is allowed even though the income-in-kind from owner-occupied housing is not regarded as taxable income. Currently, the law disallows the interest deduction on loans used to purchase tax-exempt bonds, and limits the total deduction of investment interest to net investment income plus \$10,000. Although these rules are difficult to enforce, some such limitation is needed to maintain the integrity of the system.

The deduction for State and local taxes, the second largest category, has been defended on two grounds. First, it is argued that State and local taxes are involuntary payments that reduce an individual's ability to pay other taxes. According to this argument, income minus such involuntary payments is the proper base on which to calculate taxes. This argument is flawed to the extent that these taxes finance goods and services that are valued by individuals and that are determined through State and local political processes. The second argument is that Federal subsidization of State and local government spending is desirable. This subsidization is sensible only if, in its absence, State and local spending would be inefficiently low because of external benefits to residents of other jurisdictions. This argument, however, does not suggest the form that deductibility implies—a subsidy that applies only to those who have sufficient total deductions to make itemizing worthwhile, and at a rate equal to the marginal Federal tax rate. In any case, grants can be a more efficient means to address these external benefits.

The deduction for medical expenses in excess of 5 percent of adjusted gross income provides taxpayers with partial insurance against extraordinary medical expenses. The rationale is that large medical expenses reduce an individual's ability to pay, and thus the principle that taxpayers of equal means should pay equal taxes requires such a deduction. The choice of the appropriate floor for the deduction should reflect a balance between the reduced insurance value of a high floor and the substantial administrative and compliance cost of a low floor that would apply to a large fraction of the taxpaying population.

Another target for broadening the base of the income tax is employee benefits. These benefits would be regarded as taxable income under a pure income tax system, but are currently given favorable tax treatment. The major employee benefit programs are pensions; health, disability, and life insurance plans; and worker's compensation.

Under current law, employer contributions to qualifying private pension plans are deductible at the time of payment, and are not included as current income taxable to the employee. Furthermore, earnings on the pension fund's assets are not taxed as they accrue. Pension fund benefits in excess of employee contributions are taxable to the employee when paid out. If marginal tax rates are constant, this treatment of employer contributions is equivalent to taxing the contribution when made and imposing no further tax on either earnings or receipt of the fund. If the employee's marginal tax rate is lower when benefits are received compared with when contributions were made, the provisions provide the equivalent of a taxable contribution plus a subsidy to earnings of the fund. Under a pure income tax system, pension rights would be fully taxable at the time of accrual. The current treatment can be justified as a selective reduction of the bias against saving that is inherent in any tax on income. Similarly, the system of individual retirement accounts, which also represents a divergence from a pure income tax base, is designed to encourage saving. Effective saving incentives, though, should operate at the margin of new saving. At present, IRAs have an annual ceiling, and individuals can achieve the tax saving without doing any additional saving by transferring previous savings into the accounts.

Employer payments for group health insurance are not now taxable at the employee level, although they are deductible by the employer. This treatment provides a subsidy to health insurance that contributes to escalating medical care expenditures. These consequences are discussed in greater detail in Chapter 4 of this *Report*. A pure income tax plan would eliminate this subsidy by making employer payments for insurance taxable to the employee.

Under a pure income tax, all real capital gains would be subject to tax in the year they accrue, and all real losses would be fully deductible against other income. The current tax treatment of capital gains diverges from this in a number of ways. Gains are taxed only when income is realized (i.e., when the asset is sold), conferring the benefit of tax deferral, and are excused from taxation upon the death of the asset owner. Sixty percent of realized capital gains for assets held longer than 6 months are excluded from taxable income. However, the tax is based on nominal rather than real capital gains and only \$3,000 of net capital losses for individuals can be offset against ordinary income in a tax year.

The 60 percent exclusion of long-term capital gains has been justified as an offset to the failure to tax only real capital gains. However, it is a highly imperfect offset, because an accurate measurement of real capital gain would not exclude a fixed fraction of gain, but rather a fraction that depends on the rate of appreciation and the amount of inflation that has occurred during the holding period. Adjusting the purchase price used in calculating taxable gain for inflation is preferable to the current percentage exclusion and the arbitrary holding-period distinction. Another reason for a lower tax rate on capital gains is to reduce the bias against saving and investment that is inherent in any income tax system.

Although under a pure income tax a separate corporation income tax need not exist, recent reform proposals have focused on redesigning rather than abolishing the corporation tax system. One approach is to lower the statutory corporate rate and reestablish the link between tax depreciation schedules and economic depreciation. This entails repealing the investment tax credit, lengthening the depreciation period, and indexing depreciation allowances for changes in the price level. The net effect of all three provisions would be to establish an approximately uniform effective tax rate, substantially lower than the present statutory corporation income tax rate, on all new investments. Because the effective tax rate would be uniform among types of assets, it would also be uniform among industries that use different mixes of capital goods.

The impact of such a reform on the effective tax rate on new investment cannot be determined from short-term corporate income tax payments. This is due to the extension of the period over which assets are depreciated and other credits against income are taken. To the prospective investor looking forward over the asset's useful life, the new tax system may be no less favorable than the current system. The timing of future tax payments with the same present value should not be relevant unless there is uncertainty with respect to tax rates in the future. For this reason, any conclusion drawn from a

projected short-run increase in corporation tax revenues about whether the incentive to invest decreases, stays the same, or even increases must be tentative.

The principal advantage of this type of reform is to eliminate the variation in the effective tax rate on investment and the resulting inefficient allocation of capital. Other proposals view reducing the effective tax rate on new investment as more important than eliminating the variation. These proposals typically accelerate depreciation allowances relative to economic depreciation.

In evaluating these proposals, it is important to realize that two conceptually distinct issues are involved—the average effective tax rate on new investment and the variation in effective tax rates. A tax system that treats all types of investment uniformly, regardless of inflation, can be designed with any effective tax rate desired. For this reason, accelerated depreciation is not a necessary component of a system that features low taxation of new investment.

Either approach to corporation taxation can be supplemented with a plan to reduce the double taxation of dividends. This can be accomplished either by allowing taxpayers to deduct a percentage of their dividend receipts as a credit against their individual income tax burden, or by allowing corporations to deduct some or all of their dividend payments from taxable income.

## A Consumption Tax

Proposals that emphasize taxation of consumption are based on the notion that the income tax concept itself is flawed, and that no amount of tinkering will substantially improve a system based on taxing income. Under a consumption tax, an individual's tax liability would be based on annual consumption rather than annual income. According to one proposal, it would operate similarly to the current income tax with a greatly expanded system of IRAs. A taxpayer with earned income can now establish an IRA and deduct from taxable income up to \$2,000 per year. The funds earn income without taxation, but the entire balance is subject to full taxation at the time of withdrawal. A personal consumption tax based on the IRA model would allow the taxpayer to place an unlimited amount of deductible saving into a special account. The fund's earnings would not be taxed, and the fund's balances could be withdrawn at any time. whereupon they would be subject to taxation. Borrowing would be treated as a withdrawal, and therefore subject to tax. Consumer durables and housing could be treated in various ways; one method would be to disallow deductions for their purchase, and also to exempt from tax the imputed rental value of the services they provide. Under some plans, the individual could elect not to take a deduction for any financial asset purchased, in which case earnings and withdrawals of principal would be exempt from tax.

In this way, a consumption tax would not require direct accounting of annual expenditures, which would be impractical. Instead, an indirect determination of consumption would be made, based on defining consumption to be equal to income minus saving. The tax schedule applied to annual consumption could be graduated. As under a pure income tax, there is no necessary role for a separate corporation income tax under a consumption tax system. As income is no longer the basis for taxation, it is appropriate that tax liability not be incurred until funds are distributed to the owners of the corporations and used for consumption.

The return to saving is untaxed under a consumption tax. Thus, a consumption tax, unlike an income tax, creates no distortions with regard to saving and investment decisions. On the other hand, as with an income tax, it does distort incentives to work. Because it operates on a smaller tax base than the income tax, it must impose higher statutory tax rates to raise the same amount of revenue, potentially exacerbating any distortion in labor supply. Thus, the choice between an income and consumption tax system is a matter of the relative seriousness of the distortions under the two systems. This is an empirical question that cannot be answered on theoretical grounds. Although there has been a substantial body of literature on this subject, the question has by no means been resolved.

A pure consumption tax offers a solution to many of the structural problems of the current income tax. It would eliminate the nonuniformity in the taxation of various kinds of investment by setting a uniform effective tax rate of zero on the income from investment. Because the calculation of the tax base involves only current transactions, a consumption tax system would not require any explicit indexing provisions except to alleviate bracket creep if the rate structure were graduated. Furthermore, there is no need to measure economic depreciation or accrued capital gains, or to correct these measures for inflation. Because these difficulties in measuring capital income are avoided, a consumption tax represents a simplification compared with an income tax. However, a typical taxpayer's reporting requirements would be complicated by the need to add borrowing and account withdrawals to the tax base.

Many of the advantages of a consumption tax depend on the degree to which its "purity" could be maintained. A consumption tax system, though, could be burdened with special provisions favoring certain forms of investment or consumption just as the income tax system has been so encumbered. The allocative cost of such a system

would most likely exceed the cost imposed by a pure consumption tax system.

#### Transition Issues

One unfortunate side effect of tax reform is that it alters the return to long-term commitments made on the basis of the former tax law. Consequently, assets that lose preferential tax treatment will likely experience capital losses, while assets with a reduced tax burden will likely experience capital gains. Individuals who have made long-term commitments, such as career choices, on the basis of previous tax law may be capriciously rewarded or penalized.

These gains and losses cannot be justified as recovery of tax benefits unfairly received or as compensation for excess tax payments unfairly paid. Once the current law has been in place for several years, the benefits of preferential tax treatment are reflected in the price of the asset or activity. For example, preferential tax treatment of the oil and gas industry undoubtedly generated capital gains for stockholders when the provisions were enacted. Subsequent purchasers of oil and gas stock have had to pay a higher price that reflected the tax advantages, and therefore are unlikely to have earned an extraordinary after-tax rate of return on their investment. Revoking the tax preferences would cause a capital loss to all stockholders, whether or not the current owners received a capital gain when the provisions were enacted.

One method to reduce, although not eliminate, the gains and losses that would accompany a tax reform is to phase in the changes or postpone the effective date of implementation. This would allow time for adjustment to the new rules and reduce the current value of the induced gains and losses. Another approach is to grandfather tax law changes, i.e., to apply them only to new commitments. Grandfathering can serve to minimize the capital losses on assets that are scheduled to lose preferential tax treatment, although it will not ensure that no such losses occur.

It has been argued that tax incentives designed to increase investment ought to apply only to new investment. This suggests that provisions such as the investment tax credit and accelerated depreciation that apply only to new investment provide a better set of incentives to capital formation than changes such as a reduction in the statutory corporate tax rate or dividend relief, which apply equally to new capital and capital already in place. The targeting of new investment induces capital losses on existing capital at the time such measures are introduced, because it essentially reduces the net purchase price of substitutable new capital. This policy will also tend to maximize the investment incentive per dollar of tax revenue lost, unless potential

investors anticipate additional targeted investment incentives in the future.

There are also problems that would apply specifically to the transition from an income tax to a consumption tax. The critical issue is how to treat consumption out of the wealth that has been accumulated under the current tax system. One approach is to subject the wealth to tax when consumed by requiring existing wealth to be registered and considered to be in the IRA-type special account. This approach has been criticized as inequitable because it subjects individuals to tax on the consumption out of accumulated wealth on which income tax has already been paid; this inequity would fall most heavily on the retired population. The system would also create a tremendous incentive for individuals to hide existing assets from the qualified account at the time of transition, in order to deduct the value of the assets later as if it represented new saving. An alternative approach is to simply declare consumption out of old wealth to be exempt from tax. Even in this case, however, complicated accounting rules would be required to prevent wealthholders from reducing tax liability in the post-transition years by transferring assets to deductible qualified accounts.

## The Treasury Tax Proposal

The tax reform plan proposed by the Treasury Department in 1984 embraces the principle that moving toward a pure income tax system would improve the operation of the economy by reducing the role of taxation in economic decisions. Toward this end the plan would eliminate scores of current provisions that are inimical to proper measurement of income.

The taxable base of the individual income tax would be expanded by adding currently untaxed sources of income to the base and by eliminating some deductions and limiting others. Prominent among the base-broadening measures are the repeal of the deductions for State and local taxes, limitation of charitable contribution deductions to those in excess of 2 percent of adjusted gross income, and the limitation of tax-free employee benefits (including a cap on excludable contributions for health insurance). A long list of other provisions are designed to restore uniform taxation of income.

The expanded tax base would allow individual income tax rates to be reduced significantly. The current schedule of 14 different tax brackets (15 for single taxpayers) with tax rates ranging from 11 to 50 percent would be condensed into 3 brackets with tax rates of 15, 25, and 35 percent. The personal exemption allowance would be approximately doubled, so that for a family of four filing a joint return no tax would be due on income of less than \$11,800, compared with

\$8,070 (\$9,613 assuming full use of the earned income credit) in tax year 1986 under current law. The combination of base-broadening and rate reductions would reduce the expected revenue yield of the individual income tax by 8½ percent. This reduction is spread roughly proportionately among all income groups, with the exception of significantly greater percentage reductions in tax liabilities for the lowest income groups.

The Treasury Department also proposes major changes in the taxation of business income. The statutory corporation income tax rate would decline to 33 percent from its current level of 46 percent. The investment tax credit would be eliminated and the system of depreciation allowances would more closely replicate actual economic depreciation, with an adjustment for inflation. The tax treatment of inventories would be liberalized and include indexation. Finally, a deduction for one-half of dividends would be allowed to corporations, reducing the tax penalty for paying dividends out of the corporate sector. Certain special tax preferences that apply to particular sectors, primarily financial institutions and the oil and gas industry, would be repealed.

The provisions that generally apply to corporations would increase the average effective corporate tax rate on new equity-financed investment in equipment and reduce the effective rate on investment in structures and inventories. For any firm or industry, the change in the effective tax rate would depend on the mix of these assets. The reform appears to increase the average effective tax rate on new investment generally, but this issue is not yet resolved. The reform would also substantially reduce the misallocation caused by differential tax treatment by asset type, industry, and financial arrangements.

One summary measure of the effect of any tax proposal on investment incentives is the change in the rental rate on capital. The rental rate measures the annual cost of using capital, including taxes, expressed as a percentage of the capital good's price. The net effect of the Treasury Department proposal on the rental rate depends on the rate of inflation. Table 2-7 summarizes one study's estimates of the annual rental rate on capital, assuming a 4 percent real after-tax return on corporate equity, from the combined effect of the major provisions. These estimates also depend on the assumption that the dividend exclusion provision does not reduce the cost of capital.

At a 6 percent inflation rate, the Treasury Department proposal appears to increase the rental rate on producers' equipment by about 11 percent and reduce the rate on nonresidential structures by about 5 percent. The increase in rental rates would probably reduce the fixed investment share of total output, but other effects of the Treasury proposal might increase total output in the near term.

TABLE 2-7.—Annual rental rate on corporate capital [Percent]

4	Inflation rate		
Asset type	2 percent	6 percent	10 percent
Producers' equipment:			
Current code	14.6 17.0	15.2 16.8	15.6 16.7
Nonresidential structures:			
Current code	11.2 11.8	12.1 11.5	12.4 11.4

Source: Lawrence H. Meyer and Associates, Special Analysis, December 1984.

An innovative aspect of the proposal is its attempt, through comprehensive indexation, to insulate the tax system from the distorting effects of inflation. Interest receipts and interest payments (other than for mortgages on principal residences and up to \$5,000 of other net interest expense) would be adjusted downward to approximate the portion that represents real income or expense. The taxation of capital gains would also be indexed. At the current inflation rate, most investors would be subject to about the same effective rate on real capital gains as now, but the effective tax rate on high return investments would be higher. Indexed inventory accounting and depreciation allowances are introduced in order to remove the undesirable link between the rate of inflation and the effective tax rate on real capital income.

In several important respects, the Treasury Department proposal does not meet the concept of a pure income tax. It does not tax the imputed income generated by owner-occupied housing. In fact, by exempting mortgage interest payments from the indexing provisions, it appears to increase the relative tax advantage enjoyed by owner-occupied housing. The Treasury Department proposal also represents a compromise with a consumption tax concept by retaining and, in some cases, expanding its saving incentives. The current treatment of pension contributions and earnings would be retained, as would be the treatment of retirement accounts for the self-employed (Keogh plans). Eligibility for IRAs would be extended on equal terms to spouses who are not employed, and the limit on tax-deferred contributions would be raised to \$2,500 (\$5,000 for a husband and wife).

In summary, the Treasury Department tax proposal represents a serious attempt to reduce the efficiency losses attributable to the current tax system. It directly addresses the major structural problems of the income tax system. On closer examination, some changes in the proposal may be desirable, but the Treasury Department proposal should be the starting point for serious consideration of tax reform.

## BUDGET CONCEPTS, PROCESSES, AND FISCAL AUTHORITY

Almost no one is satisfied with the Federal budget process. Many are concerned about the outcomes of this process, which they believe do not reflect the preferences of the American people. Among the outcomes that are disturbing to many people are the following:

- Federal expenditure has continued to increase relative to GNP.
- The outstanding Federal debt has grown rapidly relative to GNP in recent years.
- Many Federal services and transfers serve only small components of the population.
- There is a general perception that there is a large amount of waste in the Federal budget.
- The Federal tax system leads to a large amount of misallocation, includes preferences for many small groups, and is unnecessarily complex.

It is not clear, however, that a change in the Federal budget process would change any of these conditions, as these conditions may result from the political processes.

Others are less concerned about outcomes than they are about the costs of the process. Their concerns include the following:

- The major appropriation bills have only rarely been approved prior to the beginning of the fiscal year.
- Many of the same issues are addressed in the budget resolution, the authorizing legislation, and the appropriation bills.
- Although the budget process consumes a large amount of the time of the Congress, it devotes only the most cursory attention to many budget elements.

Many people, of course, share both of these types of concerns. The one common view is that the present budget process is not working very well. There is much less consensus about what changes may be appropriate.

#### CHANGES IN BUDGET CONCEPTS

The Federal budget is a statement of expected cash outlays and cash receipts. The budget includes both operating and capital outlays and with some exceptions does not include accrued liabilities and receipts.

For many years, proposals have been made to separate the Federal budget into an operating budget and a capital budget. One argument for this concept is that it would provide a basis for determining the appropriate amount of the expected Federal deficit, based on a rule that the expected deficit in any year should not be higher than net capital outlays. Borrowing (and the necessary future taxes) to finance

current government services and transfer payments, according to this rule, would not be allowed. Some borrowing to finance net capital outlays, however, would be permitted because the benefits accrue to the next generation of taxpayers. Most State budgets are subject to such a rule.

A change in the formal budget, however, is not necessary to make this determination. A special analysis published with the budget now summarizes the level and composition of investment-type outlays. In recent years, the total outlays for investment have been close to the level of the Federal deficit, but this is misleading. Outlays for physical structures and equipment are gross outlays, and thus do not reflect the depreciation of the current capital stock. Outlays for research and development and education may lead to future benefits, but do not directly generate future cash receipts to the Federal Government. The small amount of net loans is the only type of investment outlay that leads to significant future cash receipts. In summary, there does not appear to be a strong case for a formal capital budget. There is a better case for reporting the sum of investment-type outlays, net of depreciation, as a basis for determining the appropriate limit on the expected deficit.

Several proposals have been made to change the budget treatment of loans and loan guarantees. Under one proposal, new Federal loans would be sold to private investors. This would reduce current budget outlays from the net amount of these loans to the difference between the par value and market value of these loans. New loan guarantees could also be provided by purchasing loan insurance from private firms. This would increase current budget outlays by the amount that these firms would charge to accept these guarantees. Alternatively, the Federal Government could charge an origination fee on new loans and loan guarantees to cover the costs of administration and the expected defaults, as proposed in the fiscal 1986 budget. These proposals would lead to a more accurate budget accounting of the now implicit subsidy to the recipients of Federal loans and loan guarantees. Both of these proposals deserve serious consideration.

#### CHANGES IN THE BUDGET PROCESS

The congressional budget process does not ensure that approved outlays equal the total outlays established by the budget resolution. In addition, the process has seldom met its own deadlines.

One proposed reform would substitute a single annual budget bill for the current process of 13 general appropriation bills and the separate bills affecting taxes and transfers. The proposal involves the following steps: The budget resolution would clear the Budget Committee by April 15 and the Appropriations Committee and the Ways

and Means Committee by May 15. A single budget bill, hopefully, would be approved by the July 4 recess. This proposal would be a radical change but it is probably feasible; about half of the State legislatures now adopt their budget in a single bill. This proposal would probably be acceptable to a President only if the appropriation bills were presented to the President by individual title or, preferably, if the President, like all but a few State Governors, had the authority for a line-item veto.

Several proposals for a biennial budget, approved in the first year of each Congress, are also being considered. Many States approve budgets on a 2-year cycle. The primary arguments for this change are to reduce the budget workload as well as the uncertainty about Federal financing. A biennial budget, however, would probably increase the number of supplemental appropriations to reflect unexpected changes in economic conditions and political preferences.

The Impoundment Control Act of 1974 authorized the President to defer specific expenditures unless overridden by a majority vote of either House. The President may rescind specific expenditures, however, only if approved by a majority of each House within 45 legislative days. Since a recent court decision, which overturned the provision for a legislative veto in this and other laws, both deferrals and rescissions must be approved by a new bill subject to the normal process. The current law severely restricts the President's authority to reduce expenditures for any purpose, including obvious waste and changed conditions. In effect, appropriations are now both a ceiling and a floor for allowed expenditures. Some consideration should be given to a rule and procedure that would provide broader authority for the President to reduce specific expenditures in order to meet the broader fiscal constraints established by the Congress.

For many years, additional outlays have often been financed by additional borrowing; decisions to increase outlays are not directly related to decisions affecting expected tax receipts. Votes to increase the debt limit have not been an effective restraint on this process. In 1983 the Senate debated a proposal to make the debt limit binding by authorizing the President to reduce outlays if the debt limit would otherwise be exceeded. In 1984 the House of Representatives approved the concept, but not the procedures, of a pay-as-you-go policy that would require an increase in expected receipts if any spending measure increased total outlays.

These proposals were not adequately developed, but they addressed a serious problem: The Congress can now vote to increase outlays for some purpose without any requirement to reduce other outlays or to vote for the increased taxes necessary to finance these outlays. The proposed reforms would permit the Congress to ap-

prove any expected deficit, but the expected deficit would be limited rather than open-ended. If the Congress is willing to finance additional outlays by reducing other outlays or by increasing current taxes rather than borrowing, this process would contribute to more effective restraint on both outlays and the deficit. Some development and consideration of these proposals deserves attention.

On net, one should probably not expect too much from changes in the budget process. After many years of observing this process, the former Director of the Congressional Budget Office concluded:

"... our current problems are not primarily procedural. The budgeting process is complex and time consuming primarily because the Federal Government does so many different kinds of things, and because Congress is so reluctant to concentrate on major directions of policy while leaving the details to executive departments or State and local governments. We can simplify the budget process only by simplifying the government itself and changing the role of the Congress. We can make the budget process less time consuming only if we are willing to make decisions less often, or to give up some checks and balances. Moreover, the world is an unpredictable place, and, while we could perhaps handle unpredictability in the budget process better than we do, no procedural changes can eliminate it. . . . [T]he failure to make the hard decisions necessary to bring budget deficits down [does not] reflect biases built into our budget-making procedures."

### CHANGES IN FISCAL AUTHORITY

The President has endorsed two measures that would change the authority of the President and the Congress on fiscal issues.

One proposal would authorize the President to veto individual line items in all appropriation bills, subject to the current provisions for overriding a veto of any bill. Governors in 43 States now have such authority. The Congress has approved such authority for the Governors of the Commonwealth of Puerto Rico and the Trust Territories and for the Mayor of the District of Columbia—but not for the President. Authority for a line-item veto has only once been withdrawn by a State, but was later reinstated.

For more than a century, the Congress has rejected presidential requests for this authority in order to maintain the opportunity to package spending proposals that the President would otherwise veto in broader appropriations that the President would approve. This practice did not represent a serious problem in the Nation's early history, because most appropriation bills covered a narrow range of activities and the President exercised broader impoundment authority. Now, however, appropriations are presented to the President in only 13

general appropriation bills, and the impoundment authority has been severely restricted.

Approval of a line-item veto may not have a substantial effect on total Federal expenditure. The experience of the States indicates that per capita spending is somewhat higher in States where the Governor has the authority for a line-item veto, even when corrected for the major conditions that affect the distribution of spending among States. In addition, less than one-half of the Federal budget would be subject to a line-item veto, and most of that would be for defense. A President committed to Federal spending restraint, however, could use this as an effective tool to reduce total spending.

Another argument for a line-item veto is to change the composition of Federal expenditure—from activities preferred by the Congress to activities preferred by the President. A Member of Congress is elected from a specific district or State—the President is elected by the Nation. As a consequence, a Member of Congress has stronger preferences for activities that benefit his or her regional constituency, and the President has stronger preferences for activities that benefit the Nation. The expected result of granting approval for a line-item veto would be an increase in the relative expenditures with national benefits and a reduction in the relative expenditures for pork barrel projects. That should be a sufficient basis for early approval of presidential authority for a line-item veto.

The President has endorsed a balanced budget/tax limitation amendment to the Constitution. This proposal was approved by more than two-thirds of the Senate and by more than a majority of the House of Representatives in 1982. The legislatures of 32 States have petitioned the Congress to approve a balanced budget amendment or to call a constitutional convention for this purpose.

The objective of this proposed amendment is to change the rules by which decisions are made to borrow or to increase the size of Federal outlays and receipts relative to national income. The proposed amendment provides for three rules:

- Actual outlays may not exceed projected outlays.
- Projected outlays may not exceed projected receipts, without the approval of 60 percent of the total membership of each House.
- Projected receipts may not increase faster than the growth of national income in the prior calendar year, without the approval of 50 percent of the total membership of each House plus the President.

Each of these rules could be suspended upon a declaration of war. In effect, these rules would require broader support for a decision to increase the Federal debt or for a decision to increase the relative

level of Federal outlays and receipts than the support necessary for other legislation.

The case for the proposed amendment is based on a belief that present political and budget processes are biased in favor of increased debt and increased spending. Elected officials, because of their limited terms of office, may prefer current borrowing (and increased future taxes) to increased current taxes. Government officials may also prefer increased spending, because spending is more concentrated on vocal constituencies than are the diffuse effects of taxes. This perception is as old as the Republic. Alexander Hamilton's last report on the public finances expressed special concern about the accumulation of public debt in the following words:

"On the one hand, the exigencies of a nation, creating new causes of expenditure—as well from its own, as from the ambition, rapacity, injustice, intemperance, and folly, of other nations—proceed in increasing and rapid succession. On the other, there is a general propensity in those who administer the affairs of a government, founded in the constitution of man, to shift off the burden from the present to a future day—a propensity which may be expected to be strong in proportion as the form of a State is popular."

Approval of this proposed amendment would be a recognition that each generation may need to bind itself to responsible fiscal decisions in the interests of the current and future American community.

The necessary process of approving this proposed amendment would take several years, and the amendment would first be effective in the second fiscal year after approval. Thus, this amendment could not be binding prior to about fiscal 1990. This amendment cannot be a substitute for the hard choices necessary to reduce the growth of Federal expenditure and the Federal debt. Early approval of this proposed amendment, however, could force an earlier resolution of the choices necessary to resolve major near-term fiscal issues.

#### **CONCLUSION**

The primary conclusions of this chapter can be summarized in several simple sentences. The Federal deficit must be reduced. Reducing the growth of Federal expenditure is more likely to contribute to sustained economic growth than an increase in taxes. Some changes in the tax system that would permit lower marginal tax rates would also contribute to economic growth. None of these choices will be easy. A change in the budget process may be helpful. A change in the fiscal provisions of the Constitution may be necessary to achieve these goals.



#### **CHAPTER 3**

# The United States in the World Economy

THE CRISIS ATMOSPHERE that marked the world economy in recent years was dispelled considerably by economic developments in 1984. Progress in several areas—notably on the international debt problem and economic stagnation in the industrialized nations—provided the global economy with more breathing room than it has enjoyed in recent years.

The events of 1984 also demonstrated, once again, the extent to which national economies are linked to one another through international trade and financial relations. Many recent positive international developments can be traced to vigorous economic recovery in the United States. A growing, open U.S. market provided strong stimulus to its trading partners in both the industrialized world and in debt-burdened developing countries. For the latter, increased export demand was a critical factor in their improved economic health.

While there was some tendency for the benefits of faster U.S. growth to spread throughout the global economic system, the strength of the U.S. recovery also resulted in increased divergence between the United States and its partners in several related aspects of economic performance. Two developments—the growing U.S. current account deficit and the high level of the dollar—merit closer examination of their causes and effects.

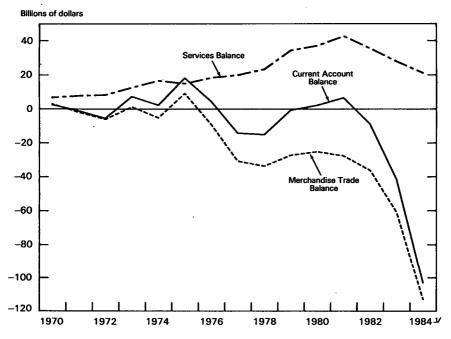
Compared to progress on international debt and growth, improvements in other problem areas have been less dramatic. Economic stagnation in many countries in the early 1980s provided an environment well suited to the advance of protectionism. Reversing this trend has turned out to be difficult. The recent marked improvement in economic conditions and the commencement of a new Presidential term provide a good opportunity for evaluating new policy initiatives, including a new round of multilateral trade negotiations. First, however, it is helpful to look at the position of the United States in the world economy and to examine recent developments in U.S. trade policy.

#### THE U.S. RECOVERY AND THE WORLD ECONOMY

The United States has led the industrialized world in economic recovery during the past 2 years. It also has experienced a sharp decline in its current account position—the difference between exports and imports of merchandise and services, minus net transfer payments made to foreign residents. In 1984 the U.S. current account position declined from a deficit of about \$42 billion in 1983 to a deficit of more than \$100 billion (Chart 3–1). Most of the decrease was attributable to the U.S. merchandise trade deficit, which widened by about \$50 billion in 1984 to reach an all-time high of almost \$110 billion.

Chart 3-1

Balances on Merchandise, Services,
and Current Account



<sup>1</sup> First three quarters at annual rate; seasonally adjusted. Source: Department of Commerce.

As a result, there have been increased calls for trade protection and other types of market intervention. Although such measures might provide a limited short-run advantage to affected sectors, they would do so only at great cost to the U.S. economy and to the integrity of the global system of free-trade relationships. Moreover, such steps are difficult to reverse. Accordingly, it is important to understand the origins of the present large external deficits in order to evaluate correctly their associated costs and benefits and to establish policy priorities. As discussed below, recent large external deficits and associated capital inflows are in large part the consequences of successful recovery in the United States, rather than problems requiring separate, new policy actions.

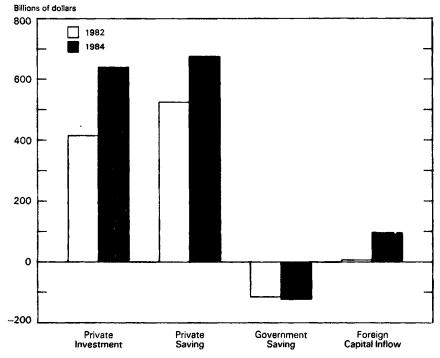
A current account deficit is not necessarily a negative factor for the economy as a whole. A current account deficit merely implies that (ignoring transfer payments) U.S. residents are purchasing more goods and services than they are now producing. Its counterpart is a capital account surplus, which measures the net claims on U.S. residents that foreign residents have accepted in payment. Thus, net capital inflow provides the financing for an excess of current expenditure over output. This inflow has been important in financing the recent U.S. investment boom.

Chart 3-2 shows how U.S. financial flows shifted during the past 2 years. Private investment is financed by saving from three sources: private saving (including undistributed profits), government saving (the negative of government borrowing), and capital inflow from abroad (the capital account surplus). Between 1982 and 1984, private saving rose by about \$150 billion to help finance a roughly \$220 billion increase—a more than 50 percent rise—in U.S. private investment; a small upswing in total government borrowing partly offset this additional private saving. However, greater capital inflow from abroad financed almost \$90 billion—about 40 percent—of the increase in private investment.

Large current account deficits and corresponding capital account surpluses are not likely to go on indefinitely. In the past when deficits or surpluses have emerged, either their underlying causes were temporary, or natural market forces (or policy responses) eventually brought about adjustment. In such episodes, whether or not the entire process of deficit and adjustment is judged to have been beneficial depends on whether the increased current expenditure is used productively. If greater current expenditure is mostly consumed, gains may be slight and subsequent adjustment painful. In the case of the present U.S. current account deficit, however, both private saving and investment have been strong. Elements seem to be in place for a sustained expansion with less likelihood of a difficult future adjustment.

Although the U.S. trade balance has fallen sharply, this decline did not arise from deterioration in U.S. productive efficiency. Since the beginning of the recovery, U.S. output per hour has advanced at

# Investment and Saving in 1982 and 1984



Note.—Data for 1984 are preliminary. Source: Department of Commerce.

an annual rate of over 3 percent, easing earlier concerns about declining productivity growth. Wage increases have also decelerated, with the result that there has been a marked improvement in U.S. unit labor costs. During the present recovery, real exports have increased at an annual rate of about 4½ percent (about 6¼ percent in 1984 alone), only slightly less than in comparable stages of recent recoveries. The strong performance of investment in the present upswing is a positive sign for the continuation of these trends.

#### CAUSES OF THE TRADE DEFICIT

In last year's Annual Report, three factors were singled out as leading causes of the large trade deficit: the strong dollar, reduced U.S. exports to heavily indebted developing countries, and faster growth in the United States compared with its industrialized trading partners. These factors still are present, but the emphasis that each de-

serves has shifted. Improved conditions in many developing countries have allowed them to resume import growth, though certainly not at pre-1981 rates. Although the growth-rate gap between the United States and its industrialized partners widened earlier this year, some convergence has been evident lately as U.S. growth slowed and expansion in Europe accelerated somewhat. The dollar, however, continued to strengthen in 1984.

Estimates of how much each of these factors contributed to the recent decline in the U.S. trade balance are inherently inexact, in part because these factors are not independent of one another. Nonetheless, rough estimates give a general impression of their relative importance. Since 1981, U.S. real growth has exceeded that of its main industrialized trading partners by about two-thirds of a percentage point per year on average; in 1984 the gap in growth rates was more than four times as large. Even at unchanged relative prices, with faster growth of U.S. spending, U.S. purchases of imported materials and products normally will increase. On this score alone, one can account for roughly one-quarter of the \$85 billion decline in the annual U.S. trade account position since 1980. Slower growth in U.S. exports to debt-burdened developing countries, which were obliged by financing constraints to reduce their imports, accounts for a slightly smaller share of the decline. This factor was especially significant in trade with Latin America, where the United States has a large stake in export markets.

Not all external developments have increased the U.S. deficit. The dollar price of oil has moved downward by more than 20 percent since 1981. Lower prices, recent shifts to other energy sources, and conservation have meant that annual payments for imported oil by the United States have been cut by about \$20 billion in the past 4 years. When these gains in the cost of imported oil are included, a net decline in the U.S. trade balance of about \$60 billion to \$70 billion remains—much of it attributable to the strong dollar.

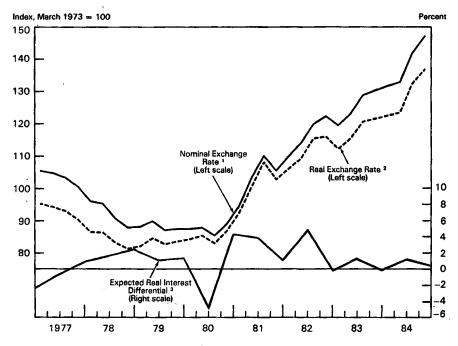
#### THE STRONG DOLLAR

One of the most striking features of the present recovery in the United States is that it has been associated with a pronounced and persistent rise in the value of the dollar. Since 1980, the latest year in which the U.S. international current account was roughly in balance, the dollar has advanced steadily against a weighted average of other major currencies until by the end of 1984 it was about 65 percent above its 1980 average and at its highest level since flexible exchange rates were adopted in 1973 (Chart 3-3). The largest increases in the dollar's value occurred in 1981 and 1982 from an unusually low level in 1980. However, during the eight quarters since the trough of the

recession at the end of 1982, the dollar strengthened by about 20 percent.

Chart 3-3

# Nominal and Real Exchange Rates and Expected Real Interest Differential



<sup>1</sup> Multilateral trade-weighted dollar.

Nominal exchange rate adjusted by relative consumer prices.

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

Given enough time, exchange rates adjust so that a representative bundle of goods costs roughly the same in countries linked by open trading. There is ample evidence, however, that this relationship need not hold over the short or medium term. Changes in the dollar's real exchange rate (i.e., the nominal exchange rate adjusted for consumer price levels here and abroad) have generally been less pronounced than changes in the nominal exchange rate, but the latter have not merely compensated for relative price performance. Since 1980 the dollar's real rate of exchange has risen by about 60 percent, only slightly less than the nominal exchange rate (Chart 3–3). From the fourth quarter of 1982 to the fourth quarter of 1984, the dollar's real exchange rate appreciated by about 18 percent.

<sup>&</sup>lt;sup>3</sup> U.S. interest rate (3-month) minus trade-weighted average interest rate (also 3-month) for six industrial countries adjusted by corresponding OECD inflation forecasts.

Over shorter horizons that are relevant for many economic decisions, exchange rates are determined in international asset markets. Asset prices, including the exchange rate, can change quickly in response to changing expectations about fundamental characteristics that influence asset demand and supply. International investors make their portfolio decisions mainly on the basis of expected rates of return, including expected exchange rate changes, adjusted for risk and other special factors. It is useful, therefore, to compare expected real interest rates on dollar and nondollar assets (i.e., nominal interest rates adjusted for expected inflation) to understand what has been happening in foreign exchange markets.

Starting in 1979, expected U.S. real interest rates moved strongly upward, despite a brief interruption in mid-1980, and peaked in 1982. Although they have fallen since then, they are still at relatively high levels. A rise in real interest rates abroad at about the same time was much less pronounced and left a substantial positive gap between U.S. and foreign real interest rates, as indicated in Chart 3-3.

Reasons for the marked increases in U.S. expected real interest rates and the dollar's value at this time are found largely in the character of the successful U.S. recovery. Increases in U.S. real interest rates were associated with the 1979 change to a tighter U.S. monetary stance. Subsequent declines in inflation contributed to a strengthened dollar between 1980 and 1982, as the expected real return to holding dollar assets rose and improved U.S. inflation performance itself justified a higher nominal dollar exchange rate.

More importantly, as emphasized in Chapter 1, the Economic Recovery and Tax Act of 1981, together with reduced inflation, significantly raised the after-tax rate of return on new business investment. This increase in the real rate of return on U.S. business investment spilled over to the return on dollar-denominated assets generally and to the level of the dollar itself. After 1981, expanding Federal budget deficits may also have raised the level of U.S. real interest rates and helped to strengthen the dollar. However, the extent of upward pressure on real interest rates and on the dollar through this channel is uncertain, and numerous studies have failed to uncover significant effects.

Higher real returns and lower inflation account for some but not all of the upward movement of the dollar. The fact that the real exchange rate has risen steadily, while the real interest rate gap in favor of the dollar has narrowed since 1982 (and occasionally has been negative), suggests that other factors have continued to push up the demand for dollar assets. Evidently the combination of increased after-tax profitability of U.S. corporations, demonstrated strength of

the U.S. recovery, reversal of international lending outflow from U.S. banks, and generally more favorable longer run prospects for the U.S. economy have prompted an additional increase in demand for dollar assets. Just as in 1980, when a relatively low level of the dollar probably reflected a more pessimistic view of future U.S. performance than could be measured by the real rate of interest and other available indexes, in 1984 a relatively high value of the dollar probably reflected more optimistic assessments than these indexes captured.

The recent strength of the dollar has had both positive and negative effects. As the dollar has risen, some U.S. industries that compete in international markets have experienced difficulties. Many of these problems are concentrated in the manufacturing sector, where declines in trade balances across industries have been widespread. However, some manufacturing industries with large trade losses are troubled by problems beyond those arising from dollar strength, including relatively high labor costs, raw material costs, and other factors that have contributed to a loss of comparative advantage. The traditional U.S. surplus in agricultural products has contracted by about \$8½ billion from its level of 3 years ago, as dollar appreciation and slower demand growth have kept dollar prices and export volumes down. Declines have also occurred in U.S. exports of raw materials.

In many respects, however, the dollar's rise in value has been beneficial. The strong dollar has stimulated production and investment in sectors less involved in international trade. In other industries, competition from imports has prompted more expenditure on plant and equipment as well as greater attention to controlling wages and other costs. Prices of traded goods and close substitutes have been kept lower than they would have been otherwise, thereby benefiting both U.S. consumers and U.S. producers who use imported inputs. Undoubtedly, the dollar's rise since 1980 has made the task of bringing inflation under control considerably easier. In addition, because of the shift in demand toward dollar assets, U.S. interest rates have been lower and real investment higher than would have been the case otherwise. Stronger U.S. investment will ultimately mean higher productivity and faster potential growth.

## THE DEBTOR COUNTRIES: RECENT PROGRESS

External deficits have narrowed markedly in recent years for many borrowing countries. Since 1981 the total annual current account deficit of the largest 17 debtors among the developing countries has declined by about \$44 billion to a level estimated to have been about \$20 billion in 1984, despite increased interest burdens. Some coun-

tries have made especially dramatic gains; Brazil and Mexico stand out in particular. The Brazilian current account deficit declined by more than \$8½ billion in 1983 and is estimated to have fallen by about another \$6 billion in 1984 to only about \$½ billion. For Mexico, the gains have been even more dramatic—a total improvement of \$19 billion between 1981 and 1983. The Mexican current account was in surplus by \$5 billion in 1983, and the surplus is estimated to have been only slightly less in 1984.

Initial improvements in the current accounts of borrowing countries were achieved primarily through cuts in imports. Subsequently, import declines continued in response to restrictive fiscal and monetary policies and exchange-rate devaluations that were part of adjustment programs supported by the International Monetary Fund. More recently, as the potential for further import reduction has been exhausted, continued improvement in borrowers' external positions has resulted from expanding exports. Almost all of the major borrowing countries experienced export growth in 1984. Most have shown stronger real output growth as well. This has been important in maintaining the political consensus needed to sustain their economic adjustment.

Increased exports have been largely a reflection of expanding demand in the industrialized countries, especially the United States. As the leader in the global recovery, the United States with its comparatively open markets has played a disproportionate role in absorbing the output of the debtor countries. Among the industrialized countries, the United States now buys about 45 percent of the exports by the 17 largest debtors, up from about 40 percent only 2 years ago.

Although in 1983 and 1984 banks slowed their lending to the debtor countries from earlier peaks, bank loans and official lending still have been available at levels adequate to support adjustment programs. In consequence, the ratio of debt to exports—a measure that is often used as an indicator of a borrowing country's financial position and ability to pay—has stopped rising in most countries and has started to decline in many others. However, the average ratio is only slightly below 2, which is still considerably above the average level of about 1½ in the mid-1970s.

Positive steps have also been taken in restructuring outstanding debt—the most notable development being a rescheduling agreement between Mexico and its private bank creditors in September 1984 on Mexico's outstanding public-sector debt of about \$50 billion. Previous rescheduling of smaller amounts of sovereign debt had generally been on a 1-year basis; the Mexican agreement broke new ground by covering debt maturing over the following 6 years. Partly in view of

Mexico's excellent performance under its adjustment program and continued good prospects, the lending terms in the new agreement were attractive—a quite low interest-spread and a generous grace period. In addition, up to 50 percent of a bank's outstanding credits to Mexico may be converted at the bank's option to its home currency, thus enabling more secure funding.

The recent gains made by Mexico, Brazil, and several other key debtors confirm that their strategies for economic adjustment and repayment are basically sound. International debt problems have not been solved, however. Progress among debtor nations has been quite uneven. Although some countries have made substantial improvements in their current account positions, the majority of the large debtors are still in deficit, indicating that they are still increasing their net indebtedness to the rest of the world.

In some cases, relatively poor performance arises from special factors. Countries that depend heavily on exports of certain raw materials (such as copper, rubber, tin, and oil) have been set back by recent price declines. In general, price trends for exports of developing countries have not been favorable lately; the average dollar price of industrial raw materials (excluding oil) has fallen by almost 15 percent since the end of 1983. In other cases, essential domestic adjustments have not yet been made. The differing performance of these countries underlines the fact that the extent of a debtor country's recovery depends closely on export growth, maintenance of competitive exchange rates, well-conceived investment plans, and noninflationary macroeconomic policies.

Recent events also reveal clearly how sensitive the performance of the debtor countries is to the state of the world economy—including the level of interest rates, the value of the dollar and, especially, the rate of growth of the industrialized economies. Sustained growth in the industrialized countries, however, is not sufficient to ensure that demand for the exports of developing countries will continue to expand. The markets in industrialized countries must remain open, not only to traditional exports from the developing debtor countries, but also to more skill-intensive exports that emerge as their comparative advantage evolves. In recent years, increased protection has been directed at this latter class of products—particularly those from the so-called "newly industrialized countries." The costs of such protection include not only misallocation of resources but also damage to the prospects for successful debt repayment.

Both production and the prospects for debt repayment would be further enhanced by expansion of foreign direct and portfolio investment flows. These flows could increase if host countries were to provide a better investment climate. Increased foreign direct investments, in particular, would not only partly relieve borrowing needs but would also provide additional benefits, such as technological transfers, training, and improved export marketing know-how.

## INDUSTRIALIZED TRADING PARTNERS

There have been significant differences among the major industrialized countries in their recovery from the 1980-82 world recession. These differences were still apparent in 1984. Although the United States, and to a lesser degree Japan and Canada, experienced further healthy expansion (albeit from a fairly deep trough in Canada), recovery in Europe still lagged well behind. Average real growth in the four major European economies (Germany, France, the United Kingdom, and Italy) accelerated slightly in 1984 to about a 2¼ percent annual rate, but this was less than half the average of the three non-European countries mentioned above. Although some progress has been made lately in revitalizing the European economies, fundamental problems remain. The most visible symptom of these problems is the presence of persistent and rising unemployment, currently equivalent to almost 11 percent of the Western European work force.

Two factors are often cited to explain the slow economic recovery in Europe: structural problems in European labor markets and disincentives to adjustment and growth. Structural factors include highly indexed wages, high nonwage labor costs and social charges, and arrangements for excessive job security that contribute to a low rate of labor mobility and new hirings. Disincentives include various government regulatory burdens, high marginal tax rates on labor and capital incomes, and large subsidies paid to agriculture and declining industrial sectors.

One consequence has been relatively low rates of investment in Europe. Expressed as a share of output, private investment has declined steadily since the first oil shock in 1973 and is now well below the level of investment shares seen in Europe in the 1960s. There has also been essentially no net job creation in Europe in the past 15 years. In addition to disincentive effects and labor market rigidities, labor market conditions have been worsened by demographic factors—especially a heavy influx into the work force of younger workers. Labor force growth is expected to decelerate in coming years, but in the absence of a marked pickup in investment, achieving a significant reduction in European unemployment will be difficult.

Many European countries have given priority to reducing large government deficits and limiting the expanding share of government expenditure in total demand. Progress has been made, but the hope that deficit reduction and curbs on public spending would contribute significantly to higher growth by releasing resources to the private sector has not been fully met.

On balance, the external sector has provided little net stimulus to growth in Europe. This is not to say that European exports to the United States have been weak. On the contrary, U.S. imports from the European Community (EC) have grown at about a 17 percent annual rate since 1982. However, the U.S. market makes up a relatively small share of total EC export sales (about 16 percent, not including intra-EC trade). Trade within the Community has fallen since 1980, and other important EC export markets—Organization of Petroleum Exporting Countries (OPEC), the Eastern Bloc, and major debtor countries—have been stagnating or declining. In these latter markets, however, even the market shares of European exporters have not increased, despite significant gains in competitiveness visavis the United States in the past 2 years.

Although progress has been slow in Europe, there are grounds for optimism. Nominal wage increases have decelerated in several countries. In some cases, performance in 1984 has been affected by special factors, such as persistent inflation in France and sectoral strikes in the United Kingdom and Germany. The rapid rebound of activity in Germany following the settlement of the metalworkers' strike suggests that underlying German growth potential is strong. Economic performance in the other countries may improve for similar reasons once their particular difficulties are dealt with successfully. Continued control of inflation and reduction of government expenditures may provide many European countries with a foundation for more stable economic growth.

In contrast to the European economies, Canada and Japan have performed well. The U.S. market is relatively much larger for both countries (70 percent of total exports for Canada and 30 percent for Japan), and recent export growth to the U.S. market has been robust (since 1982, annual growth of about 19 percent for Canada and 25 percent for Japan). The fact that Japan also exports heavily to the rapidly expanding newly industrialized countries of Asia (South Korea, Taiwan, Hong Kong, and Singapore) also has contributed to its largely export-led recovery.

Trade relations with Japan have sometimes been singled out as a special problem. In a period in which the United States is running the largest trade deficit of any nation, Japan is in quite the opposite position with a trade surplus of just over \$44 billion in 1984. Furthermore, the U.S. deficit in bilateral trade with Japan expanded significantly in 1984 to an estimated annual deficit of over \$33 billion.

Emphasis on the bilateral balance in a multilateral trading system is misplaced, however, and can be misleading—just as would be inferences about a person's financial standing based on his or her relationship with only one creditor. In fact, the decline in the U.S. bilateral trade position with Japan since 1981 has been less than that with either the European Community or Latin America. Although some problems have arisen in the past in relation to foreign access to particular markets in Japan, an agreement reached in early January 1985 between the President and the Japanese Prime Minister to establish high-level talks on this issue is a sign of potential progress in this area.

## RECENT U.S. ACTIONS IN INTERNATIONAL TRADE

U.S. policies in international trade are tied inextricably to domestic political and economic considerations. They are also developed within the larger context of a dynamic international marketplace and the sometimes abusive trading policies of other countries. Against that backdrop, U.S. actions in 1984 represent progress toward freer trade, as well as some increases in protection. Significant actions include the passage of a major trade bill by the Congress in cooperation with the Administration, decisions on several important import relief cases, and the extension or modification of existing import restrictions in several sectors.

## THE TRADE AND TARIFF ACT OF 1984

Despite unusually strong protectionist pressures, the Congress and the Administration put in place an omnibus trade law that generally supports freer trade. The major provision of the Trade and Tariff Act of 1984 renews until 1993 the Generalized System of Preferences, which eliminates tariffs on eligible imports from qualifying developing countries. Some imports (notably textiles) are not included. In addition, the renewed program establishes eligibility criteria for participation that include the extent to which participating countries offer access for U.S. exports, protect intellectual property, eliminate trade-distorting investment policies, and enforce certain rights of workers, including rights of association. Countries with a per capita gross national product exceeding \$8,500 (a figure indexed to one-half the rate of U.S. economic growth) are ineligible for the program.

The Act also provides authority for negotiations (with Israel, specifically, and with other countries) to establish a free-trade zone. Congressional ratification is required, however, and the President retains the power to impose quotas or to negotiate export restraints if

the U.S. International Trade Commission determines that increased imports cause or threaten to cause injury to domestic industries.

Certain measures in the new Act extend the Trade Act of 1974 to provide specific authority for the President both to retaliate against and to negotiate reductions in barriers to U.S. exports, including exports of services and foreign investment. The Act provides explicit authority for the U.S. Trade Representative to initiate investigations of unfair trade practices and expands the countervailing duty statutes to include specifically products that benefit from subsidized inputs.

In a series of provisions, the Act extends the legal definition of affected industry to allow grape producers 2 years to file petitions against foreign trading practices affecting the wine industry (this provision deviates from the established principle of allowing petitions only from firms with like or directly competing products); revises the criteria for determination of injury due to imports under section 201 of the Trade Act of 1974 (by requiring the International Trade Commission to consider plant closings and producers' inventories of imports in determining injury); and provides explicit authority for the President to implement his recently announced steel trade program, which is discussed below. The Act also reduces tariffs on about 100 products.

#### OTHER TRADE ACTIONS

The International Trade Commission investigated several section 201 "escape-clause" cases during 1984. After a finding of injury due to imports by the Commission, the President is charged with making the final decision on whether to restrict imports based upon the national economic interest. The Commission determined that imports were not a substantial cause of serious injury, or threat of serious injury, to three small domestic industries. In two major cases involving unwrought copper and carbon steel, however, the Commission did find injury and recommended import relief in the form of various trade restrictions. The President rejected import relief in the case of copper, primarily because of potentially large damage to the U.S. copper fabricating industry.

The President also rejected the import relief for steel proposed by the Commission, but opted instead to negotiate voluntary restraint agreements (VRAs) to be in effect for 5 years. The President acted in response to sharp surges of steel imports during the year, which were the result in part of foreign government subsidies. The restrictions are expected to limit imports to roughly 20 percent of domestic steel consumption. Agreements for new export restrictions have been reached with Japan, South Korea, Spain, Australia, South Africa, Mexico, and Brazil. A general restriction agreement with the EC will

continue through 1985, but new restrictions on pipe and tubes will extend through 1986.

In April 1984, the 3-year Japanese VRA on automobiles announced in 1981 was extended an additional year at a slightly higher limit of 1.85 million cars per year. Following losses by U.S. automobile manufacturers in 1980, Japanese automobile exports to the United States were restricted in April 1981 to 1.68 million cars per year on the grounds that the U.S. automobile industry needed time to adapt to world competition through introduction of new technology and cost-cutting measures.

In agriculture, the United States maintains a number of significant import restrictions, including limitations on cotton, peanuts, dairy products, and sugar. With the exception of the quota on sugar, these restrictions remained unchanged in 1984. The sugar quota was reduced by 17 percent to be consistent with the domestic price support for sugar and changing market conditions, including reduced sugar demand, increased use of sugar substitutes, increased domestic sugar production, and surging imports of products containing sugar from Canada and Mexico. In January 1985 the quota was further reduced by extending the quota year by 2 months.

In August 1984, new interim regulations governing U.S. textile imports were announced that codified the "substantial transformation" principle used by the U.S. Customs Service to determine the country of origin of imported goods. These regulations were issued in response to claims by domestic producers that foreign suppliers were circumventing relevant export restraint agreements by shipping parts of garments to other countries for superficial processing before final shipment to the United States. Foreign producers, importers, and domestic retailers objected strongly to the new rules. Their comments and those of other interested parties on the interim regulations were being reviewed by the U.S. Customs Service at the end of 1984.

#### ACTIONS IN INTERNATIONAL FINANCE

The United States now maintains a full array of essentially open financial markets for international investment and fundraising, as do several other industrialized countries, including Germany, Switzerland, and the United Kingdom. In May 1984 an agreement was reached between the Japanese and U.S. Governments on measures designed to liberalize markets for yen-denominated financial assets. The agreement marks an important stage in Japan's continuing movement toward fully liberalized financial markets.

The U.S. objective of unrestricted capital flow is also evident in the removal in 1984 of the U.S. withholding tax on interest earned by nonresidents on U.S. bonds and other financial instruments. The new

tax rules now make it feasible for U.S. corporations to issue securities directly to foreigners without having to go through the previous cumbersome and costly procedure of issuing indirectly through an offshore shell subsidiary. Soon after the U.S. rule change, both Germany and France dropped their own corresponding taxes on interest payments to nonresidents, and Japanese authorities have announced their intention to do the same.

The United States has also been at the forefront of efforts in the Organization for Economic Cooperation and Development (OECD) to restrict the use of subsidized financing for exports. In the case of so-called "mixed credits"—the use of concessionary loans for development aid to boost exports through tied sales—the consequences are costly not only to competing exporters, but also to aid recipients because choice of supplier and, often, choice of product are restricted.

In characterizing U.S. actions in international trade and finance in 1984, one cannot say that U.S. policy greatly advanced the cause of free trade; neither can one say, however, that U.S. policymakers capitulated to the unusually strong domestic protectionist pressures. On balance, the Administration and the Congress managed to resist those pressures and helped to set the stage for potential advances toward freer trade in 1985 and in years to come.

# THE CHALLENGE OF COMPREHENSIVE FREE TRADE

The world is moving away from, rather than toward, comprehensive free trade. In major industrialized countries, for example, the proportion of total manufacturing subject to nontariff restrictions rose to about 30 percent in 1983, up from 20 percent just 3 years earlier. Although tariffs among industrialized countries have been reduced substantially since World War II, tariffs also remain high in some sectors (textiles, footwear, steel, wood products, and shipbuilding, for example) and among developing countries. In nonmanufacturing, international trade is subject to even more severe restrictions and market distortions, especially in agriculture and services.

New international initiatives are required to sustain the post-World War II momentum toward comprehensive free trade and the world economic growth that it has fostered. Speaking to the International Monetary Fund and World Bank Joint Annual Meetings on September 25, 1984, the President called for just such initiatives:

"For the millions around the globe who look to us for help and hope, I urge all of you today: Join us. Support with us a new, expanded round of trade liberalization, and, together, we can strengthen the global trading system and assure its benefits spread to people everywhere."

Accordingly, what follows is first, a restatement of the case for free trade, including a rebuttal of the myths of protectionism; second, a discussion of the obstacles to progress toward free trade; and, finally, a discussion of strategies for surmounting these obstacles.

#### THE CASE FOR FREE TRADE

The persuasive power of arguments for free trade arises not from abstract economic reasoning, but from concrete historical comparisons of the achievements of free trade against those of protectionism. The conclusions to be drawn from such comparisons over the past two centuries are unambiguous: Countries that have followed the least restrictive economic policies both at home and abroad have experienced the most rapid economic growth and have enabled the greatest proportion of their populations to rise above subsistence living standards. Nevertheless, the demonstrated achievements of free trade cannot be taken for granted—the myths of protectionism persist, eroding the discipline of national economic policies around the world and frustrating new free-trade initiatives.

# The Achievements of Free Trade

The power of free trade is amply demonstrated in history, including the early history of the United States. Under the Articles of Confederation, protectionist interests in individual States moved quickly to restrict the flow of competing products from other States. The debilitating effects of this protectionism on the States' economies convinced the framers of the U.S. Constitution to forbid individual States from levying tariffs (and the Federal Government from levying export duties). Federal courts have guarded the integrity of this prohibition, ruling as recently as 1981, for example, that a Louisiana tax on natural gas passing through the State was unconstitutional. The constitutional ban on State tariffs was crucial to the development of the U.S. economy not only because it established a free-trade area among the 13 original States, but also because it ensured that the free-trade area would expand automatically as new States joined the Union

A second experience that illustrates the power of open markets is Britain's movement toward freer trade in the middle of the 19th century. There are two salient features of this experience. First, Britain's move was unilateral. The repeal of the Corn Laws by Robert Peel's government in 1846 was not conditional upon "concessions" from Britain's trading partners. Rather, the repeal was motivated by the growing recognition that the tariffs on imported grain set by the Corn Laws were a barrier to the advancement of Britain's own econ-

omy. Second, the results of free trade were exactly opposite to predictions that a decline in the prices of imported grains from repeal of the Corn Laws would lead to a corresponding decline in wages. Rather than falling, however, wages rose rapidly due to growth. Thus, Britain was very much an "engine of growth" in the 19th century world economy, and freer trade fueled the engine.

More recent experiences sustain the point. The slide of the world economy into the Great Depression of the 1930s was accelerated by unprecedented tariffs imposed by the Smoot-Hawley Act of 1930 and by similar measures abroad. In response to such disastrous protectionism, the U.S. Secretary of State, Cordell Hull, organized passage of the Trade Agreements Act of 1934, which became the basis for multilateral trade liberalization. Further trade liberalization, however, was delayed until after World War II. Significantly, 1984 marked the 50th anniversary of the Trade Agreements Act.

Since World War II, successive rounds of multilateral trade liberalization have demonstrated the power of open markets through almost four decades of world economic growth. After full implementation of the current Tokyo Round tariff cuts in 1987, import tariffs among major industrialized countries will average below 5 percent on industrial products, down from averages of more than 50 percent at their peak in the 1930s. These cuts have played a central role in the post-World War II expansion of the world economy.

During the same period, the emergence and expansion of the European Community liberalized trade even further among Western European countries. As the United States had done almost two centuries earlier, the members of the EC accelerated their economic growth by establishing a large, relatively unrestricted common market. The opening of the European market has been central to Western Europe's economic growth.

A final illustration of the achievements of freer trade is particularly important. As former colonies gained independence after World War II, they typically sought to achieve economic independence as well. Many embarked upon extensive import substitution policies to reduce their dependence on imports from former colonial trading partners. The overwhelming conclusion of studies of these policies, however, is that they severely stunted economic growth. In contrast, those developing countries that pursued more open economic policies have experienced truly remarkable records of economic growth. Recent examples include Hong Kong, Singapore, Taiwan, and South Korea, among others.

Acknowledging the record of free trade as a development strategy, the President made the following commitment on his departure to the International Meeting on Cooperation and Development in Cancun, Mexico in 1981:

"Free people build free markets that ignite dynamic development for everyone. We will renew our commitment to strengthen and improve international trading, investment, and financial relations, and we will work for more effective cooperation to help developing countries achieve greater self-sustaining growth."

# The Myths of Protectionism

Despite the achievements of open markets, myths regarding the benefits of protectionism persist. The most misleading of these, perhaps, is the claim that import restrictions save jobs at home. While employment in one sector may be higher with protection than without, job losses in other sectors of the economy are often even larger in the intermediate term and about the same magnitude in the longer term. Thus, import restrictions have little or no effect on total employment, although they do distort the distribution of employment among sectors. Moreover, estimates of the annual cost to consumers of each job saved in protected sectors are as high as \$250,000 for some sectors. Finally, the influence of protection on employment in an industry is usually small relative to other determinants, such as the general prosperity of the economy or long-term trends in the demand for the product.

A second myth is that protection can provide a breathing period for an industry to modernize and to become more competitive. A related argument is that the protection permits a smooth "rundown" of existing production in the industry. Most of the evidence on either argument runs to the contrary. Although protection may increase resources for improving competitiveness, it also reduces pressure for adjustment. Once protection is granted it is common for productivity and unit costs to deteriorate even further relative to other industries.

Paradoxically, more recent forms of protection (in particular, VRAs) help *foreign* producers by enabling them to charge higher prices for the restricted exports. United States protection of steel in the 1970s, for example, is estimated to have increased the annual profits of Japanese steel producers by about \$200 million—or about half of the Japanese expenditure on research and development in steel (the world's highest).

By the same token, protection does not simply facilitate a smooth rundown of existing activity—it often frustrates adjustment by attracting new resources to the sector. In many countries a disproportionate amount of entrepreneurial activity is devoted to protected sectors. Fully one-third of all the clothing and textile establishments in the United States at the end of 1982, for example, were not in the industry just 6 years earlier, and more than one-fifth of all new man-

ufacturing firms in France in recent years have been in the clothing and textile industry. Thus, it is not surprising that the "temporary" protection many industrial countries sought for textiles beginning in the early 1960s has resulted in a formal, long-term policy of protection.

Another myth of protectionism is that protection is a "fairer" policy than free trade for lower and middle income families. The burden of protection, however, typically falls most heavily on lower income consumers. The tariffs (explicit or implicit) embodied in U.S. trade barriers are more regressive than any other major tax, including sales taxes. Trade restrictions in industrial countries are skewed toward restriction of those basic, labor-intensive goods that comprise a relatively large share of lower income budgets. In most industrialized countries, for example, the proportionate burden of restrictions of textile imports on lower income consumers is several times greater than on higher income consumers.

There is also the argument that the United States should restrict the flow of imports to protect the economy from "unfairly" subsidized products from other countries. In many respects this argument, too, is incorrect. Permanently subsidized exports to the United States obviously make U.S. imports cheaper than they otherwise would be. Thus, rather than being a "beggar-thy-neighbor" trading policy, such subsidies are an "enrich-thy-neighbor" policy. Moreover, a State within the United States is not permitted to restrict imports of goods produced in other States that provide "unfair" tax subsidies.

There are two cases, however, in which this argument for restraint can be correct. One is when the foreign subsidy is not permanent. Countries might, for example, use subsidies to expand domestic production in some industries during the down period of a business cycle. In this case the importing country suffers recurring adjustment costs as its own domestic industry responds over the business cycle to variations in the level of subsidized imports.

A second theoretical possibility is in those rare instances where oligopolistic profits might be large. A country could attempt to increase its share of the potential oligopoly profits by subsidizing its own industry, either directly or indirectly. In both of these special cases, however, the best solution is an international compact on acceptable subsidization policies, rather than protectionism.

Another argument offered for protection is that the United States must restrict imports in order to protect "basic" industries. Because the U.S. economy has been characterized by certain industries since the Great Depression, the argument runs, these same industries must be protected from foreign competition to ensure continued economic growth. This argument mistakes the prospects for continued vitality

of the economy as a whole with the prospects of particular industries. So-called "basic" industries can always be identified at a point in time, but the hallmark of a dynamic economy is that basic industries can change. Most importantly, there are numerous examples of countries that have failed with the strategy of propping up weak industries, with no apparent successes.

Finally, there are, of course, legitimate national security considerations in some industries, but import restraint is a particularly inefficient method of attempting to maintain some minimum level of domestic capacity in an industry.

# OBSTACLES TO COMPREHENSIVE FREE TRADE

Before concrete free-trade initiatives are proposed, the obstacles to new international commitments to free trade should be clearly identified and understood, since initiatives that do not address the real obstacles to liberalization are doomed to failure. The following discussion of these obstacles focuses on several issues: the inertia of existing trade barriers and distortions, the appeal of new trade barriers, the participation of developing countries in multilateral trade negotiations, and the presence of domestic policy constraints.

# The Inertia of Existing Trade Barriers

Existing trade barriers carry a life of their own, as political inertia works against their elimination. In heavily protected sectors, adjustment to liberalized trade is especially painful unless the overall economy is expanding. As a consequence, it is imperative that free-trade initiatives be comprehensive enough to assure each country that at least some sectors of its economy will expand rapidly enough to cushion the adjustment of other sectors. Expanding sectors not only often reduce the extent of the contraction in formerly protected sectors, but also provide new opportunities for any displaced workers and resources. This strategy has worked reasonably well for the multilateral tariff reductions among industrial countries since World War II, and should be a key element in any new initiatives.

The comprehensiveness of trade liberalization, however, is itself threatened by extraordinary pressures to retain existing trade barriers. Remaining barriers have been revealed as those most difficult to eliminate, since these are the restrictions that negotiators have been forced to ignore. Nontariff barriers, in particular, pose difficult problems. Quantitative restrictions, import licensing, exchange controls, technical standards misused to restrict trade, and the like, are much more difficult to compare, to evaluate, and to negotiate than tariffs. Without strong incentives on all sides to make mutual progress toward free trade, negotiation of nontariff barriers can be excruciatingly slow and tedious. A new, formal round of multilateral

trade talks to deal with such barriers, for example, is expected by some to take several years to complete successfully, if at all.

The difficulty of negotiating reductions in nontariff barriers is exacerbated by another standard feature of international trade negotiations. Existing trade restrictions are the bargaining chips a country uses in international trade negotiations. Thus, countries are reluctant to liberalize their own trading practices for fear that their ability to obtain reciprocal liberalization from their trading partners will be reduced in the future. As a consequence, countries are in the paradoxical position of "needing" certain trade restrictions in order to eliminate others. To succeed fully, any new initiative must break through this paradox.

# The Appeal of New Trade Barriers

Most countries are under strong domestic political pressure to aid one or more ailing industries. Unfortunately, quantitative and other nontariff trade barriers are becoming the policy of choice. The reasons are not complicated. Such measures are typically "off-budget," so that no explicit governmental appropriation is required to subsidize the industry. They are also often extra-legal, falling outside normal rules and restrictions of the General Agreement on Tariffs and Trade (GATT), and requiring no formal legislative action. The general political appeal of trade restrictions arises from the fact that the benefits accrue to small, identifiable groups, whereas the costs, although greater, are borne less visibly by society at large.

In addition, nontariff restrictions are sometimes welcomed by the country's established trading partners. For example, VRAs transfer implicit tax revenues from consumers in the importing country (which would be collected domestically if tariffs were used instead) to producers in the exporting countries (through the effect of restricted sales on prices). Although some progress has been made in a few areas in recent years, new international commitments that limit the discretion of individual governments to maintain or impose nontariff trade barriers are clearly needed.

# Incentives for Developing Country Participation

Another serious obstacle to comprehensive trade liberalization is the problem of encouraging the full participation of developing countries. In previous multilateral rounds of liberalization, developing countries have not been required to reciprocate fully in multilateral tariff reductions by lowering their own trade barriers, and most still maintain substantial levels of both tariff and nontariff trade barriers. These countries are unlikely to participate in further liberalization as long as key sectors in which they have a comparative advantage (especially textiles) are exempted from the liberalization process.

Sustained progress in opening the capital and service markets of developing countries is not likely, for example, without accompanying progress for these countries in opening world markets for their manufactured products. Furthermore, the current trade preference schemes extended to developing countries by most industrialized countries give these countries a vested interest in existing tariff barriers in industrialized countries, since the benefit their exporters derive from the preference schemes depends upon the level of tariffs levied on goods from competing exporters.

# Domestic Policy and Institutional Barriers

In some instances, trade restrictions simply reflect domestic policies. Nowhere is this more obvious than in agriculture. The absence of strong international commitments to open markets in agriculture has fostered the development of restrictive domestic policies by the EC under the Common Agricultural Policy, by the United States and other industrialized countries, and by developing countries. These costly domestic policies require an increasingly elaborate array of international restrictions on trade in agricultural products. Hence, little progress on liberalized trade in agriculture can be expected without reforms in related domestic policies. A country cannot, for example, maintain a direct price support program for a domestic agricultural product that sets the price above the price of available imports without also imposing trade restrictions on imports either through quotas or variable import levies. Otherwise, the domestic price support would be an impossibly expensive world price support.

Domestic industrial policies can pose similar barriers. Tariffs, preferential procurement, direct subsidies, preferential credit arrangements, exclusive market rights, and the like, are examples of explicit barriers to imports. Barriers can also be implicit, however. The complex and extensive relationship between the Japanese Ministry of International Trade and Industry and major Japanese domestic industries is often cited as an example of this phenomenon. Moreover, private Japanese trading companies distribute a substantial share of imports at the same time that they have very strong ties with domestic manufacturers. In some instances these ties are reinforced by shared equity or other financial interests. Not surprisingly, therefore, trading companies do not typically market imported products that compete with those produced by domestic manufacturers with whom they already trade.

The emphasis on such institutional barriers to trade can sometimes be misleading. When institutional and commercial practices are not sustained by government policy, practices that violate the fundamentals of a competitive marketplace are subject to challenge by new entrants. This suggests that when no government trade restraints are present and no new entrants appear, existing practices may be efficient. Thus, the fundamental issue is whether and how governmental policies are used to raise artificial barriers to entry. In some instances the artificial barriers are direct and obvious (as in the official Japanese domestic monopoly in telecommunications—ostensibly to be eliminated in 1985—or the high tariffs on wood products); in others the barriers are less direct or obvious (as in the case of arbitrary technical standards or rules regarding exclusive dealerships).

#### A STRATEGY FOR FREE TRADE

Despite the obstacles to free trade, there are several reasons to push now for comprehensive trade liberalization. First, the trend toward increasing protectionism at the national level may actually help mobilize a consensus for a new international initiative toward comprehensive free trade. Furthermore, recovery of the global economy presents the opportunity to resist protectionist pressures and to reach just such a free-trade consensus.

There is also some evidence that many countries around the world may be willing to consider domestic policies that emphasize open markets, market incentives, and private control to a greater degree than before: members of the EC are under increasing pressure to find a less costly alternative to their current common agricultural policy; the Administration will seek agricultural reforms in 1985 farm legislation that will increase U.S. flexibility in negotiating freer trade in agriculture; and many developing countries appear to be at least more receptive to private, competitive markets. This possible change in the world temperament toward open, market-oriented policies poses the opportunity for successful new initiatives.

Finally, the President and the heads of government of major U.S. trading partners have already agreed at the Williamsburg Economic Summit to consultations on a new multilateral round of trade negotiations under the auspices of GATT. At the subsequent London Summit they agreed to seek early agreement on a new round. A multilateral round of trade talks is the most effective vehicle for successful trade liberalization.

# A New Round of Multilateral Trade Negotiations

To exploit present opportunities the United States must pursue decisive, extraordinarily disciplined policies. At the most general level, a successful international strategy requires that the United States push aggressively forward on comprehensive multilateral trade negotiations under the auspices of GATT. At a more concrete level, the United States itself must be committed to comprehensive trade liberalization. In this context, comprehensiveness has several dimensions—products, factors of production, countries, and types of trade

distortions, including VRAs and various preferential treatments of domestic industry. Each of these dimensions is important to successful liberalization.

With regard to products, the United States should push especially hard for liberalized trade in agriculture, services, telecommunications equipment, advanced electronics, automobiles, textiles, wood products, and steel, to mention just some of the major problem areas. The United States has much to gain from liberalizing these areas, and developing countries in particular will have reduced incentives to participate without the promise of liberalized textile trade. In the industries above where the United States has significant restrictions—automobiles, steel, textiles, and agriculture—the costs of protection are large. In agriculture, for example, the annual cost of restrictions on sugar imports is estimated to be in excess of \$3 billion, and the consumer cost of import restrictions on dairy products is even higher.

With regard to the various types of distortions, some progress has been made in GATT in the areas of subsidies, government procurement practices, and other nontariff barriers, but a new U.S. initiative at this time could accelerate and expand agreements in these and other areas.

# The Role of GATT

GATT was established in 1948 to foster liberalized trade and has sponsored several successful rounds of multilateral trade negotiations. An effective GATT is essential to further liberalization and expansion of international trade. In particular, GATT obligations can help to restrain protectionist trends around the world by providing a source of external discipline to national policies. Just as the U.S. Constitution puts interstate trading policy beyond the control of individual States, international commitments can constrain the use of tariffs and other major forms of nontariff barriers by individual countries. Moreover, because no policy is likely to be completely successful in this regard, an ambitious program of trade liberalization under GATT auspices is needed to counter the inevitable individual lapses into protectionism at the national level.

The objectives of U.S. policy toward GATT are to strengthen the existing framework in the short term and to expand the scope of the agreement in the longer term. To achieve these goals, the United States supports the work program agreed to by the GATT Contracting Parties at the Ministerial meeting in 1982. Efforts to strengthen and expand the existing framework include working parties on safeguards and structural adjustment, quantitative restrictions and other nontariff measures, and dispute settlement procedures. The United States supports the negotiation of an effective "safeguards" code that

would discipline the use of temporary import restrictions as a method of dealing with domestic industry adjustment to import competition. The continuing proliferation of quantitative and nontariff restrictions on trade is also of major concern. The working party on this issue has catalogued existing quantitative restrictions and other nontariff measures and judged their consistency with GATT principles. This information should facilitate negotiations to eliminate the restrictions, perhaps as part of the preparation for a new multilateral round of trade negotiations. Finally, a major weakness of GATT is its inability to resolve disputes effectively. A greater reliance on professional panelists to resolve disputes might lead to a more predictable settlement process less subject to control by member countries. The recommendations of the GATT Secretariat would improve the process of forming panels, as well as the implementation of panel recommendations.

The GATT Contracting Parties have discussed extension of the GATT framework into agriculture, services, counterfeit goods (and other issues of intellectual property rights), high-technology goods, and textiles. In order to bring agriculture more fully under the rules of GATT, the United States supports a reduction in quotas and licensing programs limiting agricultural imports and a general prohibition on export subsidies. The EC, however, opposes a general prohibition and believes that export subsidies should be permitted.

Although trade in services constitutes an increasing portion of international trade, it too continues to remain outside the GATT framework. Liberalization of trade in services has been slow due not only to the complexity of the subject but also to intense opposition in principle, especially among developing countries. The service industries in these countries are usually small, and the governments argue that further growth of the industries would be impossible without restrictions on foreign competition. Despite such opposition, the United States has recently persuaded other Contracting Parties to consider the issue of services under GATT auspices.

Trade in counterfeit goods has increased noticeably in recent years. In addition to the economic losses to trademark owners, trade in counterfeit goods presents potential safety and health hazards to consumers. The United States believes that GATT provides the best forum for negotiating and implementing an agreement to handle this problem and urges the formation of a working party on trade in counterfeit goods. Developing countries have opposed such a working party on the grounds that GATT is an inappropriate forum. Their underlying fear, however, is that developed countries will use rules to restrict the trade of counterfeit goods as protectionist measures to limit imports of legitimate goods. GATT Contracting Parties

agreed at the 1984 Ministerial meeting to establish an experts group on intellectual property rights in general. The group will collect information on abuses and propose alternatives for action. As required by the Trade and Tariff Act of 1984, the United States is also preparing a survey of problems around the world with intellectual property rights.

In 1982 the United States proposed that GATT examine trade in high-technology goods. As a result of opposition, the study was transferred to the OECD. Two major findings have now emerged from this study. First, open international markets are necessary to capture fully the benefits of high-technology industries. Second, restrictive trade practices are increasing trade frictions in these industries. Major issues include the role of preferential public procurement (especially in telecommunications), the role of product standards, limiting the access of domestic firms to government sponsored research, the influence of various types of government sponsored research and technology on commercial and industrial technology, and the effect of government policies on investment.

Finally, textiles remain exempt from standard GATT rules. The Multi-Fiber Arrangement, which establishes rules governing quotas for textiles, is due to expire in July 1986. A working party is examining the possibility of bringing textile trade into the GATT framework, perhaps through the negotiations on renewal of the Multi-Fiber Arrangement which begin in 1985. Textile restrictions began in the early 1960s as a temporary expedient to give the textile industries in the United States and other industrial countries time to adjust to increased foreign competition but, perhaps predictably, have evolved into a more permanent obstacle to freer trade.

# Secondary Strategies

A potential problem with multilateral negotiations is that they may be stalled by a relatively small group of countries. If this occurs, the United States and others may eventually be forced to resort to secondary strategies for liberalization. The new free-trade area (FTA) negotiating authority given the President offers one possible option. FTA negotiations (and less than fully multilateral negotiations in general) tend to reverse the usual incentives in international trade negotiations by making countries more eager to be among the first to agree to liberalize trade rather than among the last. The incentives for countries to be among the first to enter an FTA or a plurilateral agreement with the United States could be strong. Because no duties would be levied on intra-FTA exports of FTA members, the first entrants would enjoy substantial competitive advantages over outsiders in the large U.S. domestic market, especially if highly restricted sectors were to be included in the FTA agreement. In addition, as the

number of countries joining an FTA grows, the incentives for outsiders to join increase, because unfavorable trade diversion increases and the size of the non-FTA market decreases as the FTA expands.

One possible criticism of an FTA initiative is that it may appear to some as a regression to narrow, bilateral trade negotiations. This need not be the case. First, the possibility of an FTA strategy would be considered only if multilateral negotiations stalled. Second, an FTA initiative would not be the same as the narrow, complex trade "haggling" characteristic of the 1930s because there are GATT criteria for permissible FTAs and plurilateral agreements. Third, an FTA or plurilateral initiative would be as multilateral as the number of countries that chose to join the agreement. There is nothing intrinsically bilateral about an FTA. Again any FTA initiative would at all times be subordinated to resumed progress in multilateral trade negotiations.

Perhaps most importantly, however, the possibility of FTA or, more broadly, plurilateral negotiations offers the United States and others the option of using a free-trade instrument, rather than protectionism, as a lever against protectionist countries that are recalcitrant in fully multilateral negotiations. This distinction is important because there are several fundamental difficulties with using trade sanctions to persuade other countries to liberalize their trading practices. First, trade sanctions hurt the country that imposes them, in some instances as much as, or more than, the foreign country. Second, the foreign trading partner knows that this is the case. As a consequence, threats of trade sanctions are often not credible. Then, of course, there is always the additional threat of foreign retaliation.

In rare instances, however, the United States may be forced to use trade sanctions to persuade a particular trading partner or a group of trading partners to abandon especially restrictive trading practices. Although such sanctions raise the danger of retaliation, there may be isolated instances where this danger is minimal relative to potential gains. However, sanctions should be used only in accordance with clearly established rules, not as a pretext for protectionist actions. Thus, threat of a sanction should always be accompanied both by an unambiguous explanation of which trading practice the sanction is aimed at eliminating and by credible assurances that sanctions will be removed when the restrictive practice halts.

A sanction is more likely to succeed in an industry where the trading partner's exports to the U.S. market are more important to them than they are to the United States. Thus, trade sanctions must be carefully tailored to particular circumstances. A sanction appropriate for one issue of concern to the United States, such as the use of concessionary loans to boost exports, may be inappropriate for other

issues of similar concern, such as preferential government procurement, infringements of intellectual property rights, or cyclically varying subsidies. One would also expect strategic sanctions to be used only at the discretion of the highest policy levels of the government.

# A Final Caveat

It is often assumed that opening markets abroad for U.S. exports by reducing trade barriers will necessarily improve the fundamental position of the U.S. current account deficit. This is not necessarily the case. A country's current account balance is determined fundamentally by domestic investment and saving behavior (including government) relative to investment and saving behavior abroad. As pointed out earlier, this is true because of two fundamental economic relations. First, a current account deficit, for example, is necessarily offset by a corresponding capital account surplus. Second, the capital account surplus is identically equal to the excess of domestic investment over domestic saving (including government). Thus, changes in trade barriers will affect the current account in a fundamental way only to the extent that they change saving or investment. Accordingly, the use of the U.S. current account (either with the rest of the world or with particular countries) as a measure of success in liberalizing trade is likely to lead to frustration. Comprehensive free trade is a policy objective because of the proven benefits of open markets, not because it will lead to a particular external balance.

## **CHAPTER 4**

# Health Status and Medical Care

IN 1965 THE U.S. CONGRESS enacted the medicare and medicaid programs. For the first time, the Federal Government made a major commitment to finance the medical care needs of its elderly and poor citizens. The purpose of medicare was to reduce the financial burden of illness on the elderly; the goal of medicaid was to improve the access of specific categories of the poor to medical care.

The price tag for meeting these objectives was not expected to be great. The medicare hospital insurance program was expected to cost the Federal Government \$2.8 billion in its first year (in 1983 prices), with growth to about \$8.2 billion in 1983, according to Social Security Administration actuaries.

This estimate was wrong, massively so. Federal spending on medicare benefits reached \$57.4 billion in 1983; spending for the hospital portion of medicare in 1983 surpassed the original projection by almost fourfold. Medicaid consumed an additional \$34.0 billion in 1983.

Experience with medicare and medicaid vividly illustrates the dilemma of health insurance. The goal of health insurance is to reduce the risk that consumers will face large out-of-pocket medical expenses. The means by which this is accomplished is for a third party—sometimes the Federal Government—to pay a large share of the bill. Individual consumers, however, tend to purchase more medical care when the price of additional care to them is reduced. Because of this additional demand, the cost of the insurance program is driven up. Thus, the goal and the means of health insurance are in conflict. How to resolve this conflict is the central problem of public policy toward medical care.

Rising costs are not limited to public health insurance programs. Most non-elderly people in the United States have private health insurance, usually provided as an employment-related fringe benefit. The percent of gross payroll spent by employers for health benefits has increased by as much as 50 percent from 1976 to 1983. The consequence of this increase is lower real wage increases for employees.

There is also widespread concern that the unit costs of medical care are too high. The cost of a day in the hospital was \$369 in 1983,

up from \$41 in 1965 (\$119 in 1983 prices), and the average cost per hospital admission increased from \$311 (\$901 in 1983 prices) to \$2,789 over the same period.

Calls are heard to curb the increasing costs of medical care. Policy-makers have an array of options, ranging from increased regulation to unfettered competition, from which to choose.

Therefore, on the 20th anniversary of medicare and medicaid, it is appropriate to review the present condition of public and private health insurance programs in the United States. Positive steps can be taken toward the goals of delivering appropriate medical care at reasonable prices. Policies must be chosen carefully, however, to promote consumers' incentives for healthy behavior, reasonable levels of health insurance coverage, and careful use of medical care services. Producers must also face incentives to deliver medical care services efficiently at competitive prices.

## HEALTH STATUS OF THE AMERICAN POPULATION

The life expectancy of Americans has improved steadily since 1900, when the average American could expect to live for 47.3 years. At the turn of the century, females lived 2 years longer than males, on average, and blacks lived 33.0 years, substantially fewer than the 47.6 years for whites. By 1982 the average life expectancy had increased to 74.5 years. The male-female gap had widened to 7.4 years, but the black-white gap had narrowed to fewer than 6 years.

The factors mainly responsible for increases in life expectancy during the first half of this century—improved sanitation, heating, and other amenities, along with significant breakthroughs in immunization against communicable diseases—contributed most significantly to the survival of infants and children. For adults over 65, life expectancy statistics show only modest gains during this period, from 11.9 years in 1900 to 13.9 years in 1950. As of 1982, however, the life expectancy of older adults had increased to 16.8 years.

Increased life expectancy at older ages, along with declining birth rates, has led to the well-known "graying" of America. The age distribution of the population has shifted markedly since 1950, when the over-65 population represented 8.2 percent of the total population. In 1983 the elderly accounted for 11.7 percent of the total population. Because the elderly spend about 3½ times as much per capita on medical care as do the non-elderly, population aging has profound implications for medical care spending. Greater demands are placed on medicare and on that part of the medicaid program that finances long-term care for the elderly poor.

Increasing life expectancy at older ages is evidence of improving health status of the American population. Additional evidence is that infant mortality rates and fetal death rates have fallen since 1950. (Infant deaths occur within the first year of life; fetal deaths are the deaths of fetuses of 20 weeks or more gestation.) Large declines have occurred for both blacks and whites. However, in 1981 (the latest year for which data are available) the infant and fetal death rates for blacks remained substantially above those for whites.

Between infancy and age 65, there are distinct differences in the causes of death by age, sex, and race. The leading cause of death for whites and blacks of both sexes below the age of 15 is accidents. In fact, accidents are the leading cause of death below the age of 45. From ages 15 to 24, accidents are the leading cause of death for whites, whereas homicide is the leading cause of death for blacks. Cancer is the leading cause of death for black females between the ages of 25 and 44 and for white females between the ages of 25 and 64. After age 65, heart disease is the major cause of death.

The dominant role of accidents and homicides makes clear that behavioral factors play an extremely important role in mortality. Moreover, because many of these deaths occur at early ages, accidents and homicides have a disproportionate effect on life expectancy at birth.

Other than through mortality statistics, there are problems in measuring the public's health status. For example, people's willingness to report certain nonfatal diseases may change over time. The health status indicators must also be adjusted for the age distribution of the population, because the population is aging and many diseases appear more frequently among the elderly.

Even with these qualifications in mind, it is useful to examine trends in the self-reported health status of the American population from nationwide surveys of households. One measure of health status is "restricted activity days," which are days that a person cuts down on his or her usual activities because of illness or injury that occurred during the 2 weeks prior to the survey. A day spent in bed at home or in the hospital ("bed-disability day") is, of course, a restricted activity day.

Surveys indicate that the number of restricted activity days decreased among all age groups from 1957 until the middle or end of the 1960s, after which the trend has reversed. The number of bed-disability days per person fell during the late 1950s and early 1960s and has remained roughly constant since then. Some increase occurred within the 45-to-64 age group.

Another health status indicator is limitations of activity caused by chronic conditions that began more than 3 months prior to the survey. A striking trend emerges: the proportion of males aged 45 to

64 who were unable to perform their major activity increased from 7.2 percent of that age group in 1969 to 11.5 percent in 1981. Smaller, but very noticeable increases are shown for this activity limitation among other males and females aged 45 to 64.

Trends in reported activity limitations may be explained, in part, by the expansion of disability cash benefits and of the number of beneficiaries. Between 1965 and 1975, cash payments to disabled persons increased from \$9.7 billion (\$28.1 billion in 1983 prices), or 1.1 percent of gross national product (GNP), to \$33.9 billion (\$58.0 billion in 1983 prices), or 2.2 percent of GNP. During the same period, the number of social security disability insurance beneficiaries grew by 150 percent while the covered work force grew by only 55 percent. It appears that persons with chronic conditions can, in recent years, leave the work force with greater disability benefits, whereas earlier they might have continued to work. Changes in mortality patterns may also partly explain increases in activity limitations. As mortality rates drop, some people who live longer have chronic diseases that cause disability.

# TRENDS IN MEDICAL CARE SPENDING AND USE

In 1983 Americans spent \$355.4 billion on medical care. Table 4-1 shows that hospital care accounted for 47.0 percent of "personal health care spending" (a category that includes most payments to medical care providers) in 1983. Following hospital care in importance were physicians' services and nursing homes with 22.0 and 9.2 percent, respectively, of personal health care spending.

Fifty-five percent of the money spent on medical care comes from private funds paid directly by consumers and by private insurers. Of the private funds, insurance is the dominant mode of paying for hospital services and, to a lesser extent, for physicians' services. Consumers pay for most drugs and dental services out of their own pockets. Private insurance provides little coverage for nursing home care.

Government funds constituted 41.9 percent of total medical care spending in 1983, of which the Federal Government contributed 69.0 percent. Federal spending dominated that of State and local governments in most personal health care categories and in medical research, while State and local governments were dominant in expenditures for construction and public health activities.

The percentage of medical care spending devoted to hospital and nursing home care has risen. This trend has implications for how these services are financed. Hospital and nursing home care occur infrequently and are expensive; both considerations tend to increase consumers' demands for third-party reimbursement. Thus, it is not

TABLE 4-1.—National health expenditures by type of expenditure and source of funds, 1983 (Billions of dollars)

	Total	Private funds					Government funds		
Type of expenditure				Consumer					State
Type of expenditure	TOTAL		Federal	and					
TOTAL	355.4	206.6	195.7	85.2	110.5	10.9	148.8	102.7	46.1
Health services and supplies	340.1	199.8	195.7	85.2	110.5	4.1	140.3	96.8	43.5
Personal health care	313.3	188.8	185.2	85.2	100.0	3.7	124.5	93.0	31.5
Hospital care Physicians' services Dentists' services Other professional	147.2 69.0 21.8	68.8 49.7 21.2	67.3 49.7 21.2	11.1 19.6 13.9	56.2 30.1 7.4	1.5 (²)	78.4 19.3 .6	60.6 15.6 .3	17.8 3.7 .3
services Drugs and medical	8.0	5.6	5.5	3.3	2.1	.1	2.5	1.9	.5
sundries Eveglasses and	23.7	21.6	21.6	18.4	3.2		2.1	1.1	1.1
appliances Nursing home care Other personal	6.2 28.8	5.2 14.9	5.2 14.7	4.5 14.4	.7 .3	.2	1.0 14.0	.9 8.1	5.9
health care	8.5	1.8	<b> </b>			1.8	6.6	4.5	2.1
Program administration and net cost of private health insurance	15.6	10.9	10.5		10.5	.3	4.6	2.6	2.0
Government public health activities	11.2						11.2	1.2	10.0
Research and construction of medical facilities	15.3	6.8				6.8	8.4	5.9	2.6
Research 5	6.2 9.1	.4 6.5					5.8 2.6	5.2 .7	.6 2.0

Source: Department of Health and Human Services, Health Care Financing Administration.

surprising that third-party payments increased from 67.3 percent of hospital care and nursing home spending in 1950 to 85.6 percent in 1983.

Another trend has been an increase in the Federal share of personal health care spending from 3.4 percent in 1935 to 29.7 percent in 1983. The largest portion of this increase occurred between 1965 and 1970 and was accompanied by a fall in the share of private sector payments. This drop appeared almost entirely as a decline in consumer direct payments.

Table 4-2 shows aggregate and per capita trends in medical care spending from 1965 to 1983. In 1965 Americans spent \$207 per capita (\$599 in 1983 prices) on medical care. Total medical care spending in that year accounted for 6.1 percent of GNP. By 1983 medical care spending had grown to \$1,459 per person. Despite an expansion in the economy during this period, medical care spending consumed an increasingly large share of GNP, reaching 10.8 percent in 1983.

Spending by philanthropic organizations, industrial in-plant health services, and construction financed privately.
 Less than \$100 million.
 Research and development expenditures of drug companies and other manufacturers and providers of medical equipment and upplies are excluded from "research," as the value of their research is included in the expenditure class in which the product lifs.

TABLE 4-2.—National health expenditures, by source of funds and as percent of gross national product, selected years, 1965-83

Year	Total			Private funds			Government funds		
	Amount (dollars)			Amount (dollars)		D	Amount (dollars)		
	Total (billions)	Per capita	Percent of GNP	Total (billions)	Per capita	Percent of total	Total (billions)	Per capita	Percent of total
1965	41.9	207	6.1	30.9	152	73.8	11.0	54	26.2
1970	75.0	350	7.6	47.2	221	63.0	27.8	130	37.0
1975	132.7	590	8.6	76.3	340	57.5	56.4	251	42.5
1980	248.0	1,049	9.4	142.2	601	57.3	105.8	448	42.7
1981 1982 1983	285.8 322.3 355.4	1,197 1,337 1,459	9.7 10.5 10.8	164.2 186.5 206.6	688 774 848	57.4 57.9 58.1	121.7 135.8 148.8	510 564 611	42.6 42.1 41.9

Note.—Per capita amounts are based on July 1 Social Security Area population estimates, which include the resident U.S. population and that of the outlying territories, plus Federal military and civilian employees and their dependents overseas, plus an estimate of the census undercount.

Source: Department of Health and Human Services, Health Care Financing Administration.

Neither the level nor the rate of increase in medical care spending in the United States is unique compared with other industrialized countries. For example, Sweden spent 8.7 percent of its GNP on medical care in 1975 and 9.7 percent in 1980. Comparable figures for the United States are 8.6 percent in 1975 and 9.4 percent in 1980. Other countries have attempted, for the most part unsuccessfully, to control medical care spending by regulation rather than through market forces. One exception appears to be the United Kingdom, where strict central controls have limited medical care spending to 5.6 percent of GNP in 1975 and 5.8 percent in 1980. This apparent success masks major costs not measured in the GNP data, however. For example, consumers in the United Kingdom's national health system face long waiting times for nonemergency hospitalization.

#### FACTORS RESPONSIBLE FOR RISING MEDICAL CARE EXPENDITURES

The factors responsible for rising medical care expenditures can be attributed either to changes in price or in quantity. Price changes can be subdivided further into general inflation and increases unique to the medical sector. Quantity changes can be partitioned into three elements: changes in population, in quantity per capita, and in the nature of services provided per visit or per admission.

General inflation (measured by changes in the GNP implicit price deflator) accounted for 51.7 percent of the rise in hospital inpatient spending between 1971 and 1981. The remaining sources of increased hospital spending were increases in hospital input prices in excess of increases in the GNP deflator, 11.7 percent; population growth, 7.2 percent; growth in admissions per capita, 8.6 percent; and growth in real expenses per admission, 20.8 percent. Real ex-

penses per admission are a proxy, albeit an imperfect one, for changes in the nature of hospital care.

The share of hospital spending growth attributable to rising real expenses per admission increased to approximately 39.4 percent from 1981 to 1982 and 46.1 percent from 1982 to 1983. Those increases occurred at a time of lower general inflation and flat or declining demand for hospital admissions. Real spending growth per admission fell back to 26.7 percent of hospital spending growth in the first 6 months of 1984, compared with the same period in 1983. This rate remains above the average rate from 1971 to 1981.

General inflation caused 58 percent of the increase in expenditures for physicians' services from 1971 to 1981. Other causes were the price index for physicians' fees in excess of the GNP deflator, 10 percent; visits, 5 percent; and real expenses per visit, 27 percent.

Some analysts have emphasized the fact that general inflation caused most of the growth in medical care spending. Although technically correct, this view is seriously misleading. If spending grew only 2 percentage points faster than inflation, real expenses per unit of service would quadruple during the average person's lifetime, with other factors being constant.

The significance of these numbers is that the extraordinary increase in medical care expenditures results largely from changes in the nature of the product: the scope, the complexity, and hence, the prices of medical care products have risen in relation to those of other industries. In the hospital sector, this trend reflects the growing number of hospitals that provide highly specialized services. In the physicians' services sector, the volumes of out-of-hospital laboratory tests and surgical procedures have been growing much faster than the number of physicians' visits.

## TRENDS IN USE OF MEDICAL CARE SERVICES

Significant trends have occurred since 1964 in the use of particular medical services by different demographic groups. Hospital days of care fell from 1964 to 1981 for younger age groups, but rose for older people, especially those over 65. This latter increase may be attributed, in part, to the medicare program, which has provided hospital insurance coverage for the elderly since 1966.

In 1964 poor people (family income under \$2,000) had the lowest rate of physicians' visits. Poor people (family income less then \$5,000 in 1976 and less than \$7,000 in 1981) had the highest rate of physicians' visits in 1976 and 1981. The hospital discharge rate among poor people increased, while discharge rates among other income groups fell. These trends may be attributed, in part, to a variety of

Federal programs, including medicaid, which have improved the access of poor people to physicians and hospitals.

## DOES MORE MEDICAL CARE PRODUCE BETTER HEALTH?

Trends in medical care spending parallel improvements in some measures of health status in the United States. It would seem natural, then, to assume that more medical care produces better health. Spending some amount of money on medical care is indisputably worthwhile. But this does not imply that, beyond some point, spending more money on medical care necessarily leads to further improvements in health.

Statistical studies, for the most part, indicate that differences in mortality and sickness among States or regions in the United States cannot be explained by differences in the distribution of medical care resources. One such study examined the relationship between an area's medical resources and physiological measures of health. In the context of the health conditions and levels of resources considered, it was found that additional medical resources made little or no contribution to a person's health.

The strongest evidence that an across-the-board increase in medical care use will not improve the health of the average person comes from the RAND Corporation health insurance experiment. About 4,000 nondisabled people between the ages of 14 and 61 were randomly assigned to insurance plans for 3 or 5 years. One plan provided free care; the others required enrollees to pay a share of their medical bills. The experiment showed that when cost-sharing was higher, visits to physicians and adult hospitalizations were fewer. However, the only statistically significant positive health effect of free care for the average participant was for corrected vision. Other measures of health were similar among the cost-sharing groups and the free care group.

Numerous studies of Health Maintenance Organizations (HMOs), which are prepaid medical care plans, also show that more medical care does not necessarily lead to better health. Prepayment gives physicians an incentive to practice conservative styles of medicine. As a result, enrollees in prepaid plans use up to 40 percent fewer hospital days than enrollees in fee-for-service health insurance plans. There is no evidence that the conservative style of medical care in prepaid plans is inferior to that in the fee-for-service sector.

Additional spending for some types of medical care makes a significant positive contribution to health. Research conducted in the United States and other countries has shown that hypertension (high blood pressure) can be controlled by appropriate treatment. This

result is significant because hypertension is a key risk factor in cardiovascular disease, which accounted for approximately half of all U.S. deaths in 1980. Other studies have shown that hypertension control has improved significantly in recent years. Improved rates of hypertension control have been cited as a factor responsible for the dramatic decline in age-adjusted death rates for heart disease, which fell from 253.6 per 100,000 population in 1970 to 188.5 in 1983.

Evidence that poor people with hypertension can benefit from free medical care comes from a "natural experiment" in which some adults were terminated from the California medicaid program in 1982. Blood pressure levels among terminated people with hypertension increased significantly during the 6-month study period, compared with a control group. The RAND health insurance experiment also found that poor people with high risk of hypertension benefited from free medical care.

A growing consensus also suggests that infant and prenatal care can improve health outcomes. One study showed that neonatal death rates (deaths of infants in the first 28 days of life) were reduced by the medicaid program. Another study found that women who seek medical care earlier during pregnancy are less likely to deliver infants with low birthweights. This finding is significant because women covered by medicaid tend to seek medical care earlier than those with no insurance coverage.

Evidence from these studies, taken together, points to the following conclusion. An across-the-board increase in medical care spending does not appear to be justified. However, additional medical intervention does produce positive benefits for some conditions and at-risk populations.

## THE EFFECTS OF LIFESTYLE ON HEALTH

If the effectiveness of additional medical care in producing better health is questionable, the opposite can be said about the importance of lifestyle factors such as smoking, consumption of alcohol, and diet. Studies of middle-aged men have identified three risk factors—smoking, cholesterol, and blood pressure—as the major determinants of the risk of death from any cause. These factors are all influenced by a person's lifestyle.

A number of investigators have estimated that 30 percent, or more, of coronary heart disease deaths can be attributed to cigarette smoking. Smoking is the major single cause of cancer deaths in the United States, and it is a contributing factor to deaths from stroke and emphysema. In fact, the U.S. Surgeon General calls it "the chief, single avoidable cause of death in our society, and the most important

public health problem of our time." The total annual U.S. mortality from smoking is estimated to exceed the number of Americans killed in battle during World War II.

According to one estimate, the total direct medical care cost of smoking was \$12.8 billion in 1972 (using 1983 prices). The discounted value of lost earnings attributable to sickness or death related to smoking was \$31.1 billion. The total cost for smoking-induced illness represented 10.9 percent of all medical care costs in 1972. Focusing on the smoking-induced direct costs of cancer, there was a marked increase from 1972 to 1980—from \$1.67 billion to \$3.15 billion (in 1983 prices).

Alcohol abuse also imposes enormous costs. Direct medical care costs attributable to alcohol abuse were estimated to be \$18.6 billion in 1971 (1983 prices); discounted costs of lost production from this cause were \$33.4 billion. Alcohol abuse also contributed to motor vehicle accident losses of \$10.5 billion and violent crimes that cost \$3.3 billion.

# PUBLIC POLICY TO ENCOURAGE HEALTHY BEHAVIOR

Evidence shows that people can improve their health if they adopt healthy lifestyles. It would be inappropriate, however, to conclude from this evidence that government policy should attempt to promote healthy behavior. The legitimacy of public action rests on a finding that private markets do not provide incentives for individuals to adopt healthy behavior in appropriate situations. This may occur if consumers do not have access to relevant information or if there are externalities. In the first case, the government has a legitimate role in providing information, but the case of externalities is more complicated.

Negative externalities arise if the behavior of one individual imposes costs on other individuals. An example is unsafe driving, which leads to accidents that may involve other people. Cigarette smoking is another example, in which the behavior of individual smokers creates negative externalities through smoke pollution.

These negative externalities can be affected by taxing the products that cause them. For example, the Federal excise tax on distilled spirits will be raised from \$10.50 per proof gallon (64 ounces of ethanol) to \$12.50 on October 1, 1985. The Federal excise tax per package of cigarettes was raised from 8 to 16 cents by the Tax Equity and Fiscal Responsibility Act of 1982. This provision is due to expire later this year when the Federal cigarette tax will revert to its old level. Several studies have shown that consumption of alcoholic beverages and cigarettes falls if the prices of these products are increased by an excise tax.

The problem of externalities is sharply distinct from the problem of costs imposed on the smoker by his or her own behavior. These costs affect other people if the smoker's health insurance premium is not increased to reflect the expected additional health costs of smoking. Some individual insurance policies currently practice risk-rating for poor health habits. In one instance the insurance company gives a 10 percent discount to individuals who report that they do not smoke. Automobile insurance policies use age, sex, and previous accident history, among other factors, to distinguish among risks. Similar rating methods might be applied to the health costs of alcohol.

The role of the Federal Government in this area should be to ensure that legal barriers are not imposed to restrict the ability of private insurers to distinguish among risks. In one instance an active policy may be appropriate. This concerns premiums for enrollees in the Federal Employees Health Benefits Plan, the Nation's largest, with approximately 9.2 million enrollees and dependents. The premium for this health insurance plan might be adjusted to reflect the excess health costs attributable to smoking and drinking.

# HEALTH INSURANCE AND MEDICAL CARE COSTS

Studies suggesting that an increase in medical care use would do little to improve the health of the average person might justify some concern that rapidly rising medical care costs are "excessive," but they could hardly explain the widespread belief among both analysts and policymakers that the medical care system is in a state of distress. In other industries the principle of consumer sovereignty is generally the best guide to determine how many resources should be allocated to the industry. Why doesn't this principle apply to the medical care industry?

Medical care is different from other major industries because only about one-quarter of the cost of medical care is paid directly by consumers. The remainder, excluding a small percentage of philanthropy, is paid by public and private health insurance programs. Private health insurance arose because consumers of medical care are generally uncertain about when they are going to require medical attention. This uncertainty and the expensive nature of medical care create a large degree of risk. In order to eliminate much of this risk, consumers buy insurance for their medical care needs. By paying a fixed amount each month, consumers protect themselves from large medical costs.

Thus, health insurance serves a useful function in the economy. However, the benefits of health insurance can be offset if the policy premium is not based on expected medical care costs incurred under the policy by specific risk classses of consumers. If premiums are not risk-rated, then the costs of each individual's behavior are spread throughout the insurance pool and are negligible to the individual. Because the benefits of using more medical care, however slight, accrue to the individual, each person will have little incentive to use medical services carefully and to buy services from the most cost-effective providers.

Perfect risk-rating for every individual would be exceedingly complex. Nevertheless, certain observable characteristics—such as smoking—can be used to distinguish among health risks for the purposes of determining health insurance premiums. To the extent that such practices are not followed, the distorting effect of health insurance on individual choice is magnified by another feature of the health insurance policy. Policies that subsidize the cost of additional services or more expensive services will increase the consumer's incentives to use medical care without regard to costs. Because many policies provide such arrangements, including free care at the point of purchase, the undesirable effects of imperfect risk-rating are magnified. Moreover, the subsidy for additional services reduces providers' incentives to hold down their prices and to control the complexity of their products. Price increases make it more difficult for uninsured consumers to purchase medical care and may explain, in part, why public insurance programs have arisen.

Numerous studies, conducted in the 1960s and 1970s, showed that demand for medical care services is directly related to the level of health insurance coverage. Data sources for these studies were regional (often statewide) aggregates, individual consumer data collected by surveys, and several "natural experiments" in which the level of cost-sharing was changed for a particular group of consumers. All of these studies showed that total medical expenditure per capita was greater when cost-sharing was lower, although estimates differed among studies.

Reliable estimates of the impact of insurance on demand for medical care services have been provided by the RAND health insurance experiment. Interim results from the RAND experiment show that total medical expenditure per capita rises steadily as the fraction of the bill paid by the family falls. Controlling for other determinants of medical care spending, individuals with full insurance coverage spent approximately 50 percent more than individuals in families that paid 95 percent of the bill.

Individuals with health insurance may choose more expensive providers than those without insurance, either because the insured individual demands more complex services or devotes less time to searching for cost-effective providers. One study using 1963 data

suggested that complete insurance coverage would raise the hospital room and board price by 23 percent and the price of the physician selected by 18 percent, compared with the prices of hospitals and physicians chosen by persons with no insurance. This finding has not been substantiated by experimental data, however.

Several studies have shown that physicians' styles of practice are related to the average level of health insurance coverage. In one instance, it was found that more extensive insurance coverage may lead physicians to provide more services per visit or to itemize charges that were previously included in a single professional fee. Another study calculated that insurance was responsible for more than half of the rise in hospital prices from 1958 through 1967. This contrasts with general inflation, which accounted for only 10 percent of the increase.

Current insurance policies leave the consumer little or no incentive to find cost-effective suppliers. Nearly 100 percent insurance coverage weakens the concept of a competitive medical care market. Such high levels of insurance permit hospital prices to rise much faster than prices in less insured markets for drugs and dental and physician services. This suggests that health insurance creates a "vicious cycle" in which insurance drives up prices, causing consumers to demand more insurance to protect themselves against large health care bills, which leads to further price increases.

Finally, the purchase of health insurance is heavily subsidized by the tax system. Even if perfect risk-rating were achieved and the use of additional services were not encouraged by the insurance policy, the tax subsidy would be a subject of public policy concern.

## THE TAX SUBSIDY FOR PRIVATE HEALTH INSURANCE

Private health insurance is a relatively recent phenomenon in the United States. Prior to World War II the vast bulk of the population did not have such protection. However, in the 1940s and 1950s the spread of employment-related health insurance was given special impetus after the Internal Revenue Service ruled that employer health insurance contributions were excluded from the wage base for determining income and social security taxes. Recent estimates indicate that about 82 percent of the population has private health insurance and 85 percent of private health insurance is employment-related.

The tax exclusion can be viewed as a special Federal subsidy for the purchase of employment-related health insurance. From this perspective, the exclusion reduces the price of insurance to employed consumers and thereby provides an incentive for employees to purchase more health insurance than they would if they were using taxable income. Several studies have used various measures of the tax subsidy to obtain estimates of the responsiveness of the demand for health insurance to price changes. All have concluded that the demand for health insurance would fall if the tax subsidy were reduced.

# REFORMING THE TAX TREATMENT OF HEALTH INSURANCE BENEFITS

Several policies have been proposed to reform the tax treatment of health insurance benefits. One proposed by the Administration in 1983, and included in the Treasury Department's 1984 tax proposal, would limit tax-free health benefits paid by an employer to \$175 per month for a family plan and \$70 per month for individual coverage. These limits would be indexed to increase yearly in proportion to the rise in the consumer price index.

Some employers with contributions over these limits would reduce their contribution to health benefits and increase cash wages or other benefits. Employers might also offer employees a choice of health care plans, with some of the plans having premiums below the limit. Both of these strategies would affect total health insurance premiums and, therefore, medical care costs. In addition, there would be a revenue effect. The Treasury Department estimates that a tax cap imposed on January 1, 1987, would produce approximately \$11 billion in additional income and payroll taxes in fiscal 1988.

The tax cap proposal might also improve the efficiency of the group health insurance market by encouraging employers to make a fixed contribution to the health insurance premium. One study showed that companies currently following this policy have lower premium costs than companies that contribute a level percent (including 100 percent) toward the health insurance premium. This evidence implies a more careful plan choice by employees who have to pay for additional premium costs out of their own pocket.

# INDEMNITY INSURANCE AND PREFERRED PROVIDER ORGANIZATIONS

Even if the tax subsidy for health insurance were reduced or eliminated, health insurance would have a distorting effect on medical care markets, as long as the insurance policy subsidizes the costs of additional medical services. Most health insurance policies currently incorporate this undesirable feature. However, some insurers and self-insured employers are experimenting with indemnity insurance, in which the insurance company makes a fixed payment per unit of care. An indemnity payment provides protection against risk without encouraging the consumer to choose expensive providers. The reason is that the cost of services in excess of the indemnity is paid entirely by the consumer.

Ideally, indemnity payments would be based on episodes of illness, rather than units of medical care. This system would reduce the tendency of insured consumers to use additional services as well as to choose expensive providers. However, the difficulty of defining illness might make an ideal system exceedingly complex. Therefore, indemnity payments based on units of care may represent an acceptable, albeit imperfect, alternative.

Private indemnity plans typically allow providers to bill consumers for amounts above the indemnity. However, some insurers have expressed an interest in establishing agreements with providers who will accept the indemnity as payment in full. The insurer would channel patients to these providers. This is the basis of the preferred provider organizations that are springing up around the country in increasing numbers. A preferred provider organization represents a method for determining the insurer's indemnity payment at a level equal to the full-billed charge of the low-priced providers. In practice, other criteria, such as quality, can also be used to select the preferred providers.

Many employers have expressed an interest in the preferred provider organization concept as a means to control their soaring health benefit costs. The major barrier to the development of preferred provider organizations appears to be restrictive State insurance laws. Fortunately, a number of States have passed enabling legislation that permits the development of preferred provider organizations.

## PUBLIC POLICY TOWARD DISCOUNTS

Although the basic preferred provider organization concept does not involve a discount, i.e., payment less than the hospital's full-billed charge, many insurers are attempting to negotiate discounts as part of the preferred provider organization arrangement. If successful, they will join some of the Nation's 90 Blue Cross and Blue Shield plans, which have already obtained discounts from hospitals. Many HMOs have also negotiated hospital discounts.

These discounts have become an important public policy issue for two reasons. First, hospitals claim that discounts force them to shift costs by raising charges to other insurers. This has led to suggestions that discounts be banned in favor of so-called all-payers rates, where all insurers would pay equal rates. Second, some critics have claimed that the size of the Blue Cross discount appears to be related to, and is perhaps a consequence of, Blue Cross' relatively large market share. Noting this relation, the less concentrated commercial insurance industry has sought unsuccessfully to obtain relief from antitrust laws that prohibit joint insurance company negotiations with hospitals.

There is little economic justification for banning discounts. All-payers rates would reduce the competitive pressure on both insurers and hospitals to control costs. If third-party payers can negotiate discounts, the whole system may benefit. The reason is that when one insurer negotiates a discount, cost-shifting is not the only possible outcome. The discount may also reduce the hospital's net operating margin; the hospital's operating efficiency may improve; and the level of real expenses per admission may fall. All of these outcomes might be viewed as positive responses. In particular, because hospital costs are artificially inflated by insurance, some reduction in real expenses per admission may be desirable.

This does not imply, however, that commercial insurers should be encouraged to negotiate together for a discount. In the first place, a large market share is not necessary in order to negotiate a discount. Many HMOs recently have negotiated hospital discounts even though their market shares are small relative to that of Blue Cross. Second, any insurer, regardless of its size, can form a preferred provider organization. Through the preferred provider organization, the insurer can selectively determine its payments to hospitals so that hospitals with excessively high costs will lose customers in the marketplace. Third, giving the Federal Government's blessing to countervailing market power sets a dangerous precedent. Countervailing power arguments could, for example, be used by hospitals seeking to band together to escape relief from legitimate but vigorous price pressure from the insurance industry.

The large market shares commanded by Blue Cross plans are most probably not attributable to anticompetitive conduct by those plans. State insurance laws usually exempt Blue Cross' policyholders from State taxes on insurance premiums. These taxes generally range from 2 to 4 percent of premiums. This gives Blue Cross a competitive advantage over its commercial rivals. Two empirical estimates suggest that differences in premium tax rates may contribute to Blue Cross' market share.

Several studies have indicated that Blue Cross plans with premium tax advantages have relatively high administrative costs and exhibit other characteristics indicative of poor market performance. Although insurance regulation is a matter best left to the States, these studies suggest that competition among health insurers might be promoted if tax advantages favoring Blue Cross were reconsidered by the States.

#### THE ROLE OF INFORMATION IN MEDICAL CARE MARKETS

Most experts agree that, for the medical care market to function properly, consumers must have the right incentives and they must be informed about the available choices. Critics of pro-competition medical care proposals often point to consumer information as the weak link in the proposal.

Such objections miss the point that a competitive medical care system would tend to produce more reliable information than the present one. For example, only 29 percent of the participants in the RAND health insurance experiment realized that the following statement is false: "If you have to go into the hospital, your doctor can get you into any hospital you prefer." When the same statement was presented to a group of more than 5,000 employees in Minneapolis, where many employees have a choice among competing HMOs, researchers found a significantly higher percentage of correct answers. This suggests that consumers in Minneapolis are aware that choosing a closed-group HMO limits one's ability to choose any hospital.

One area where information is currently poor concerns the prices charged by different providers. Inadequate price information is, to a large extent, a wound that the health care system has inflicted on itself. Most price advertising of medical services has been banned by State laws or regulations, as a result of organized medicine's determined effort to ban such advertising. Evidence shows that bans on advertising have raised the prices of eyeglasses, eye examinations, and prescription drugs. Recent court rulings, however, have substantially lifted these prohibitions.

It should also be pointed out that not all consumers have to be perfectly informed for markets to function effectively. If enough people are well informed, the remainder can judge medical care quality by observing price differences in the market.

Finally, the problems of weak incentives and poor information are related: When consumers have complete insurance, they have little reason to shop for low-priced providers and, thus, they will be poorly informed about medical care prices. This point is substantiated by a survey of individuals regarding their health insurance premiums. People with nongroup insurance coverage were more likely than those with group insurance to respond correctly that they paid out-of-pocket premiums. This occurs because nongroup policyowners are more likely to purchase the health insurance policy themselves; thus, they have a stronger incentive to learn about the price of the policy.

## MEDICARE: PUBLIC HEALTH INSURANCE FOR THE ELDERLY

In 1983, spending for the medicare program benefits was \$57.4 billion. This represented 46 percent of government personal health care spending in 1983 (Table 4-3). Medicare has expanded at a rapid rate since 1967, when it consumed \$4.5 billion (\$12.3 billion in 1983 prices).

TABLE 4-3.—Sources of funds for personal health care expenses, selected years, 1950-83
[Billions of dollars]

-	Total	1	Private funds	;	Government funds			
Year		Direct payment	Private insurance	Other	Medicare	Medic- aid <sup>1</sup>	Other	
1950	10.9	7.1	0.9	0.3			2.4	
1960	23.7	13.0	5.0	.5			5.2	
1965	35.9	18.5	8.7	.8			7.9	
1970	65.4	26.5	15.3	1.1	7.1	5.2	10.1	
1975	117.1	38.0	31.2	1.6	15.6	13.5	17.2	
1980 1981 1982 1983	219.1 253.4 284.7 313.3	62.5 70.8 77.2 85.2	67.3 78.8 90.8 100.0	2.6 3.0 3.4 3.7	35.7 43.5 51.1 57.4	25.2 29.0 31.3 34.0	25.8 28.4 31.0 33.1	

¹ Includes medicaid purchase of medicare coverage for eligible medicaid recipients.Source: Department of Health and Human Services, Health Care Financing Administration.

The impending crisis in medicare concerns the Hospital Insurance Trust Fund, which finances hospital, home health, and skilled nursing care for 30 million elderly and disabled persons. Spending from the trust fund is expected to grow at the rate of 11.8 percent per year from fiscal 1985 through fiscal 1995. Given the projected growth of revenues, the trust fund balance is expected to decline, starting in 1990. Under projections developed by the Congressional Budget Office, the trust fund will be exhausted in 1994. It will face a negative balance of \$56 billion in 1995 and even larger deficits in following years. Therefore, it is clear that major reforms are required to save the medicare program from financial insolvency. Fortunately, however, policymakers have time to consider carefully the proposed solutions to medicare's financial crisis.

## MEDICARE BACKGROUND INFORMATION

Medicare consists of two parts. Hospital insurance, also called Part A, covers 90 days of hospital care per spell of illness and allows an additional 60 reserve days to be used over the beneficiary's lifetime. Part A also covers 100 days of skilled nursing facility care per spell of illness and, since 1980, an unlimited number of home health visits. Hospital inpatient services are subject to a deductible equal to the cost of a day of hospital care (which increased from \$356 to \$400 on January 1, 1985) and coinsurance rates of one-fourth of the deductible for days 61 to 90 of hospital care, one-half of the deductible for each reserve day, and one-eighth of the deductible for days 21 to 100 of skilled nursing facility care.

Supplementary medical insurance, also called Part B, helps beneficiaries pay for physician and other outpatient care. Part B is a voluntary program open to almost any citizen who is over 65 or disabled.

Ninety-seven percent of Part A participants are also in Part B. Services covered by medicare Part B are subject to a \$75 annual deductible and 20 percent cost-sharing. Medicare is administered by the Health Care Financing Administration of the Department of Health and Human Services.

The principal source of funding for the Hospital Insurance Trust Fund is payroll tax contributions, at rates periodically modified by the Congress. The trust fund is financed on a pay-as-you-go basis, that is, current workers pay the costs of current beneficiaries. The Supplementary Medical Insurance Trust Fund is funded primarily through premiums from beneficiaries and general revenue contributions. The 1984 premium was \$14.60 per month, which was raised to \$15.50 per month on January 1, 1985. These calendar year rates were projected to equal 25 percent of the supplementary medical insurance program costs of elderly beneficiaries, as required by the Social Security Amendments of 1983.

## MEDICARE PHYSICIAN REIMBURSEMENT

Medicare reimbursement for Part B services is based on "reasonable" charges. Private insurance carriers that administer the Part B program determine the reasonable charge by comparing the amount actually billed with the billing physician's customary charge and the locality's prevailing charge. The lowest of these three amounts for any claim submitted is the reasonable charge. After the Part B deductible is met, medicare generally pays 80 percent of the reasonable charge and the beneficiary is responsible for the remaining 20 percent.

Increases in reasonable charges are limited by the medicare economic index, a formula based on increases in physicians' practice costs. The rate of increase in the medicare economic index has been consistently lower than the rate of increase in prevailing charges. Therefore, the medicare economic index places a limit on increases in reasonable charges. Estimates are that about 60 percent of medicare Part B charges are limited by the medicare economic index.

Physicians can decide on a claim-by-claim basis whether to accept medicare's reasonable charge as payment in full for the service. If so, the physician receives payment directly from the program. The patient is responsible for the 20 percent coinsurance and any remaining deductible. If not, the physician bills the patient directly and the program reimburses the patient for 80 percent of the reasonable charge (after the deductible has been satisfied). The percentage of claims paid directly to the physician declined steadily from 61.5 percent in

1969 to 50.5 percent in 1976, after which it slowly increased, reaching 54 percent of claims in 1983.

The Deficit Reduction Act of 1984 imposed a 15-month freeze, effective October 1, 1984, on medicare physicians' fees. All physicians were required to say by October 1 whether they would accept direct payment for all of their medicare patients for the following year. The freeze and other provisions in the Deficit Reduction Act were expected to reduce the rate of increase in medicare physician spending in fiscal 1985 from 14.5 percent to 11.1 percent.

There are three related issues in the area of medicare physician reimbursement: the conditions for direct payment, determination of the medicare payments, and supplementary private insurance. As noted above, physicians currently have the option of accepting or rejecting direct payment on a claim-by-claim basis. Some observers have argued that this amounts to a license to overcharge patients and have, therefore, proposed all-or-nothing acceptance of direct payment. One problem with this proposal is that some physicians who had previously refused direct payment could simply cease to treat any medicare patients. Other physicians might continue to treat medicare patients, but select fewer medicare patients and more private patients. The total volume of services produced per physician by both types of physicians would also fall.

The second issue concerns how medicare's physician payments should be determined. Few observers would defend as reasonable the present payment system, which freezes in place the existing distortions in physicians' prices. For example, studies show that physicians' charges for hospital procedures are higher than for outpatient procedures; insurance coverage of inpatient procedures, which predates coverage of outpatient services and is still more extensive, may cause these differences.

Numerous proposals have been advanced to reform the medicare physician payment system. A successful proposal would use market mechanisms to set the values of the medicare payments. This is desirable because values set at competitive levels should assure continued access to quality medical care for beneficiaries. For example, the performance of certain high-volume procedures might be put up for competitive bids. The winning low bids would become the basis of a comprehensive scale that assigns weights to all procedures. Finally, the multiplier (a number that converts the weights into reasonable charges) could be auctioned to all willing physicians in the community.

The third issue concerns supplementary medicare insurance. In 1967, 45.5 percent of medicare beneficiaries also had private, supplementary insurance; by 1977 this fraction had grown to two-thirds.

Medicare supplementary policies tend to protect consumers against medicare cost-sharing. This calls into question the effectiveness of medicare payment strategies based on cost-sharing. One may ask why the demand for medicare supplementary insurance is so strong, particularly in the light of allegedly high premiums for these policies.

The answer may be that medicare supplementary insurance is highly leveraged. That is, the supplementary policy that pays 20 percent of the physician's reasonable charge may cause policyholders to use more services, for which medicare Part B is obligated to pay 80 percent of the bill. Therefore, consumers may regard supplementary policies as highly attractive, even though they may create substantial excess use of services for the system as a whole.

# MEDICARE HOSPITAL REIMBURSEMENT POLICY

Until October 1983 medicare reimbursed hospitals for their "reasonable costs" of providing care, subject to some limits and exclusions. The Social Security Amendments of 1983 marked a major departure from cost-based reimbursement by establishing the prospective payment system. Under this system, hospitals are paid a prospectively determined rate for each discharge. The amount of the payment is determined by the classification of the discharge into one of 468 diagnosis-related groups. Certain types of expenses, such as capital and medical education, are still paid on a cost basis.

Data indicate that hospitals are responding to financial pressures to control costs and admissions. Hospitals have reduced personnel and staffed beds from the second and third quarters of 1983, respectively, to the second quarter of 1984. The introduction of the prospective payment system has also coincided with a gradual decline in hospital admissions and a sharper rate of decline in the length of stay for people age 65 and over.

The virtue of the prospective payment system is that it uncouples prices from the costs of individual hospitals. This idea, which lies at the heart of the prospective payment system, is that hospitals will strive to reduce their costs below the level of these fixed prices. The major problem with the prospective payment system is that the system of prices it established has no relation to the prices that would cause hospitals to produce the amount of services that consumers desire to buy at the right quality and the minimum cost. A price that is too low may cause producers to reduce investments so that the quality of service declines. Of more relevance to hospital services, a price that is too high in a market with competing suppliers will lead hospitals to compete in dimensions other than price, driving costs up to prices.

Achieving the appropriate set of prices will not be easy. The approach currently favored by the Health Care Financing Administration is to revise the existing system to account for unusual cases, hidden differences in the severity of cases among hospitals, and the like. However, the prospective payment system—no matter how finely tuned—creates incentives for cost increases that could be substantial in the long run. For example, hospitals have incentives to increase net revenues by increasing admissions, by unbundling services to shift costs to other parts of the medicare program, and by diagnosing and treating patients in the most highly reimbursed diagnostic categories.

The Health Care Financing Administration may attempt to thwart these cost-increasing tendencies by setting up regulations to detect and punish excessive use of services under the prospective payment system. However, without incentives on the part of consumers, it is doubtful that extra regulations will be effective. This is because individual consumers have no stake in saying "no" to extra admissions, unbundling of services, or reclassification of admissions into higher priced diagnosis-related groups. In addition, they have no reason to shop among hospitals on the basis of price. An efficient hospital can gain patients by offering higher quality care, but not by offering a lower price. This will lead to excessive quality competition. The system is basically one of price control, with all the usual disadvantages of that approach. As a transitional measure to a market-based system, however, current arrangements are superior to the previous system of cost reimbursement.

A disadvantage of any price control system is that it tends to become the target of groups who seek concessions for their special circumstances. For example, hospitals' capital costs and medical education expenses are still reimbursed on a cost basis under the new system. This special subsidy will tend to increase the amount of resources devoted to capital and medical education. In the long run, other groups, including large public hospitals that provide charity care, may also obtain concessions from the prospective payment system. Such concessions would gradually convert the system from one that controls the overall level of prices to one that allocates resources on a microeconomic level within the hospital sector.

There appear to be two possible solutions for the longer run. First, medicare Part A could be turned into a preferred provider organization in which the program pays in full for admissions at low-priced hospitals. Consumers choosing more expensive hospitals would have to pay the balance of the hospital's bill. This arrangement would not preclude using medicare's substantial buying power to obtain discounts from high-priced hospitals.

The advantage of this approach is that it could be set up quickly in most parts of the country, including those where organized alternative delivery systems do not exist. The disadvantage is that it would not address the structural incentives of hospitals to increase admissions, unbundle services, and diagnose patients in profitable diagnosis-related groups. In order to solve these problems, it may be necessary to adopt the alternative approach of combining medicare into a single program and letting organized provider groups bid to serve the medicare population at competitive rates.

Under this alternative proposal, each medicare beneficiary would receive a voucher that would enable him or her to purchase both physician and hospital services from an approved medical plan. A successful voucher system would seem to have four characteristics: (1) it would be based on capitation, that is, a fixed payment per enrollee per month; (2) the medicare contribution would be determined by competitive bidding; (3) consumers would have a choice among alternative plans; and (4) it would be mandatory.

Medicare payment based on capitation would eliminate the problems of excessive admissions, unbundling of services, and diagnosisrelated groups' reclassification that affect the present system. Competitive bidding would address the fundamental problem that the Health Care Financing Administration does not know in advance what hospitals' costs truly are.

The problem with using bidding to determine the capitation rate is that of specifying the product to be delivered and ensuring that the winning bidder actually delivers that product and not an inferior substitute. To overcome this problem, it is necessary for consumers to have a choice among competing plans. Then, if a plan did not deliver its promised services or otherwise inconvenienced its enrollees, they could go elsewhere. Such plans would acquire a bad reputation so that consumers need not be harmed before switching to another plan. In order to ensure an adequate number of competing plans, it would be necessary to define eligible plans quite broadly. In some instances, the capitation payment might be given to a primary care physician who becomes the patient's case manager and is at risk for additional expenses.

However, choice among health plans entails its own problems—those of preferred risk-selection and self-selection. Preferred risk-selection refers to the tendency of a health plan to pick off good risks, thereby making a profit at the standard capitation rate. There are two ways to prevent this. First, if the plan can charge consumers more than the standard capitation rate, then it will be willing to enroll all applicants, with marginal payments tailored to the applicant's risk. This system may be perceived as unfair to high risks, who have to

pay positive marginal premiums. An alternative is to risk-rate the capitation payment itself. Using certain predetermined demographic factors that are related to health care expenditures, the Health Care Financing Administration can vary the capitation payment. Although this system would not be perfect, it is exactly the technique that a private insurer would use to risk-rate its enrollees.

Standard medicare could remain as one of the choices under this system, but not as an open-ended choice. Those who remained with standard medicare would have to pay for premium expenses greater than their risk-rated voucher. Otherwise, medicare would be forced to subsidize those individuals who prefer the less efficient delivery system.

The Tax Equity and Fiscal Responsibility Act of 1982 marked a significant step toward the goal of medicare vouchers. That legislation amended the medicare statute to permit payments on a risk basis to HMOs and other competitive medical plans. The current law has significant shortcomings, however. One of these is a requirement that, if medicare payments exceed the estimated cost of serving medicare enrollees, the savings must be passed on to enrollees in the form of additional benefits or reduced cost-sharing. This regulation is unnecessarily restrictive because medicare enrollees might rather have cash rebates than additional benefits. A second flaw of the existing system is that the medicare payment to competitive medical plans is determined by the 95th percentile of risk-rated expenditures in the standard medicare plan. The competitive approach to setting this payment would have plans bid on the payment rate for each distinct risk class of enrollee.

The choice between the prospective payment system and vouchers boils down to the question of the appropriate unit of service for paying providers. The prospective payment system favors payment for each admission, whereas the voucher system is based on payment per enrollee. On balance, the argument for vouchers seems to be stronger, but both systems face similar problems in determining the appropriate payment rate: the prospective payment system must make appropriate distinctions among different types of admissions, whereas the voucher system must distinguish among different risk classes of enrollees.

In comparing the competing proposals, two points are important. First, competitive bidding might be used to help set the value of the medicare payments. Second, either system should include strong incentives for consumers to select efficient providers. This can be done through a preferred provider arrangement or by making the voucher system mandatory. Without consumer incentives, the medicare pro-

gram will continue to experience the cost-increasing pressures of insured medical care.

#### CARE FOR THE DYING

Much concern exists about the appropriateness of medical care services for the dying. Nowhere is this concern more relevant than for the medicare program. In 1978 medicare enrollees in their last year of life accounted for 28.2 percent of total program spending, although they represented only 5.2 percent of all enrollees. An earlier study had shown that medicare decedents in 1967 comprised 5 percent of enrollees and accounted for 22 percent of total program spending. Therefore, a disproportionately small number of enrollees accounts for a large, and apparently rising, share of program expenditures.

Much of this medical care is rendered in hospitals, which critics claim are an inappropriate site to care for the dying. The validity of this claim rests on the ability of medical science to determine, before care is rendered, whether or not expensive lifesaving measures are likely to succeed. Although this is an unresolved question, some research suggests that a large part of care rendered in hospitals' intensive care units is of low lifesaving value. As an alternative to expensive hospital treatment, careful attention should be given to innovative proposals for addressing medical needs during the last year of life.

One proposal to allow medicare beneficiaries suffering from terminal illness to receive hospice benefits was enacted by the Tax Equity and Fiscal Responsibility Act. An unresolved issue is whether the hospice benefit replaces expensive inpatient hospital care, or whether it primarily serves new beneficiaries. If the second effect dominates, then, although services to new beneficiaries clearly have some value, medicare costs will be driven up. An ongoing evaluation of the hospice program will determine its effect on the quality and cost of care.

The medicare hospice benefit recognizes that the purpose of endof-life medical care is to provide for the comfort and well-being of the patient. In these areas, the patient may be the best judge of what is good medical care. The most difficult question is this: Under what conditions does a mentally competent patient have the right to refuse life-sustaining medical treatment? It is beyond the realm of economics to attempt to answer this question. It is clear, nevertheless, that expensive medical care, devoted merely to postponing death by weeks or days, will come under increasing scrutiny by patients, their families, and third-party payers.

## COVERAGE FOR NEW MEDICAL TECHNOLOGY

An issue closely related to care for the dying is coverage for new medical technology. Recent advances in technology have enabled physicians to repair or transplant numerous organs, but at very high costs and with uncertain long-term outcomes. Should new medical technology be covered by health insurance programs? This question is being addressed by private health insurers who have, in some cases, extended coverage to include organ transplants. These insurers have developed estimates of the costs of new coverages and, if consumers are willing to pay, the firms offering such options will succeed in the marketplace. Unfortunately, no counterpart to this process exists in the medicare hospital insurance program, because the program is not financed by premiums and because consumers cannot express their preferences by choosing among different medicare options. These problems might be solved by medicare vouchers, but only if the standard voucher does not include expensive new technologies. Patients wishing to cover these services could then do so at their own expense. The alternative of covering new technologies in the standard voucher would provide protection for all medicare beneficiaries, but it would tend to add further cost increases to the medicare program. These increases might exceed the ability of our society to pay for all new medical technologies.

#### MEDICAID: PUBLIC HEALTH INSURANCE FOR THE POOR

The public image of medicaid is that of a welfare medical program oriented largely toward children and other members of families receiving Aid to Families with Dependent Children payments. Allegations abound that these clients abuse the program. Other critics point to abuses by medicaid providers; and policymakers have become increasingly concerned about "medicaid mills" in which low-quality care is provided.

None of these perceptions is accurate. In fact, medicaid has successfully met its legislated objectives. The primary emphasis of medicaid was intended to be on persons whose economic status is beyond their control—dependent children, and the elderly, blind, and disabled. Access to medical care for these groups has markedly improved and with it have come improvements in the health of the poor.

## MEDICAID BACKGROUND INFORMATION

Medicaid was enacted by the Social Security Amendments of 1965 to pay for the medical care of specific categories of low-income people. It is administered by States and jointly funded by the Federal

Government and States. The Federal share of medicaid is determined by a formula related to the State's per capita income. For 1982 and 1983, the Federal share ranged from a statutory minimum of 50 percent in 13 States to 77 percent in Mississippi.

With some exceptions, to be eligible for medicaid, an individual must receive or be eligible for federally assisted cash welfare payments. States, at their option, may cover specific groups of people who do not receive cash assistance. Because of medicaid's multiple criteria for eligibility, about 12 million people with income below the Federal poverty threshold in 1980 were ineligible for medicaid. At the same time, about 5 million of those eligible had annual family incomes at least twice the poverty standard.

Medicaid must cover a broad range of benefits with most services provided free of charge, including some, such as skilled nursing home care, that are not often found in private insurance contracts. Because nursing home care is a catastrophic expense (exceeding \$30,000 for the average admission), nursing home residents often "spend down" their resources and income until they become eligible for medicaid. Many States have also chosen to cover optional services (for example, dental care, eyeglasses, and intermediate care facilities) that accounted for 40 percent of all medicaid outlays in 1978.

The overwhelming emphasis of the medicaid program is on institutional care. Of \$32.4 billion spent on medicaid in fiscal 1983, hospitals received 27.2 percent for inpatient care and nursing homes accounted for 30.9 percent (up from 23.4 percent in fiscal 1972). Payments to physicians represented only 6.7 percent of all medicaid payments in fiscal 1983.

The number of medicaid recipients increased from 18.3 million in fiscal 1972 to 22.8 million in 1977 and has declined slightly since then. The largest group of recipients are people who are eligible for Aid to Families with Dependent Children (5.5 million adults and 9.4 million children). However, this group accounted for only \$8.3 billion of spending in fiscal 1983. A much larger amount—\$23.3 billion—was spent on the elderly, blind, and disabled. This is a reflection of the medicaid program's emphasis on institutional and, particularly, long-term care.

Nearly 60 percent of all medicaid patients treated in private physician practices are seen by physicians whose patient volume is composed of at least 30 percent medicaid patients. However, these large medicaid practices do not fit the stereotype of medicaid mills. Ancillary services do not appear to be abused; nor is there evidence of excessive markups over cost. Visit length in large medicaid practices is comparable with that in other practices. Physicians in these practices often earn less than other physicians. However, physicians in large

medicaid practices tend to be older, nonboard certified, and graduates of foreign medical schools.

#### AID TO FAMILIES WITH DEPENDENT CHILDREN MEDICAID

Proposals for medicaid reform fall into three broad areas: to change the eligibility criteria and coverage of the poor, to trim medicaid benefits, and to modify the Federal role. For example, the Federal role might be changed from that of providing matching grants to payment of block grants to States. The argument behind this proposal is that block grants give the States greater flexibility in deciding how to use medicaid funds.

But this approach might lead medicaid-eligible people to migrate from States with poor benefits to States with generous benefits. If that were the case, some States would not be able to set benefits as high as they might desire for their current residents, because to do so would invite excessive immigration. Other States would set low benefit levels to encourage outmigration. Thus, the best strategy for all States would be to provide levels of benefits lower than they might otherwise desire.

One alternative is to tie the Federal contribution to a program of basic medicaid benefits judged to be necessary in all States. Those States desiring to add more benefits, or to extend coverage to more people, could do so with their own funds. Another alternative is to cap or reduce Federal payments by a fixed percentage amount. This method was used by the Omnibus Budget Reconciliation Act of 1981, which reduced Federal payments to each State in fiscal 1982, 1983, and 1984 by 3, 4, and 4.5 percent, respectively.

Proposals to change medicaid eligibility criteria and coverage of the poor should receive serious consideration, but the first principle for any change is that it should not reduce the incentives of medicaid recipients to work. A program that replaces the present categorical definition of eligibility with an income test would in effect add another tax on the earned income of poor people.

Any proposal to trim medicaid benefits or to introduce cost-sharing should be examined closely. The concern is that such policies adversely affect the health of the poor.

An alternative to medicaid cost-sharing is for the program to contract with selected hospitals on a competitive bid basis. California is experimenting with this program. Arizona is also conducting a demonstration of a substantially different method of providing medicaid benefits. Virtually all beneficiaries must choose among competing prepaid capitated organizations. All care must be provided or authorized by the prepaid capitated organization which is at financial risk for the provision of care. This system is similar to the HMOs volun-

tarily selected by many employees under their private insurance plan options.

#### LONG-TERM CARE MEDICAID

Long-term care medicaid presents different issues. Foremost among these is the growing demand for long-term care for the elderly. The elderly population doubled between 1950 and 1980 and will double again by 2030, accounting for almost one-fifth of the U.S. population. Moreover, the elderly population is becoming older. In the two decades from 1990 to 2010, the 85-and-over age group will increase three to four times as fast as the general population. This will create increasing demands for long-term care.

Most of the long-term care population resides in the community. Nevertheless, because institutional care is very expensive and many experts believe that it may be unnecessary in some cases, many proposals emphasize more community care for the elderly. Among these are formal sources of care (paid providers of home care, adult day care, etc.) and informal support by family members. Some have proposed giving families tax deductions or credits if they maintain severely disabled family members at home rather than placing them in an institution.

Other approaches would seek to strengthen private, voluntary financing mechanisms for long-term care. One of these is the life care contract, in which the beneficiary is guaranteed a lifetime continuum of care in a community that combines residential living with specialized long-term care services. The resident usually pays a lump sum initial fee and monthly charges thereafter. This contract represents a capitated approach where the provider is at risk and, therefore, has an incentive to provide a cost-effective mixture of services including alternatives to institutional care.

## CONCLUSION

Medical care spending is rising at an alarming rate, seemingly beyond control. This despairing attitude is not justified. It is possible to control medical care costs without harming the health of the average person. This is because many of today's health problems are more closely related to eating, drinking, and smoking habits, and to accidents, than they are to lack of medical care. Thus, people can significantly improve their health by taking responsibility for healthy lifestyles. The private and public sectors can encourage this trend by adjusting health insurance premiums to reflect the savings from healthy behavior.

Much of the rise in medical care spending is attributable to health insurance, which insulates both individual consumers and providers from the costs of using or prescribing additional services. Numerous proposals would introduce price incentives into the market for medical services. The use of indemnity payments, which remove the insurance subsidy from the marginal units of medical care, is especially promising. Another proposal would cap the tax subsidy of employer health insurance contributions. The goal of these proposals is to use market mechanisms to determine both the level of medical care spending and its allocation among services.

Another promising development is that States have recently begun to take action to control medical care costs. State laws have been changed to permit the development of preferred provider organizations. Further attention should also be given to eliminating State regulations that favor one type of insurance company over another.

Some private health insurers have been able to negotiate discounts from hospitals. Discounts benefit the policyholders of these insurers and place pressure on other health insurers to control their premium costs. However, it would be unwise to encourage insurance industry concentration in order to obtain discounts. The negative consequences of market concentration might outweigh any benefits from this policy.

Until recently, the medicare program reimbursed each hospital for its costs of providing care. This Administration, however, has adopted a system that pays hospitals a prospectively determined rate for each medicare discharge. This system may be viewed as a transitional measure to a market-based approach.

The changes summarized above represent a healthy trend toward the use of incentives. As such, they indicate that the same principles used to allocate resources in other industries can be applied successfully to medical care. By making a commitment to continue this trend, society can turn the corner in the fight against medical care cost inflation.

#### CHAPTER 5

# Economic Status of the Elderly

RETIREMENT AS IT IS KNOWN TODAY is a relatively recent phenomenon. In 1900 life expectancy at birth was 46 years for males and 48 for females. While most women did not work outside the home once they married, two-thirds of all men over 65 were still in the work force. Many men retired only because of poor health or company rules, and retirement usually consisted of a few years of declining health. Often the elderly relied on their children for housing and financial support.

Since 1900 the fraction of elderly men with jobs has declined dramatically, while the life expectancy of the elderly (65 and older) has improved substantially. Now, a man who is approaching the end of his working career can expect to spend about 15 years in retirement, a retirement that is often shared by a spouse who also makes a transition from worker to retiree. Because life expectancy has increased more for women than for men in the 20th century, the retirement years have become especially important for women. These are years that women are likely to face alone; two-thirds of women over 75 are widows. Elderly widows rarely remarry and on average they live 16 years beyond their husbands. Higher divorce rates have added to the number of elderly women living alone, so that today only two-fifths of all elderly women live with their husbands.

Resources to support these new retirement patterns rarely come directly from the families of retirees. The elderly receive less than 1 percent of their income from their children, and the fraction of elderly people living with their children has declined sharply. These new patterns are signs of the financial and physical ability of the elderly to live independently; they do not indicate isolation or abandonment. Only about 5 percent of the elderly live in nursing homes and most of the elderly who are not in nursing homes, even most of those over 85, report that they need no help with daily activities.

Although independent, the elderly have strong family ties. A national survey found that four-fifths of the elderly have at least one child and that only 11 percent of the elderly with children had not seen one of their children in the past month. The families of the elderly usually include grandchildren as well as children, and four-

generation families are becoming more and more common; about half of all elderly people have great-grandchildren. Longer lifespans also mean that the children of the elderly can be elderly themselves; about 10 percent of the elderly have a son or a daughter who is also over 65.

Retirement planning has become increasingly important for the Nation as well as for families. The proportion of the population that is elderly is growing; it will explode as the baby-boom generation retires. In 1900 one person in 25 was 65 years of age or older; today that proportion is one in eight; by 2030 one person in five will be elderly. In about 35 years the United States as a whole is expected to have the same proportion of elderly as Florida does today. In 50 years the ratio of people over 65 to the working-age population will be 2½ times as great as it was in 1950. No other demographic change will influence the Nation in the next 50 years as much as this "graying" of America. Every American and every facet of the society will be affected.

# CURRENT FINANCIAL STATUS OF THE ELDERLY

Thirty years ago the elderly were a relatively disadvantaged group in the population. That is no longer the case. The median real income of the elderly has more than doubled since 1950, and the income of the elderly has increased faster over the past two decades than the income of the non-elderly population. Today, elderly and non-elderly families have about equal levels of income per capita. Poverty rates among the elderly have declined so dramatically that in 1983 poverty rates for the elderly were lower than poverty rates for the rest of the population.

These encouraging statistics do not tell the whole story. The elderly are not a homogeneous group. Those with spouses have relatively high levels of family income, especially when leisure opportunities, lower tax rates for the elderly, noncash transfers, and assets are taken into account. A good deal of evidence supports the contention that the elderly with spouses are, on average, more financially secure than the non-elderly. But many of the elderly live alone and these individuals, particularly women, often have very limited financial resources; they are often poor. Poverty rates for elderly blacks and the very old are also high.

Conflicting statements about the economic status of the elderly can sometimes be traced to these differences among the elderly but they also arise for other reasons. The resources of the elderly include income after taxes and assets, as well as transfers both from the government and from families. Many of these resources, particularly

those that are more important to the elderly than the non-elderly, are hard to evaluate. In addition, statements about the financial security of the elderly are relative statements; they are based on a comparison of the measured resources of the elderly with the resources of the elderly when they were younger, with other groups, or, in a few cases, with a measure of the needs of the elderly. Different comparisons can lead to different conclusions about the economic status of the elderly as a group.

Many of the measures of the financial status of the elderly can be explained in the context of normal life-cycle patterns of income, consumption, and saving. Labor earnings tend to rise during the working years and then decline sharply after age 60. Consumption levels are more constant than earnings; a typical household borrows early in the life cycle and later begins to accumulate savings during the higher earning years. In the absence of social security payments, retirees maintain consumption by drawing down these savings. Social security changes life-cycle patterns in several ways; social security taxes and benefits can affect saving, retirement decisions, bequest plans, and consumption. The effect of social security on life-cycle patterns depends on many factors, including the degree to which the elderly anticipated actual benefit levels when they were younger.

## INCOMES OF THE ELDERLY

Given these normal life-cycle patterns, current income, the most widely used measure of financial status, can be misleading. Income can be low in retirement even when preretirement consumption levels are maintained, because consumption is financed out of savings accumulated during the working years. In addition, relative measures of income depend on the choice of the comparison group. The elderly have relatively low income compared with those near retirement; but they have income levels close to much younger groups. The difference is in part attributable to life-cycle patterns of earnings. These relative measures are also affected by the increase in incomes of successive generations because of economic growth, an increase that tends to work in the opposite direction and depress the income of the elderly relative to the young.

Several of the various measures of relative financial well-being can be illustrated using the before-tax income data in Table 5-1. The income of today's elderly can be compared with the income of the elderly in the past, a comparison of elements in the last column. Since 1950 the mean income of elderly families has gone up more than 80 percent in real terms, and the mean income of the unmarried elderly living in a household without relatives (unrelated individuals) has more than doubled. The income of the elderly can also be com-

pared with the income of the same individuals when they were younger, a measure that depends on life-cycle patterns of income. Table 5-1 can be used to approximate portions of the life-cycle patterns of income for several generations. These life-cycle patterns are traced out for families by diagonal elements in the table. For example, most of the elderly families in 1980 were roughly in the 35-to-44 age bracket in 1950. Thus, the data in Table 5-1 indicate that, on average, elderly families in 1980 had higher levels of before-tax real income than they had in 1950 but lower levels of income than they had closer to retirement. Research based on income data for individual families over time rather than averages has led to the same conclusion—that elderly families have real incomes below levels they attained in middle age but similar to levels attained when the head was younger.

TABLE 5-1.—Mean real money income before tax (in 1983 dollars) of families and unrelated individuals, selected years, 1950-83

[Dollars]

Ì	Age (years)								
Economic group and year	25-34	35-44	45-54	55-64	65 and over				
Families 4									
1950	14,910	17,510	18,140	16,900	11,780				
1960	20,480	24,130	24,810	22,160	14,740				
1970	26,570	31,850	34,810	30,730	18,260				
1980	25,760	32,420	36,460	32,890	20,370				
1983	24,730	32,460	36,530	32,060	21,420				
Unrelated individuals									
1950	8,920	9,280	8,270	6,670	4,150				
1960	11,880	13,730	11,230	8,710	5,510				
1970	18,640	17,940	15,740	13,070	7,380				
1980	16,890	19,730	16,530	13,150	8,64				
1983	16,420	20,120	18,200	14,070	10,040				

<sup>1</sup> Age determined by age of head of household.

Source: Council of Economic Advisers, based on data from Department of Commerce (Bureau of the Census).

The Table 5-1 data for unrelated individuals cannot be used to trace income patterns over a lifetime because there is substantial movement into and out of this category. In many cases the relatively low income levels of elderly individuals living alone, particularly women, can be explained by the loss of a spouse.

One common measure of relative financial well-being is the average income of the elderly, those currently 65 and over, compared with the average income of adults now aged 25 to 64. This measure

Note.—Money income converted to 1983 dollars using the consumer price index for urban wage earners and clerical workers (CPI-W) and rounded to the nearest \$10.

is a comparison of one element in the last column of Table 5-1 with the average for the younger groups in the same row. It is influenced by life-cycle patterns of income, by the effect of economic growth on the income of successive generations, and by changes in the age distribution of both the elderly and non-elderly. Since the 1950s the average age of the elderly has increased because the fraction of the very old among the elderly has increased. The average age of the non-elderly has also changed, reflecting low birth rates in the 1930s and the high birth rates that produced the post-World War II baby boom. Given these influences, it is difficult to interpret relative income measures that compare the elderly with the non-elderly and it is not surprising that these measures have fluctuated since 1950. Nevertheless, between 1970 and 1983 the relative status of the elderly improved dramatically (Table 5-2). In 1983 before-tax per capita mean income was virtually the same for elderly and non-elderly families. Two-thirds of the elderly lived in family units. Per capita income ratios are higher than family income ratios because families with an elderly head tend to be smaller than younger families. In 1983 elderly families contained an average of 2.4 persons compared with an average of 3.5 persons for non-elderly families. The elderly to non-elderly income ratios are lower for unrelated individuals because the elderly in this class are frequently older widows, who tend to be the poorest of the elderly.

TABLE 5-2.—Mean real money income before tax of the elderly and non-elderly, 1970 and 1983

Economic group	1970	1983
Elderly (65 years and over) Family income Family income per capita¹ Income of unrelated individuals	\$18,260 7,630 7,380	\$21,420 9,080 10,040
Non-elderly (25-64 years)  Family income Family income per capita¹ Income of unrelated individuals	\$31,050 8,110 15,820	\$30,940 8,960 16,900
Income ratios (elderly to non-elderly)  Family Family per capita  Unrelated individuals	.59 94 .47	.69 1.01 .59

¹ Bureau of the Census publications do not include a measure of average family size prior to 1976. The 1970 measures of mean per capita income are estimated from information on the income of families of varying sizes.

Note.—Money income converted to 1983 dollars using CPI-W and rounded to the nearest \$10. Age of family determined by age of head of household.

The distribution of before-tax income around its mean is very different for the elderly and non-elderly. Although the elderly are less likely to have income below the poverty line, they are more likely to have income below mean levels for their age group. In 1983 most of

Source: Council of Economic Advisers, based on data from Department of Commerce (Bureau of the Census) and Department of Health and Human Services (Social Security Bulletin).

the elderly (60.8 percent) had before-tax income between \$4,000 and \$15,000.

This bunching of the income distribution for the elderly below the mean is the result of normal retirement patterns and the social security benefit schedule. Most of the elderly have chosen to retire. That choice reflects the decision to consume more leisure at the expense of income. In addition, social security benefits, a principal source of current income for the elderly, are capped. The maximum benefit was \$734 a month for a 65-year old individual who retired in December 1983. With the benefit for a spouse, equal to one-half the primary benefit amount, annual social security payments would amount to \$13,217.

Income levels of the elderly have improved both absolutely and relatively in spite of several forces that worked in the opposite direction. The most dramatic of these forces was a decline in labor force participation of the elderly and a simultaneous increase among the non-elderly. The labor force participation rate of elderly males declined from 26.8 percent in 1970 to 17.4 percent in 1983; the participation rate for elderly females declined from 9.7 to 7.8 percent. Among those aged 25 to 54, both male and female, the participation rate increased from 72.0 to 80.1 percent over the same period. Along with increasing income, the elderly have benefited from increasing amounts of leisure over the past few decades on both an absolute and a relative basis.

Demographic factors have also tended to depress the average income of the elderly. The age distribution of the elderly has shifted toward those over 75. Because income typically declines with age and because older generations have lower levels of lifetime income, increases in longevity tend to lower average income levels for the elderly. In addition, the ratio of women to men among the elderly has increased from six women for every five men in 1960 to three women for every two men in 1980. In 1983 mean income for elderly females living alone was equal to 80 percent of mean income for elderly males living alone.

Most income measures, including those in Tables 5-1 and 5-2, are before-tax rather than after-tax measures. The elderly have lower average tax rates than the non-elderly and thus have more to spend out of a given income than the non-elderly. Approximately two-thirds of the elderly pay no income tax. The elderly benefit from several tax provisions. Individuals 65 and older with low incomes receive a 15 percent credit against their tax and all individuals aged 65 and over are entitled to an additional \$1,000 exemption. Those over 55 also receive preferential tax treatment on the capital gain from the sale of one principal residence. Social security benefits were not taxed at all

before 1984. Now individuals with incomes well above average levels for the elderly must include a portion (up to one-half) of their benefits in taxable income.

Income levels of the elderly have improved despite offsetting demographic trends largely because of increases in social security benefit levels and coverage. Between 1950 and 1983 the fraction of the elderly receiving social security benefits rose from 16 to 94 percent. Furthermore, the average level of nominal benefits went up much faster than the price level during the same period (Table 5-3). Real benefits went up by almost 150 percent. Income levels of the elderly have improved relative to the non-elderly since 1970 because social security benefits increased by 46 percent in real terms while earnings from wages and salaries, the major source of income for the non-elderly, decreased by 7 percent in real terms. Thus, younger families have had to work more to keep up with inflation since 1970; older families have not.

TABLE 5-3.—Increases in wages, prices, and social security benefits, 1950-83

	Percent change						
ftem	1950 to 1960	1960 to 1970	1970 to 1980	1970 to 1983	1950 to 1983		
Median annual wages and salaries 1	46	58	104	138	451		
Consumer price index <sup>2</sup>	23	31	112	156	312		
Average monthly social security benefit for retired workers	69	60	189	273	905		

<sup>&</sup>lt;sup>1</sup> Data are for persons 14 years of age and over through 1977 and for persons 15 years of age and over beginning 1978. 
<sup>2</sup> CPI-W.

Sources: Department of Commerce (Bureau of the Census), Department of Health and Human Services (Social Security Administration), and Council of Economic Advisers.

Relative trends in the income of the elderly and the non-elderly may be misleading if the two groups typically spend their money in different ways. Typically the elderly spend more of their income on medical care and food and less of their income on transportation and child care than the non-elderly. Different expenditure patterns are not taken into account in the calculation of real income because the same measure of average prices—the consumer price index—is used to adjust dollar income for both groups. Several studies have investigated this issue and virtually all have concluded that the goods typically purchased by the elderly and the non-elderly have experienced similar price increases. In other words, the same index can be used to compare the real income levels of the elderly and the non-elderly. The common perception that the elderly are especially susceptible to inflation is not supported by recent evidence. Social security payments have increased faster than the consumer price index, and that

index accurately reflects price increases of the purchases of the elderly.

Current income has been the most widely used measure of financial status out of necessity rather than merit. The economic status of the elderly can be evaluated properly only in the context of needs relative to total resources. Resources include assets, gifts, and other transfers as well as income. But it is very difficult to define needs, and both needs and assets are measured only sporadically.

#### POVERTY RATES AS A MEASURE OF NEED

The best known measure of need is the official definition of poverty, a standard that takes some of the needs of different types of families into account. Families with incomes below the official poverty level are defined as poor. Benefits in kind are not included in the measure of income.

Poverty rates are lower now than in 1960; they have declined more for the elderly than the non-elderly (Table 5-4). Elderly families now have lower poverty rates than non-elderly families. Most of the elderly poor live alone or with nonrelatives, however. The poverty rate for these elderly individuals living alone (unrelated individuals) is higher than the poverty rate for unrelated individuals between 25 and 64, but the disparity in these poverty rates has declined dramatically. In 1983 the poverty rate for the entire elderly population was 14.1 percent; for the non-elderly, including those under 24, it was 15.4 percent.

Table 5-4.—Percent of the elderly and non-elderly populations with incomes below the poverty line, selected years, 1960-83

Economic group	1960	1970	1980	1983	1960	1970	1980	1983	
	Eld	erly (65 y	ears and	over)	Non-elderly (25-64 years)				
<u>Families</u>	27	16	9	9	16	8	10	12	
Married couple families and families headed by a male	26	16	8	7	13	6	6	7	
Female head, no husband present	31	20	15	17	44	32	32	36	
Unrelated individuals	66	47	31	26	32	20	17	18	
Male	60	39	24	22	26	14	14	17	
Female	68	50	32	28	38	25	21	21	

Note.—Age of family determined by age of head of household.

Source: Council of Economic Advisers, based on data from Department of Commerce (Bureau of the Census).

One major reason that poverty rates have declined for the elderly is the social security system. The average couple's benefit was \$744 per month in December 1983, 48 percent more than the poverty line for an elderly family of two. In the same month, the average widow's

benefit was \$393, which was 98.9 percent of the poverty line for an elderly single individual.

Despite large Federal outlays for the elderly—more than \$200 billion in fiscal 1983—measured poverty persists among the elderly because less than 10 percent of these outlays are for programs designed specifically to assist the low-income elderly. Often, the Federal programs that are intended specifically for the poor among the elderly do not provide benefits that are large enough to raise households above the poverty level, even when State supplements are taken into account. About 90 percent of Federal outlays for the elderly are for retirement and health programs that do not have eligibility criteria based upon income or assets—a means test. These programs are important for many of the elderly with low income, but they are not intended specifically for the poor. About half of all elderly households with income below the poverty level receive no means-tested benefits. Some of these households have assets that preclude the receipt of benefits; others may be reluctant to apply.

### BENEFITS IN KIND

Income levels and poverty rates do not reflect benefits that are paid in a form other than cash (benefits in kind). One important benefit in kind is medical care. Almost all elderly families are covered by medicare. Federal expenditures on medicare for the elderly were \$48.4 billion in fiscal 1983 or nearly \$1,800 per elderly individual. In addition, \$12 billion in medicaid (about one-third of all medicaid funds) was devoted to the elderly, primarily the elderly in nursing homes. About 16 percent of the elderly (about one-third of all elderly men) are eligible for medical care from the Veterans Administration. A veteran who has reached the age of 65 is now automatically eligible for medical care on request, without regard to financial need, if space is available in Veterans Administration hospitals and nursing homes.

Despite the fact that the elderly have lower poverty rates, elderly households are more likely to receive at least one form of meanstested noncash benefits than the average household. Although elderly households account for 21 percent of all households, they account for 31.5 percent of households receiving housing subsidies, and 29.4 percent of households receiving medicaid, though they represent only 16.8 percent of households receiving food stamps.

In spite of the substantial research on the value of benefits in kind, the results are controversial. In 1983, for example, the poverty rate for elderly people measured on a cash income basis was 14.1 percent. After including food, housing, and medical benefits valued at their full cost in the private marketplace, the poverty rate for the el-

derly was estimated to be 3.3 percent. Because they are less likely to receive medical benefits, the same valuation would reduce the poverty rate of the population under 65 by much less—from 15.3 percent to 11.1 percent. Debate continues on whether this market measure overstates the value of in-kind benefits. These benefits do provide goods and services that the elderly would otherwise have to pay for out of their cash income, but the recipients of these benefits may not value them at their full cost. Estimates of the poverty rate for the elderly based on cash income plus in-kind benefits vary from 3.3 percent to 9.1 percent for 1983, depending on the assumed level of recipient valuation.

#### ASSET LEVELS

Many observers have characterized the contribution of assets to the financial status of the elderly as minimal, but the 1983 Survey of Consumer Finances conducted by the Federal Government found that the average asset levels of elderly families were higher than the average asset levels of younger families (Table 5-5). The survey also found that the assets of families in which the family head is 75 or older were slightly lower than assets of families with a family head between 65 and 74. This difference may reflect the fact that assets are used to finance consumption in retirement; the difference could also be attributable to the generally lower wealth levels of older generations. In fact, some recent studies have found that asset levels of the current elderly often do not decline. Many of the elderly continue to save and build up assets. There are several ways to interpret this surprising pattern of saving among the elderly, but it is a strong indication that the elderly who do save have a high level of economic security.

Home equity is the largest asset for most elderly households. Most of the elderly own rather than rent their dwellings, and they have substantial amounts of equity in their homes. The elderly as a group gained disproportionately from the increases in home values that occurred in the 1970s.

Assets are important to many elderly families, but they do not contribute much to the financial resources of families with very low income. Assets are highly correlated with income so that most of the families with low income also have low asset levels. Asset income, including the imputed rental value of owner-occupied housing, amounts to only a few hundred dollars for households that have annual incomes below \$5,000.

Elderly individuals with low income generally have had low earnings before retirement because, for the most part, retirement income is related to earnings. Low earnings also limit the ability to accumu-

TABLE 5-5.—Financial assets and homeownership of households holding such assets, by age group,

Age of head (years)	Percent Liquid asset those holdin house-		ling such   of households holding			Percent of house-	Net equity of homeowner 3	
	holds owning liquid assets	Mean	Median	Mean	Median	holds with home- ownership	Mean	Median
Under 25	81	\$1,970	\$600	\$2,650	\$750	10	\$18,870	\$13,780
25-34	87	4,270	1,200	7,960	1,510	40	32,640	27,770
35-44	91	8,910	3,000	14,410	3,750	66	52,070	40,600
45-54	89	14,830	3,310	23,010	4,130	75	64,470	50,000
55-64	91	25,440	7,430	54,950	9,340	73	73,580	55,000
65-74	88	30,670	9,680	65,340	11,400	69	63,670	45,000
75 and over	86	26,480	7,890	37,060	10,350	57	47,760	40,000
45 and over:								
Head in labor force	93	20,960	6,230	42,790	8,200	76	68,390	53,770
Head retired	86	28,200	6,730	50,170	8,750	69	62,460	44,170

<sup>1</sup> Liquid assets include checking accounts, savings accounts, money market accounts, certificates of deposit, IRA and Keogh

Source: Board of Governors of the Federal Reserve System.

late assets before retirement. Consequently, financial distress among the elderly is not so much a function of aging as it is a function of the factors that lead to low levels of income at all ages. These factors include education, race, and work history. The principal exception to this generalization may be for elderly women who lose a spouse, either through death or divorce. Although the loss of a spouse generally lowers household income at any age, the young and men of all ages usually remarry after a divorce or the death of a spouse; older women usually remain single. Elderly widowed men have remarriage rates that are about seven times higher than those of elderly widows.

#### SOURCES OF SUPPORT FOR THE ELDERLY

The relative importance of different sources of support for the elderly has shifted considerably over the past few decades. Earnings have decreased in importance with declining labor force participation, while social security, pensions, and assets have increased in importance.

Other sources of support have also changed. Between 1950 and 1970 the percentage of the elderly living with their children declined from 31 to 9 percent. Some of this decrease reflects a shift toward institutional care, but most of it reflects the formation of independent households. The rate of nursing home use by those 65 and over

accounts, and savings bonds.

2 Financial assets include liquid assets plus stocks, other bonds, nontaxable holdings (municipal bonds and shares in certain mutual funds), and trusts.

3 Nonfarm homeowners.

has almost doubled since the introduction of medicare and medicaid in 1966, but it is still quite low—around 5 percent.

Many observers see a causal relationship in these patterns: a cessation of work because of retirement benefits and the substitution of legally mandated intergenerational transfers for transfers within families.

#### **EARNINGS**

Earnings, at one time the most important source of income for the elderly, now represent about 15 percent of the money income of the elderly. Earnings have declined as a share of income because of reduced labor force participation and because a higher fraction of elderly workers participate on a part-time basis. In 1960, 35 percent of male workers 65 and over worked on a part-time basis; now almost half work part time. Part-time employment for female workers 65 and over increased from 48 percent to 61 percent over the same period. Most older workers who reduce their work effort below full time have left the job they held in their prime working years, and they generally work at a lower hourly wage rate. The average duration of partial retirement for those who choose to work part time is about 3 years.

The increase in the relative importance of part-time work is clearly influenced by the social security earnings test. Earnings above a limit reduce social security benefits by \$1 for every \$2 in earnings. The limit increases as retirees grow older and after age 70 there is no limit. The social security test is, in effect, a 50 percent tax on a range of earnings above the limit. To some extent, this tax is offset by increases in future benefits. When other taxes are taken into account, the marginal tax rate on current income can exceed 100 percent for some of the elderly. Consequently, many of the elderly do not work once they have earned the limit. Earnings distributions for the elderly clearly show this phenomenon; annual earnings tend to bunch near the point where the earnings test begins to bind.

New retirement patterns are largely a matter of choice on the part of the elderly, a choice that reflects both an improved financial status that allows them to enjoy more leisure and the incentives inherent in retirement benefits. The view that most of the elderly have been forced to retire by poor health or by mandatory retirement laws is not supported by the evidence. Changes in health do not explain the decline in labor force participation over time. To some extent, the decline in participation can be explained by the fact that the minority of workers with health problems are now able to retire early. This phenomenon is not a significant factor behind current retirement patterns. Most workers now retire between age 60 and age 65. That pattern is explained by economic incentives, not by health.

The explanation for work patterns among the elderly is not found in mandatory retirement rules either. Even before the Congress raised the minimum mandatory retirement age from 65 to 70 in 1978, only a minority of workers were employed in jobs that imposed mandatory retirement, and the vast majority of these workers retired before the mandatory date. Estimates of the percent of workers who retire because of mandatory retirement have been quite small—between 2 and 5 percent. The actual incidence may be even lower now because several States have outlawed mandatory retirement entirely.

There is increasing evidence that the retirement decision is a matter of choice, a choice that is strongly influenced by the economic incentives inherent in both social security and private pensions. Labor force participation has declined as pension benefits have increased. The effect of pensions on labor force attachment can also be observed among individuals in a given year. Even though pension recipients are not forced to stop working, they often do. In 1980 the employment rate for recipients of private, State, and local pensions aged 60 and over was only 56 percent of the rate for the entire population in the same age bracket. Further evidence that the timing of retirement is largely a matter of choice can be found in the distribution of retirement ages: The two peak years of retirement occur at ages 62 and 65. Sixty-two is the earliest age of retirement for social security. The current benefit structure of the social security system discourages work past the age of 65. In addition, 65 is the normal retirement age in most pension plans. After the age of 65, pension accrual frequently ceases. The implication of these suggestive patterns is reinforced by more sophisticated statistical studies. About three-quarters of the variation in retirement ages can be explained by economic variables that measure the level of accrued pension benefits at a given age and changes in income streams that can be anticipated if retirement is postponed.

The decision to retire is clearly influenced by the financial rewards for continued work. These financial rewards include wages and pension benefits. Although workers are less likely to retire when the rewards for continued work are high, they often retire even when retirement means lower income. This choice of leisure over income is influenced by working conditions. Workers in blue-collar jobs, particularly those jobs involving heavy manual labor such as mining and construction, are likely to retire earlier than workers with jobs in retail trade or service industries.

Despite the limited labor force attachment of older workers, surveys find that many of the elderly want to work part time. This is not surprising, given the incentives inherent in the social security earnings test. The fact that more people say they want to work part time

than actually do has led to the conclusion that there is a shortage of part-time employment opportunities for older workers that is caused by age discrimination and employer inflexibility over hours. It is unlikely, however, that these factors explain the frequency of part-time work among the elderly.

Wanting a part-time job can mean many things. It usually means a desire for a job with a wage that is sufficient to attract a worker out of retirement. Even though many of the elderly work part time at a reduced hourly rate compared with their preretirement wage, the lowest hourly wage at which workers would be willing to accept a part-time job can be quite high for some older workers. The compensation package for elderly workers frequently includes no retirement benefits. Thus, post-retirement jobs must offer more in wages to make them as attractive as preretirement opportunities. The fixed costs of working may also raise an individual's minimum acceptable wage. A low wage for a few hours a week may not be attractive when transportation, clothing, and other work-related expenses are taken into account. Thus, many workers may be unwilling to work at an hourly rate lower than the rate paid on a preretirement job.

Employers, however, are likely to offer reduced wages for part-time employment for several reasons. Part-time employment for older workers often means a job change either because retirement provisions preclude work with a preretirement employer or because retirees seek a less demanding job once pension benefits have been secured. A job change often means that workers cannot use the same skills they acquired in their career before retirement. In addition, employers often face fixed costs of employment that make one full-time employee more cost effective than two or more part-time employees who work the same total hours. Among these are costs of record-keeping, performance evaluation, training, some fringe benefits, and some social insurance payments.

As a result, jobs that are available often do not pay enough to attract the elderly. A shortage of jobs exists only in the same sense that would imply a shortage of almost anything with desirable features and an unspecified price. Alleged employer inflexibility in this case is the result of the normal forces that reward efficiency in a firm. Age discrimination is also an unlikely explanation for the scarcity of parttime employment among the elderly. Part-time employment, particularly employment for less than 25 hours a week, is rare among all adult workers.

#### ASSETS AND FAMILY SUPPORT

Surveys indicate that money income from assets accounts for about 25 percent of the cash income of the elderly. These findings should

be interpreted with care because income from assets is often significantly underreported, more so for the elderly than the non-elderly. Assets become more important as a source of income as income rises, accounting for only slightly more than 5 percent for households with income under \$5,000 but more than one-third of income for households with income over \$20,000.

The major single asset for most of the elderly is their home. Nearly three-quarters of elderly households own their own home; half have complete ownership (no mortgage). Some elderly homeowners have little in the way of other resources, and they may need ways to convert home equity into money income. Reverse mortgages—financial arrangements that provide monthly payments from a bank and reduce home equity—were devised to meet this need. They provide income and a home to elderly individuals as long as they live. The bank takes over the home when the homeowner dies. These and other financial instruments to tap home equity have received a great deal of attention lately, but the actual use of reverse mortgages is rare. Many of the existing schemes are financially unattractive to the elderly because they offer little in monthly income relative to the market value of the home.

Some research has suggested that the reverse mortgage market has not flourished because the elderly have better ways of converting housing into other forms of consumption. Children may support parents so that they are not forced to move out of their homes. This financial support keeps the home in the family so that it can revert to the children as a bequest. In essence, parents borrow from children and secure the loan with their homes. The attractiveness of this arrangement compared with loans outside the family may explain why reverse mortgages are uncommon. Although there is little evidence of these arrangements in income surveys, financial support from children to the elderly may be in the form of gifts in kind or the direct payment of bills; this kind of support is rarely measured as income. In any event, the decline in measured support for the elderly by their children may be explained by their growing financial security, a trend that has reduced the need for both reverse mortgages and transfers from children to elderly parents.

The asset income figures cited above do not reflect consumption that is financed from the sale of assets. A principal rationale for saving is to provide assets that can be drawn down during retirement. But an important consideration for the elderly is the uncertainty surrounding longevity. A plan to draw down assets that is based on average lifespans would require disastrously low consumption in the last years of life under the otherwise fortuitous circumstance of living until age 90. An investment that reduces this uncertainty over

the lifespan of the elderly is an annuity that provides a monthly payment as long as the owner is alive. The monthly payment depends on the amount of money invested and the age at which the annuity is purchased. Although it has attractive features, the private annuity market is similar to the reverse mortgage market. Private annuities are rare, and they are often financially unattractive. The availability of social security and pensions may explain the limited availability of private annuities. Because both social security and many private pension benefits are in the form of an annuity, the need for other annuities is reduced.

#### SOCIAL SECURITY

Social security benefits are the principal source of income for the majority of elderly Americans. Benefits comprise about 40 percent of the income of the elderly, and for 59 percent of the elderly households they make up at least 50 percent of their income. Social security benefit levels and coverage are given in Table 5-6.

TABLE 5-6.—Social security coverage and benefit levels, selected years, 1950-83

Year	Percent of p years and or ben	opulation 65 ver receiving efits	Average monthly benefits at year-end				
		Social	Current	dollars	1983 dollars <sup>2</sup>		
	Social security 1	security and/or supplemen- tal security income 1	Retired worker	Spouse	Retired worker	Spouse	
1950	16	37	\$43.86	\$23.60	\$180.91	\$97.35	
1960	62	72	74.04	38.72	248.25	129.82	
1965	75	82	83.92	43.63	264.10	137.31	
1970	86	90	118.10	61.19	302.00	156.47	
1975	90	94	207.18	105.19	382.23	194.07	
1980	91	94	341.41	171.95	411.07	207.04	
1983	94	96	440.77	225.66	440.77	225.66	

¹ Includes old-age and survivors' benefits. Disability benefits become old-age benefits beginning at age 65.
² Current dollars deflated by CPI-W.

Sources: Department of Health and Human Services (Social Security Administration) and Council of Economic Advisers.

The social security benefit formula has many features that are particularly attractive to recipients. The current formula to determine initial benefits adjusts all previous earnings for average wage increases in the past. In other words, workers are given full credit for productivity gains made by the economy during their working years. Thereafter, benefits are indexed to the overall level of prices, so that the promised benefit stream maintains its purchasing power even in the presence of unexpected inflation. In addition, payments are in the form of an annuity, so that they continue as long as the beneficiary remains alive. Because social security provides excellent protec-

tion against the major uncertainties that face elderly Americans, the dollar amount of benefits underestimates their value to the recipients.

To qualify for social security benefits, an individual must have had a minimum level of earnings in covered employment for a minimum number of quarters. The minimum number of quarters has been rising; it was 32 for those turning 62 in 1983. Benefits are financed by a tax on both employers and employees. The benefit payments that are available upon retirement are related to earnings during the working years, and they are adjusted for the age and marital status of the retiree. The relationship between taxes and expected benefits is progressive in the sense that the average rate of return on tax payments is lower for high-wage earners who have contributed relatively more to the system. This intentional redistribution may be offset to some extent by the fact that members of some low-income groups have shorter average lifespans; they are less likely to live long enough to collect large amounts of social security. The redistributive element of social security has recently been strengthened by the requirement that individuals who have substantial alternative sources of income pay income tax on up to one-half of their benefits.

The social security system also redistributes income toward married couples where only one spouse is in the paid labor force, and away from other types of households. Under the current social security law, a couple with one spouse who never works outside the home is entitled to 150 percent of the pension that would go to a single retiree with the same earnings history. Thus, the rate of return on social security contributions is higher for married couples with only one earner than for other households. In many cases, couples with two earners receive little or no extra benefits even though they have paid higher social security taxes; the effective rate of return on their additional taxes is negative.

The large magnitude of social security benefits does not entirely represent a net addition to retirement resources. To the extent that these benefits were anticipated before retirement, individuals may have reduced their own savings. Furthermore, the presence of benefits may induce individuals to work less than otherwise in their later years, and lead family members to contribute less to their support.

The question of whether the social security system reduces private saving for retirement is controversial. Because the system guarantees a certain level of income during retirement, individuals who plan over their entire life cycle might plan to save less during their working years if they anticipate social security benefits. On the other hand, the social security system provides an incentive for people to retire earlier, tending to increase the number of retirement years for

which saving must be done and to reduce the number of years over which it can be done. The social security system may also affect the amount of support that the elderly can expect from their own children, offsetting the reduction in required saving. Thus, the net effect on private saving is uncertain.

The possibility that social security benefits may replace private saving does not apply with full force to the current elderly; the major increase in benefit levels enacted by the Congress in the early 1970s was undoubtedly unexpected. Even if a 55-year-old worker responded to these essentially windfall gains by reducing private saving, it is unlikely that the offset would be as complete as is the case of perfectly anticipated benefits. The alternative adjustment—reductions in resource flows from children to parents—is more likely. In some families these flows are reversed; the elderly provide financial support to adult children.

People who retired during the early years of the social security system received very high rates of return on their own contributions because they paid payroll taxes for only a small number of their working years. The system has now reached a mature stage where most new retirees have made contributions for their entire working lives. Even for this currently retiring generation, the rate of return on contributions is quite high, primarily because of the large increase in real benefit levels enacted by the Congress in the early 1970s.

For the present generation of workers, the prospects for earning a high rate of return on contributions are not nearly as bright. Because the ratio of retired individuals to the working population has increased substantially and will increase more when the baby-boom generation begins to retire, maintaining the same benefit schedule requires a continually increasing tax burden on the working population. The current work force is paying now for benefits to today's retirees that exceed their contributions by a substantial amount. The baby-boom generation cannot expect to do nearly as well when it retires.

The fiscal health of the social security system, in both the short term and long term, has recently been a cause of considerable concern. Since 1939 the system has operated on a pay-as-you-go basis, with the benefits for current retirees being financed by taxes on current workers. Beginning in 1975, though, program expenditures exceeded revenues and long-run projections indicated a substantial permanent deficit in the social security trust fund.

These problems were addressed by legislation in both 1977 and 1983. The 1977 amendments raised contribution levels and corrected a flaw in the indexing formula that overcompensated beneficiaries for inflation. The Social Security Amendments of 1983 adopted most of

the recommendations of the National Commission on Social Security Reform, which reported its findings to the President in January 1983. The 1983 amendments included provisions for limiting future growth in expenditures and increasing payroll tax revenues so as to ease both the short-term and long-term shortfall. The Social Security Administration now estimates that the old-age, survivors, and disability programs will be in approximate balance over the next 75 years, with surpluses accumulating until about 2020 and being gradually drawn down thereafter. The long-run solvency of the fund depends on the growth of real wages and the growth of the working-age population. There is a great deal of uncertainty over these factors. The medicare program, a social security program that is not included in these estimates, is now projected to have growing deficits well into the next century.

#### **PENSIONS**

Pension coverage has grown dramatically over the past three decades. In 1950 about 25 percent of the work force was covered by a pension plan other than social security. Today more than half of all workers are covered. Increased pension coverage has been linked to the tax treatment of pensions, Federal freezes on wage compensation, and a 1948 ruling by the National Labor Relations Board that employers are required to bargain over the terms of pension plans. About 30 percent of the elderly now receive pension benefits, accounting for about 15 percent of income for all elderly persons and about 45 percent of the income of pension recipients. Pensions will become a much more important source of retirement income in the future; more and more newly retired workers will have acquired pension rights because of past increases in coverage. The future role of private pensions will be strongly influenced by the resolution of several current pension policy issues. In order to understand these policy issues, some knowledge of the institutional features of the U.S. pension system is required.

# The Private Pension System in the United States

Pension coverage does not necessarily imply actual receipt of a pension. Pension benefits become certain, or vested, only when the age and tenure restrictions specified by the pension plan have been met. There are two distinct types of pension plans. Three-quarters of pension plan participants are enrolled in defined benefit plans that pay a specified stream of benefit payments based on years of employment and earnings. The other type of pension plan, a defined contribution plan, pays benefits that are a distribution of an employee specific investment account that has accumulated through employer and employee contributions. The yearly pension depends on mortality ex-

pectations, the contribution rate, and the performance of the plan's investment portfolio. Employees bear the investment risk in defined contribution plans, while defined benefit plans place investment risk on the employer. Blue-collar workers are more likely to have defined benefit plans as are workers in large firms and in unionized firms. Defined contribution plans are more common among professionals and highly paid white-collar workers than among blue-collar workers.

In some instances employees can move between employers and remain in the same plan. These multi-employer plans are established through collective bargaining agreements between two or more employers and a single union. These plans are prevalent in industries where there are many small firms, where employees in an industry are members of a common union, and where the nature of the work frequently shifts employees from one firm to another. Many union workers in the construction, trucking, and garment industries are covered by multi-employer plans.

# Regulation of Private Pensions

Along with the growth of private pensions came a growing concern over the ability and willingness of firms to meet their pension promises. In some cases, employees with long service were arbitrarily denied benefits and some defined benefit plans did not set aside enough funds to guarantee the payment of benefits. The well-publicized collapse of some major plans prompted the Congress to enact the Employee Retirement Income Security Act of 1974. This Act, which is usually referred to as ERISA, established participation and vesting standards. The law also established standards for all parties that have control over pension plan assets to ensure that funds are managed in the best interests of plan participants.

ERISA also created a Federal agency, the Pension Benefit Guaranty Corporation to pay benefits when underfunded plans are terminated. The Corporation raises funds through a premium on existing plans and by taking over some of the assets of firms that terminate plans. The premium, which is set by law, is now too low to cover the pension commitments that have been assumed by this Corporation. Legislative initiatives to raise the premium and close some loopholes in current law that have allowed firms to dump pension liabilities on the Corporation have yet to be enacted by the Congress. Currently, the premium is based on the number of employees covered by defined benefit plans and is a flat rate per participant.

The current premium structure does not reflect the risk that a plan will terminate without enough funds to pay benefits. Employers with fully funded plans who pose little risk to the Corporation have objected to higher premiums that are not tied to legislative reform to close the loopholes that have led to abuse. An alternative longer

range solution would be to develop a mechanism that would charge a higher premium to firms that are more likely to use the Corporation guarantee. A risk-related premium would have the added benefit of reducing incentives to underfund pension commitments.

Amendments to ERISA established liability rules for employers withdrawing from multi-employer plans. There have been numerous court challenges to the constitutionality of these multi-employer amendments. In some cases, when the owner of a business dies or retires, or when the number of workers employed by the business declines sharply, the firm must make a substantial payment to the pension fund even though pension contributions stipulated in the union contract have always been paid. Some small companies claim that the withdrawal liability is greater than the value of their companies.

The Employee Retirement Income Security Act of 1974 did not change the voluntary nature of private pension plans. No employer is required to have a pension, and a plan may be terminated as long as employee rights to previously accrued benefits are protected. Recently, several firms with defined benefit plans have terminated their pension plans in order to gain access to assets in the plan that had accumulated in excess of liabilities; these plans were overfunded. This overfunding was caused by an increase in the interest rates that are used to measure liabilities and by increases in the value of assets held by the plans. ERISA prohibits the withdrawal of assets from an ongoing plan, but the law allows for the reversion of excess assets to the plan sponsor when a plan is terminated. These rules are consistent with the risk-sharing principles of defined benefit plans. Firms bear the risk of poor portfolio performance in defined benefit plans; they are also legally entitled to investment returns in excess of those needed to pay benefits when a plan is terminated.

Many of the firms that terminated plans to acquire excess assets maintained identical or similar plans after the original plan was terminated. Recent Administration guidelines clarified the obligations of firms in these circumstances. Plan members are protected from any future downturns in the value of assets in the pension fund after excess assets are withdrawn by a requirement that accrued rights to pensions be secured through the purchase of third-party annuity contracts. This ruling was very controversial. Many observers feel that some or all of the excess assets that accumulate in a defined benefit plan should be used for retirement benefits.

# Effects of Regulation

As demonstrated in the debate surrounding excess assets, the arguments over the merits of ERISA that preceded its passage have continued. Some see the law as burdensome and unnecessary. Many opponents predicted that the law would lead to massive terminations of

pension plans. In fact, pension coverage has grown since the 1974 Act was passed, although at a slower rate than in the previous two decades. Proponents see the 1974 Act as a necessary protection for workers that has had little impact on responsible employers.

Whatever the merits of ERISA, it now governs a major segment of the economy. The amount of funds regulated by the Act is nearly \$1 trillion and is projected to grow rapidly. The bulk of these funds is invested in corporate equities and bonds, and the remainder in government securities, mortgages, and other investments. The investment decisions made by the managers of pension plans are important not only because they affect retirement income but also because they affect the allocation of a significant amount of resources in the economy.

There is some evidence that pension funds have experienced low rates of return relative to other invested funds over the past decade. It is possible that the return to pension funds has been reduced by restrictions that ERISA places on investments and by the incentives faced by plan managers. The 1974 Act generally prohibits all transactions between interested parties. These prohibitions may actually deter some investments that are in the plan's best interest. Although exemptions to the prohibited transactions rule can be obtained from the Department of Labor, there have been many complaints that the process limits profitable activities because it is time-consuming and expensive.

The incentives of fund managers have also been questioned. The 1974 Act is interpreted to preclude compensation that is based on the performance of the portfolio under management. Because compensation is based on management fees and transactions costs, fund managers have an incentive to engage in transactions that may not increase the overall profitability of the fund. As pension funds grow in importance, these incentives are receiving increasing amounts of attention.

### Rationale for Private Pensions

Why do employers offer pension plans? The tax advantages of pension plans are one explanation, but taxes do not explain the important features of most plans. Tax advantages can be secured through defined contribution plans that have little effect on the decision to remain with the plan sponsor, or defined benefit plans that exert a strong influence on employee turnover. Most workers belong to defined benefit plans; these plans are designed to provide very strong incentives to stay with a firm up to some age and then strong incentives to retire after that. The incentives to retire can peak at 65 or later, but many plans encourage earlier retirement. There is an abundance of evidence that workers respond to these incentives.

The predominance of defined benefit plans indicates that the incentives inherent in these plans are important in explaining their existence. The preference for defined benefit plans is expressed by both employers and employees and demonstrated in the outcome of collective bargaining agreements.

Why do pension plans have these incentives? An answer that is consistent with the evidence is that incentives are needed to ensure that the worker does not stay on past the time when total wages over a career exceed the worker's contribution to total output. Under some wage structures, workers are paid less than the value of their work at early stages of their careers and more than the value of their work at the end of their careers. There are several explanations for the divergence of pay and productivity. Some explanations are based on the fact that employers need a way to encourage highly trained workers to stay long enough to recoup training costs. Other explanations are based on the ability of employers to observe and reward work only after it is completed. In some cases employers may not want to lower the wages of older workers when their productivity begins to decline. All explanations lead to the conclusion that the observed pattern of wages and pensions is more attractive to both the employer and employee than a wage that increases less over a career and is more closely tied to productivity.

Although this wage structure is beneficial to both sides in the employment relationship, it encourages complaints by older workers even though these same workers benefited from the system when they were younger. Workers near retirement may prefer to continue working at high wages and accruing additional pension benefits. The fact that this option is not available has led to complaints that pension systems discriminate against older workers. Demographic trends have focused attention on these complaints because many people believe that the budgetary pressures on the social security system created by the baby boom can be relieved if the elderly are encouraged to work. The elimination of pension incentives to retire is sometimes called pension neutrality. Pension neutrality might seem like a good idea now, especially for today's older workers, but today's younger workers-tomorrow's elderly-could be worse off as a result because pension neutral schemes may preclude the compensation arrangements that are most attractive to both employers and employees. Moreover, pension neutrality might actually reduce rather than increase retirement ages in the future when demographic pressures are even greater. Defined benefit pensions do encourage retirement at some age. But they also postpone retirement before that age. With pension neutrality and the wage patterns that would go with itlower wage rates for those past mid-career—workers in the future may well choose earlier retirement dates.

#### Women and Pensions

The relatively high rates of poverty among elderly single women have focused attention on the pension rights of women. About three-quarters of the difference between incomes of elderly men and women can be explained by pension income.

The financial position of elderly single women is likely to improve in the future for several reasons. Women have entered the labor force in record numbers in the past few decades and, consequently, future generations of elderly women will have more income from pensions. Recent judicial and legislative actions have also affected the retirement resources available to women. A 1983 Supreme Court ruling, for instance, required that pension plans make payments that are based on gender-neutral actuarial tables. Prior to the ruling some plans paid lower monthly benefits to women because, on average, women were expected to collect those benefits for more years. That actuarial adjustment is no longer allowed. The new ruling may increase pension benefits for some women and reduce benefits for some men. Alternatively, lump sum distributions of accumulated assets may increase, depriving some retirees of the advantages of group investment plans.

Recent legislation has also altered the pension rights of women. Under the Retirement Equity Act of 1984, pension plans are required to pay a survivor's benefit to the spouse of any vested plan participant who dies. Prior to the 1984 Act, some spouses received no benefits unless the plan participant was close to retirement age at death. The new law also requires that pension payments after retirement be made to both the plan participant and the surviving spouse unless both spouses elected another option. Previously, retirees could select, without the formal consent of a spouse, a payment plan that provided benefits only while the retiree lived. Monthly payments were higher if this option was chosen, but the spouse received no payments after the retiree died.

In addition, the Retirement Equity Act changed ERISA rules to accommodate what are believed to be normal career patterns of women. Pension coverage now must begin at age 21; the previous minimum was 25. The new law also strengthened the vesting rights of employees who have a break in service with a single employer. The intent of these changes was to increase the pension benefits of women.

The debate surrounding these changes was much like the debate over the Employee Retirement Income Security Act. Some see the changes as valuable protections for women while others see them as intrusive burdens that suppress important economic forces. Proposed extensions of the Retirement Equity Act illustrate some features of this debate. Many supporters of this Act want to require earlier vesting rules and plans designed so that benefits are portable, or easily transferred among employers without loss. At present, most defined benefit plans require 10 years of service before benefits are vested and, even when benefits are vested, inflation rapidly erodes pension rights acquired in a prior job.

But these features of pension plans are not accidental; they were designed to reduce turnover. If employers cannot reduce turnover with pension plans, they may have little interest in providing pensions especially now that individual retirement accounts offer essentially the same tax advantages. Thus, rules that require portability and vesting could increase the pension benefits for workers who are employed in firms that have plans, but they could also reduce the number of firms that offer pensions.

# POLICY IMPLICATIONS: PRIVATE AND SOCIAL SECURITY RESOURCES

The economic status of the elderly is likely to improve in the future. Tomorrow's elderly will earn more income throughout their lives than earlier generations, and thus will accumulate more resources for retirement.

A growing fraction of retirement resources will come from private pension plans. The coverage and security of pension plans has increased substantially since 1950. With the vesting and fiduciary standards established by the Employee Retirement Income Security Act and benefits insured by the Pension Benefit Guaranty Corporation, retired workers can be more confident of receiving benefits. Attention is now focusing on policies that may increase the rate of return to pension funds. New tax rules have also made it easier and more attractive to achieve retirement objectives. Foremost is the introduction of individual retirement accounts, which allow immediate tax deductions and tax-exempt earnings for funds deposited in an account that is maintained until at least the age of 591/2. The 23 percent across-the-board reduction in marginal tax rates legislated in the Economic Recovery Tax Act of 1981 should also stimulate private saving by increasing the rate of return available to savers. Also important is the effectively tax-free accumulation of assets through pension funds. The objective of all these tax provisions is to induce individuals to voluntarily allocate more of their lifetime resources toward providing an adequate standard of living in the retirement years.

Social security payments per beneficiary will also grow despite the increase in the fraction of the population over 65. Because the current benefit formula gives workers full credit for all the productivity gains made by the economy during their working lives, real benefits per person are scheduled to triple over the next 75 years.

The aging of the population will not go unnoticed. The Social Security Administration projects that in 2040 outlays to support the old-age, disability, and hospital insurance programs of social security will be nearly 25 percent of taxable payroll, compared with 14 percent in 1984. More than half this increase (63 percent) is attributable to increased outlays from the hospital insurance program. Outlays for supplemental medical insurance which are financed primarily from general revenues, are now equal to one-half of outlays for hospital insurance. The rate of growth of supplemental medical insurance suggests that its financing could require the equivalent of another 4 to 6 percent of taxable payroll. These benefits will require a significant tax increase, a substantial reduction in other government services, or an increase in total government indebtedness.

These projections have led many to conclude that private mechanisms for retirement savings must be enhanced to reduce the pressures on both the retirement and medical programs of the social security system. Many proposed changes in the private pension system have been advocated with this objective in mind. Such proposals include mandatory universal coverage, earlier vesting rules, legislation to increase the portability of pensions, and the elimination of private pension incentives to retire. These approaches are unlikely to significantly increase private retirement resources. Because pensions are only one part of a life-cycle retirement plan, a mandated increase in saving through pensions may be largely offset by reductions in other forms of private saving. In addition, many restrictions on pensions may end employers' willingness to offer them, defeating the original objective of the restrictions entirely. Mandatory coverage is not the answer to this problem, however. The firms that do not now offer pensions, particularly small firms in the service sector, would be especially burdened if pension costs were imposed on them. The cost of establishing a pension plan tends to be relatively high for smaller firms, and their generally higher turnover rate adds further to the cost of administering a long-term contractual relationship. It does not make sense to penalize that sector which has provided much of the remarkable employment growth that has occurred in this country. Pressure on the social security system should not be reduced by limiting employment opportunities in a particularly dynamic sector of the economy.

The retirement incentives inherent in social security have also been questioned in light of demographic pressures on the system as a whole. The current social security system discourages work past the age of 65, and it encourages the elderly to seek part-time rather than full-time work. These features of social security were incorporated into the system when it was believed that older workers must be encouraged to leave the labor force in order to make room for new workers. The remarkable ability of the economy to absorb the new workers of the baby-boom generation and the new work patterns of women has refuted this fallacy. The energy and experience of the elderly represent an important national resource, and current policies unnecessarily discourage work even from those who are able and willing to be productive members of the labor force.

Some progress toward reducing the work disincentives in the social security system was made in the 1983 amendments. A modification of the earnings test is scheduled to reduce the implicit tax on earnings over the exempt limit from one-half to one-third starting in 1990. Serious consideration should be given to continuing the scheduled decrease and eliminating the earnings test entirely. Opposition to this proposal is often based on the fear that social security outlays would increase if the earnings test were eliminated. Higher social security payments to those who now work part time would increase social security payments. That increase would be offset to some extent by the additional social security and income taxes paid by all those aged 62 and over who increase their hours of work and by reductions in delayed retirement credits. The net effect on total social security outlays is uncertain. But even if the earnings test does reduce budget outlays, it is still hard to defend. The earnings test reduces the contribution of the elderly to the total output of the economy. It does not make good economic sense to curtail social security outlays by reducing the base that provides for transfers to the elderly.

The 1983 amendments will also reduce the current system's strong disincentives to work after the age of 65 by increasing the amount that is added to monthly benefits when workers postpone retirement. The late retirement benefit will be increased gradually beginning in 1987. When those increases are complete, the additional amount that is given to late retirees will be enough to make up for the fact that benefits begin at a later date. Full-time work after the age of 65 will no longer be penalized. In addition, the age at which the full primary benefit is payable will be raised from 65 to 67 gradually between the years 2000 and 2022. These changes will help to neutralize the impact of the social security system on a worker's decision to retire. The retirement incentives provided by private pension plans—incentives that vary considerably across firms—can be justified on the

ground that they create a bond between employers and employees that increases productivity and benefits both parties. This reasoning does not apply to social security. The social security benefit structure should not penalize workers who postpone retirement.

The economic status of the elderly has clearly improved over the past three decades. The elderly can now work less and still enjoy a higher standard of living than the elderly in the past. With good retirement policies that promote the efficient use of all resources, tomorrow's elderly will be even more secure. The 1983 amendments provide a start in improving the efficiency of the social security system. By reducing the current disincentives to work facing the elderly, these changes will reduce their dependence on social security and simultaneously encourage the efficient use of one of the Nation's most valuable resources, the elderly.

#### CHAPTER 6

# The Market for Corporate Control

THE SUCCESS OF THE AMERICAN ECONOMY depends on competition. Competition stimulates managers to respond to rapidly evolving technologies. Competition requires that firms adapt to changing market demands and calls upon them to adjust to fluctuating capital market conditions. Competition breaks down entrenched market positions, unsettles comfortable managerial lives, and provides incentives for innovative forms of business organization and finance. In sum, competition plays a central role in the evolution of the economy: It promotes efficient modes of production and eliminates processes and organizational structures that have outlived their usefulness.

#### CONTROL OF PUBLICLY TRADED CORPORATIONS

Competition plans a particularly important role in the market for control of publicly traded corporations. This market determines who will operate the Nation's largest business enterprises and influences the business strategies that many of these organizations follow. The Nation's economy is strongly influenced by the performance of these publicly traded corporations. As of year-end 1983, the market value of the securities of these corporations amounted to \$2.5 trillion, about 22 percent of the value of the Nation's total asset base. With such a large portion of the Nation's wealth and productive capacity represented by these publicly traded corporations, the Nation has a compelling interest in maintaining their competitive and efficient economic performance.

These corporations are generally owned by stockholders who delegate substantial decisionmaking authority to a group of hired managers. Managers make the corporation's investment, pricing, production, and research and development decisions, and are primarily responsible for the corporation's success or failure. Typically, managers own a relatively small percentage of the firm's shares.

This delegation of authority from stockholders to management is highly efficient. It fosters specialization that allows managers to develop substantial firm-specific human capital. It also promotes development of a class of talented professional managers knowledgeable about the operation of large, complex organizations. In addition, it reduces the costs of diversifying investors' portfolios and facilitates mobility of financial resources among corporations competing for capital. Indeed, separation of ownership and control has been a major reason for the success of the modern corporate form as a business entity.

The delegation of authority from stockholders to management is not, however, without risk to stockholders and the economy at large. In particular, the delegation creates a possibility that management will operate the corporation in management's best interests, and not in the best interests of the corporation's stockholders. Such divergences of interest can result because stockholders are concerned primarily with maximizing the value of their shares, while managers' incentives are often more complex and can involve assurances of continued employment by an independent, publicly traded corporation.

These divergent incentives can give rise to an agency problem within the corporation—a situation in which managers are poor agents for their stockholders because they do not act in the stockholders' best interests. The adverse consequences of this agency problem can be significant because, if unchecked, it can deter socially beneficial mergers, keep assets from being allocated to higher valued uses, impede adoption of more profitable capitalization plans, and otherwise prevent publicly traded corporations from making the largest possible contribution to aggregate economic performance.

#### INCENTIVES AND CORPORATE MANAGEMENT

The market generally relies upon two sets of incentive mechanisms to align management and stockholder interests. The first results from the operation of the labor market for management services. In this market, executives are hired and fired and compete for career opportunities. Here, corporations also establish incentive systems designed to stimulate employee productivity and, in order to align management and stockholder interests, often grant stock options to key management personnel.

There are, however, substantial limits to the practical effectiveness of this labor market. In particular, a management team may believe that it is maximizing the value of the corporation when, in fact, it is not. Under these circumstances, management will not change corporate strategy on its own accord. Moreover, unless stockholders independently conclude that corporate performance can be improved by changing management teams, and unless some stockholders mount an expensive proxy contest to oust incumbent management, a change in corporate strategy is unlikely to occur. The labor market for man-

agement services can thereby allow a corporation to continue to be controlled by an entrenched management that does not maximize the value of the corporation's shares.

Under these circumstances, the external market for corporate control provides an important set of checks and balances. In this market, bidders directly approach stockholders and offer to purchase the corporation's shares at a premium above market price. These bidders often install new management in the event their bid succeeds. In some cases the bid is made directly by a new management team that believes it can improve the target corporation's performance.

The best assurance an incumbent management has against a successful takeover attempt is a stock price that is high relative to outsiders' estimates of the potential value of the corporation's shares. Managements that allocate capital to higher valued uses, operate efficiently, and adopt capitalization structures responsive to prevailing financial market conditions are less likely to be subject to takeovers than other management groups. Consequently, in order to prevail in the external market for corporate control, it is not enough that an incumbent management believes that it is doing a proper job, or that it persuades stockholders that it is doing so. Instead, management must demonstrate that its performance is competitive with the performance of other potential managers, and the value of management's performance must be reflected in the corporation's stock price. In this fashion, the external market for corporate control disciplines managers who believe they have maximized the value of the corporation's shares when, in fact, they have not.

Contests for corporate control are not, however, motivated solely by opportunities to improve management. As discussed below, takeovers can occur because of divergent estimates of future economic trends, opportunities to capitalize on economies of scale, distribution efficiencies, tax factors, and myriad other reasons. Therefore, even well-managed companies may find themselves subject to contests for corporate control that can be economically rational and beneficial for the economy as a whole.

#### RECENT TAKEOVER EXPERIENCE

The potential for divergent stockholder and management interests is most striking in hostile takeover attempts. In a hostile takeover attempt a bidder offers stockholders a substantial premium for the corporation's shares. In response, target management opposes the bid and typically resorts to defensive tactics such as litigation against the bidder, the sale of new securities to investors committed to support incumbent management, the repurchase of shares already owned by the bidder, or numerous other transactions. If successful, the defense

can leave management in continued control of the target corporation. However, as explained below, management's success in maintaining the corporation's independence comes at a high price for target stockholders who typically suffer substantial losses when a bid is defeated.

#### THE DEBATE OVER CONTESTS FOR CORPORATE CONTROL

Takeovers have recently become the subject of extensive debate in the Congress, among executives of the Nation's largest corporations, and in the media. The debate has been stimulated, in part, by a rapid increase in the size of corporations involved in takeover battles and by the evolution of new and controversial takeover techniques.

As explained below, recent financial and legal developments have made many of the largest publicly traded corporations susceptible to takeovers. Managements of these corporations have historically perceived themselves as acquirers and not as potential takeover targets. The recent exposure of these corporations to the discipline of the market for corporate control has caused substantial controversy and has stimulated calls for legislation that would deter takeovers attempted without a target management's approval. Some critics of the takeover process also claim that bidders use tactics that are designed to coerce stockholders into selling their shares, and that regulations governing bidder practices provide insufficient time for stockholders and management to evaluate and respond to takeover attempts. More fundamentally, critics of the takeover process question whether takeovers are beneficial for the economy. They suggest that many takeovers result from a pursuit of paper profits that does not contribute to productivity. They also suggest that takeovers can damage the economy because they can increase potentially anticompetitive concentration of market power, distort the credit market, and reduce incentives for long-term investment.

Management defensive tactics are also often criticized. In particular, managements faced with unwelcome takeover attempts sometimes repurchase the would-be acquirer's shares at a premium over the market. This practice, commonly known as greenmail, can preclude a takeover premium from being paid to target stockholders whose shares are not repurchased. In other situations, target managements have sold additional stock to new shareholders who commit themselves to support management interests. Target managers have also filed numerous lawsuits opposing takeovers, and have mounted competing tender offers for the potential acquirer's shares. Critics object to these practices because they can be used by management to protect its tenure at stockholders' expense.

The outcome of this debate over takeover tactics is significant for the economy as a whole. The set of tactics permissible in contests for corporate control determines both the probability that takeover attempts will be made and the probability that they will eventually succeed. To the extent that government regulations impose costs on bidders, or reduce a bidder's chances for success, fewer takeover attempts will be made. This tends to insulate corporate managements from the competitive pressures of the external market for corporate control. Stockholders, as a group, will also suffer as a result of excessive regulation because it reduces the chance to earn takeover premiums. However, to the extent that takeover practices are abusive, either because they allow bidders to acquire corporations through manipulative means, or because they allow entrenched managements to defeat takeovers that are in stockholders' and the economy's best interests, certain controls may be appropriate.

#### POLICY CONSIDERATIONS

The central policy question regarding takeovers should be whether the benefits to the economy as a whole resulting from takeovers exceed their costs. As explained below, there is powerful evidence that takeovers as a group are beneficial. This evidence does not, however, suggest that takeovers are without costs or dangers. In particular, if the antitrust laws are not properly enforced, takeovers can lead to anticompetitive accumulations of market power.

Although extensive research has established that takeovers tend to be beneficial, not every takeover is successful in attaining its originally contemplated benefits, and there are many examples of takeovers that, in hindsight, appear to have been misguided. Takeovers should not, however, be singled out in this regard because investments in physical plant, research and development, petroleum exploration, and numerous other activities also often appear misguided in hindsight. However, because it is impossible to predict which takeovers will be unsuccessful, the takeover process must be evaluated in the aggregate, and cannot be assessed on the basis of isolated examples of failure or success.

In addition, even when takeovers succeed, some individuals and communities may be adversely affected if jobs are lost or plants and offices are shut down. The problems raised by such reallocations of assets are a proper subject of social concern, but they are not unique to takeover transactions. Instead, they result from the economy's need to adapt to changing circumstances. To the extent that takeovers are associated with reallocations that impose particularly high costs on specific individuals or communities, the appropriate govern-

ment response, if any, should be to ease local adjustment problems rather than to interfere with the takeover process itself.

Contests for corporate control are largely economic phenomena, and they can and should be understood as such. The policy debate need not be guided by anecdotal evidence that emphasizes isolated incidents that some critics perceive as abusive. Contests for corporate control have been studied in great detail, and this accumulated knowledge provides a foundation for sound public policy. Although much additional research remains to be done, and although there are not adequate explanations for all phenomena observed in the takeover market, the current state of knowledge strongly indicates that further Federal regulation of the takeover process, particularly insofar as it would make takeovers more costly, would be poor economic policy. The remainder of this chapter assesses the economy's recent experience with mergers and acquisitions, describes the debate over certain practices employed in the market for corporate control, and evaluates proposals for further Federal regulation of this market.

#### MERGER AND ACQUISITION ACTIVITY IN PERSPECTIVE

Contests for corporate control are part of a larger merger and acquisition process that plays an important role in the economy's adjustment to changing market circumstances. Merger and acquisition activity historically has run in cycles, with peaks occurring during periods of strong business growth. The first recorded peak in merger and acquisition activity occurred at the turn of the century, as the Nation recovered from the depression of 1893 and before it slipped into the recession of 1904. A second peak occurred between 1925 and 1930, a period of rapid economic growth followed by the Great Depression. Merger and acquisition activity remained subdued during the Depression and World War II. After 1945 the number of business combinations began a steady increase that culminated in a merger wave spanning the late 1960s and early 1970s.

Data describing the number and value of merger and acquisition transactions are presented in Table 6-1. Those data show that recent merger and acquisition activity, as measured by the number of reported transactions, has been at a rate less than half that reported in the 1960s. Although the number of transactions remains below previous peaks, the total value of merger and acquisition transactions has recently reached new highs. The announced value of merger and acquisition transactions reported in the first 9 months of 1984 was \$103 billion. On an annualized basis measured in constant 1983 dollars, this activity represents \$133 billion in mergers and acquisitions, an increase of about 19 percent over the previous peak recorded in

1968. Indeed, the average annual reported real value of mergers and acquisitions during 1981-84 is approximately 48 percent greater than the average reported during any 4 years of the late 1960s and early 1970s. Thus, fewer transactions have been generating a relatively large dollar volume of merger and acquisition activity.

TABLE 6-1.—Number and value of merger and acquisition transactions, 1963-84 [Values are in billions of dollars]

· Year	FTC estimates o mining	f acquisitions of and manufactur	large firms in ring 1	W.T. Grimm & Co. estimates of merger and acquisition activity			
	Number of transactions	Value of assets exchanged		Number of	Value of consideration exchanged <sup>3</sup>		
		Nominal dollars	Constant (1983) dollars	transactions <sup>2</sup>	Nominal dollars	Constant (1983) dollar	
963 964	54 73	2.5 2.3	7.6 6.9	1,361 1,950	(*) (*)	(*	
965	64 76 138 174 138	3.3 3.3 8.3 12.6 11.0	9.4 9.3 22.5 32.8 27.4	2,125 2,377 2,975 4,462 6,107	(*) (*) (4) 43.0 23.7	(1 112 58	
970 971 972 973 974	91 59 60 64 62	5.9 2.5 1.9 3.1 4.5	13.9 5.5 4.1 6.4 8.4	5,152 4,608 4,801 4,040 2,861	16.4 12.6 16.7 16.7 12.5	38 28 36 34 23	
975 976 977 978 979	59 82 101 111 97	5.0 6.3 9.2 10.7 12.9	8.5 10.3 14.1 15.4 17.0	2,297 2,276 2,224 2,106 <b>2,128</b>	11.8 20.0 21.9 34.2 43.5	20 32 33 49 57	
980 981 962 983	(*) (*) (*) (*)	(4) (4) (4) (4)	(*) (*) (*)	1,889 2,395 2,346 2,533	44.3 82.6 53.8 73.1	53 90 55 73	
984: 9 months Annualized	(*)	(4) (4)	(4)	1,899 2,532	103.2 137.6	99 132	

Source: Federal Trade Commission (Bureau of Economics) and W.T. Grimm & Co.

The large dollar volume of recent merger and acquisition activity is attributable primarily to a substantial increase in the size of the largest individual transactions, most of which involve publicly traded corporations. Of the 100 largest merger and acquisition transactions recorded through year-end 1983, measured in nominal terms, 65 occurred between 1981 and 1983, 24 occurred between 1979 and 1981, and only 11 occurred prior to 1979. Prior to 1976 the largest acquisition on record, measured in constant 1983 dollars, had a value of \$3.3 billion. Today, the record stands at \$13.3 billion. Indeed, transactions with a nominal value in excess of \$1 billion used to be rare and only 12 such transactions were recorded in the 12-year span

<sup>1 &</sup>quot;Large" firms are defined as those with assets of \$10 million or more. Excluded from the tabulation are firms for which asset data are not publicly available.

2 The W.T. Grimm & Co. tabulations measure only publicly announced transactions and include transfers of ownership of 10 percent or more of a company's assets or equity, provided that the value of the transaction is at least \$500,000.

3 Includes only those transactions for which valuation data are publicly reported.

from 1969 to 1980. However, between 1981 and 1984 alone, there have been at least 45 such transactions.

These large mergers tend to be focused in specific industries. As Table 6-2 explains, five industries that account for less than 10 percent of national income—petroleum, banking and finance, insurance, mining and minerals, and food processing—accounted for one-half of all the consideration reported paid in mergers and acquisitions between 1981 and 1983.

TABLE 6-2.—Value of merger and acquisition transactions, by industry, 1981-831

Industry classification of seller	Nominal value (billions of dollars)	Percent of total	Cumulative percentage	
Oil and gas Banking and finance	16.5	21.1 11.2 7.9 6.8	21.1 32.3 40.2 46.9	
Food processing Conglomerate Transportation Broadcasting	6.8	3.8 3.6 3.3 2.7	50.8 54.4 57.6 60.3	
Retail	5.3 5.1 72.8	2.5 2.4 34.8	62.8 65.2 100.0	
Total	209.5	100.0		

Includes only those transactions for which valuation data are publicly reported. See Table 6-1, footnote 2. Source: W.T. Grimm & Co.

Transactions in the petroleum industry have been particularly notable for their size. Between 1981 and 1983 the reported value of petroleum industry mergers and acquisitions exceeded \$44 billion. This accounts for more than a fifth of the value of mergers and acquisitions during that period. The pace of merger activity in the oil industry continued to be rapid into 1984, when \$29.2 billion was paid in three transactions alone. The Federal Trade Commission has concluded that merger and acquisition activity in the petroleum industry is attributable largely to changes in underlying market conditions. Among these changes are wider use of enhanced oil recovery techniques, divergent expectations concerning the future movement of crude oil prices, and phased decontrol of crude oil. In addition, the recent decline in demand for petroleum products has created excess capacity in the industry. Such excess capacity may make consolidation in the petroleum industry efficient and desirable. Some recent petroleum industry mergers are a part of that consolidation process.

In other industries, mergers and acquisitions are responses to new opportunities created by deregulation. Deregulation in the banking, finance, insurance, transportation, brokerage, and investment industries has opened new opportunities for distribution economies, as well as economies of scale and scope that can be achieved by mergers and acquisitions. Together, these recently deregulated industries ac-

count for about 25 percent of all merger and acquisition activity between 1981 and 1983.

A significant percentage of recent merger and acquisition activity thus appears to be related to competitive pressures to adapt to new market conditions. Accordingly, any policy that would influence merger and acquisition activity must recognize the valuable role these transactions play in allowing industries to adapt to changing circumstances and the costs that can be imposed by inhibiting such responses.

Another distinguishing characteristic of current merger experience is the prevalence of divestiture transactions. In a divestiture transaction, a parent corporation either spins off a subsidiary as a free-standing entity or sells it to another firm. Divestiture transactions currently account for about one-third of both the number and value of all merger and acquisition transactions.

Divestitures often occur when firms undo prior acquisitions that did not work out as planned, or when firms decide to raise cash to reduce debt generated by earlier acquisition programs, or to invest in new projects. In addition, many divestitures are currently designed to focus the parent corporation's operations in their most profitable lines of business. This represents a trend away from the conglomerate-type mergers characteristic of the late 1960s and early 1970s and toward less diversified corporate structures that focus on product lines in which the corporation has a relatively strong market position.

Current merger and acquisition activity is further characterized by a larger number of leveraged buyout and management buyout transactions. In a leveraged buyout, the acquiring firm borrows a large percentage of the purchase price by pledging the assets of the acquired firm as collateral for the loan. In a management buyout, the acquiring company is owned in whole or in part by the management of the acquired firm. Because management buyouts are often accompanied by substantial borrowing, management buyouts are also commonly leveraged buyouts.

Although leveraged and management buyouts are not novel, they are being used with increasing frequency in the acquisition of publicly traded firms. The value of leveraged buyouts of publicly traded companies increased rapidly from \$636 million in 1979 to \$7.1 billion in 1983. In 1983 leveraged buyouts accounted for about 19 percent of all takeovers of publicly traded companies and about 18 percent of the market value of those takeovers.

#### BENEFITS AND COSTS OF TAKEOVER TRANSACTIONS

Public policy toward takeovers should depend on whether these transactions benefit the economy. If, on balance, they promote efficient allocation of resources, the transactions are beneficial and should not be impeded by Federal or State policy. In contrast, if the costs of these transactions exceed their benefits by, for example, wasting scarce resources or causing anticompetitive increases in market power, then regulation of the takeover process may be appropriate.

The available evidence, however, is that mergers and acquisitions increase national wealth. They improve efficiency, transfer scarce resources to higher valued uses, and stimulate effective corporate management. They also help recapitalize firms so that their financial structures are more in line with prevailing market conditions. In addition, there is no evidence that mergers and acquisitions have, on any systematic basis, caused anticompetitive price increases.

These findings are consistent with the possibility that some individual transactions turn out to be misguided and generate losses for the economy at large. Public policy should not, however, be based on the outcomes of individual transactions, because it is impossible to predict in advance which transactions will succeed and which will fail. Public policy therefore must be based on aggregate trends describing the consequences of takeovers as a whole. On this criterion, there is no economic basis for regulations that would further restrict the merger and acquisition process. Indeed, the economic evidence suggests that existing regulations impose restraints that may deter potentially beneficial transactions.

#### STOCK MARKET PRICES AS A MEASURE OF BENEFITS AND COSTS

Ideally, a study of the costs and benefits of takeover transactions would evaluate the gains and losses resulting from each transaction on a case-by-case basis. In addition, each takeover transaction would be evaluated by objective and well-informed observers with strong incentives to render accurate and unbiased estimates of each transaction's likely consequences. Such an evaluation would also look behind the accounting techniques and book values employed by the parties, and would arrive at an assessment based on current market values and best estimates of future market trends.

In many ways, the behavior of prices quoted in the stock market provides just such an evaluation of the probable consequences of a takeover transaction. In the stock market, each takeover transaction is evaluated on its own merits by investors who, because they stand behind their assessments with real dollars placed at risk, have a powerful incentive to judge accurately the outcome of individual takeover transactions. It is also well established that the stock market sees through accounting techniques and bases its evaluations on underlying market values. Moreover, there is extensive evidence that the stock market rapidly absorbs any information contained in the historic price patterns of stock trades. Therefore, even if the stock market goes astray in its assessment of the likely consequences of takeover transactions, such deviations would give rise to arbitrage opportunities that would return the market to a more unbiased and objective perspective. The market's evaluation of takeover transactions is therefore self-correcting over time.

Stock market prices thereby provide a reliable barometer of the likely consequences of takeover transactions. If the aggregate net change in the value of acquirers' and targets' shares is positive as a result of a takeover, then the transaction creates wealth and is beneficial. If the aggregate net change is negative, the transactions reduce wealth and are harmful.

#### EVIDENCE THAT TAKEOVERS ARE BENEFICIAL

The evidence is overwhelming that successful takeovers substantially increase the wealth of stockholders in target companies. Although estimates of the magnitude of the wealth increase vary, recent studies find average gains in the range of 16 to 34 percent of the value of the targets' shares.

The data regarding changes in the value of acquiring companies are not as uniform, but the best available evidence strongly confirms that the value of acquiring companies' shares also increases as the result of takeovers. A recent study of takeovers of 249 New York and American Stock Exchange traded companies concluded that the average stock price gain to bidding stockholders is about 2.3 percent. Although this gain appears small, especially in comparison with the gains accruing to target stockholders, it masks a significantly larger return on the assets acquired by the purchasing firm.

On average, an acquiring firm is four to five times larger than the firm it purchases. Because of this size difference, the average 2.3 percent gain in the stock price of the acquiring firm translates roughly into a 9 to 11 percent average return on the assets of target firms to bidding stockholders.

These results are consistent with the operation of an efficient capital market. On average, and over the long run, bidders will not desire or be able to complete acquisitions unless the acquisitions are profitable for the bidding firm. Indeed, bidders often terminate or reduce the price of their offers when scrutiny of the target leads them to conclude that the initial offer price was too high. Target

stockholders will similarly refuse to sell their shares unless their wealth increases as a result of the transaction. Economic theory therefore suggests, and the available evidence confirms, that merger and acquisition transactions are, on average, beneficial for stockholders in both bidder and target firms.

#### SOURCES OF GAIN FROM TAKEOVER ACTIVITY

The evidence is strong that takeovers generate aggregate net benefits to the economy. Although many potential sources of gain from these transactions can be identified, it is difficult to quantify the size of the gain that results from particular sources.

Production and distribution economies are one source of gain, particularly in transactions involving firms in related industries. An acquisition can also generate economies of scale and create opportunities for more efficient forms of distribution and contracting. Mergers and acquisitions can also promote technology transfers that might otherwise be unavailable to firms operating on a stand-alone basis. For example, some petroleum acquisitions have led to the transfer of enhanced recovery techniques that have improved yields from aging petroleum reservoirs. In addition, many recent studies have found that companies with larger market shares also have lower per unit costs. These studies suggest that the cost-reducing effects associated with larger market shares more than offset the increased prices that can, in some circumstances, result from having an industry composed of fewer firms with larger market shares.

Substantial gains can also result when a takeover causes assets to be shifted to higher valued uses. A retail chain may, for example, possess real estate that is more valuable as office sites than retail outlets. Although the retail chain may be well managed, if the company announces that it will not sell its real estate or put it to any use other than retailing, then the market has little incentive to value the firm's real estate at its current market price. Even if the market believes that it is inevitable that the firm's real estate will eventually be put to a higher valued use, the stock market will substantially discount the property's current market value because of uncertainty over when the transaction will occur and the price that the real estate will bring when sold. The announcement of a takeover attempt at a firm price eliminates much of this uncertainty and can account for a significant portion of the gains resulting from mergers and acquisitions.

Improved management is another possible source of gain from mergers and acquisitions. Evidence suggests that the stock price of target firms tends to fall over long periods well before a takeover attempt is announced. These firms may be disfavored by the market because they suffer from poor management. Takeovers of these firms can discipline managements and impose new corporate strategies in place of unsuccessful ones. These findings do not establish that all target firms are poorly managed, and they do not suggest that management efficiencies are the dominant source of gain from mergers and acquisitions. They do, however, suggest that poor management at target firms cannot be discarded as a motive for takeovers, and that restraints on takeover activity can protect inefficient managers from the discipline of the marketplace.

#### DANGERS OF MERGER AND ACQUISITION ACTIVITY

Currently, four economic criticisms of takeovers are frequently voiced. They are that: (1) takeovers increase concentration and have adverse effects on competition; (2) tax-motivated takeovers can generate economic losses for the economy; (3) takeovers can crowd productive business projects out of capital markets; and (4) takeovers can create incentives for management to concentrate on short-term performance to the detriment of long-term corporate investment.

# Effects on Competition and Concentration

There is no evidence that recent merger and acquisition transactions have caused anticompetitive price increases. The Department of Justice and the Federal Trade Commission engage in careful market-by-market analyses of mergers that raise a possibility of anticompetitive effects. These agencies have actively opposed mergers that have threatened to create anticompetitive market power. In addition, so as to assure continued competition in the marketplace, the antitrust enforcement agencies have required billions of dollars of divestitures in connection with large mergers and acquisitions.

Indeed, in order to contend that recent takeovers have been anticompetitive, critics would have to demonstrate that public and private enforcement of the antitrust laws has been inadequate. There is, however, no credible evidence that the antitrust laws have permitted business combinations that have resulted in any material lessening of competition. To the contrary, a recent study of the U.S. economy, conducted on a market-by-market basis, has found a widespread increase in competition between 1958 and 1980. In 1980 approximately three-quarters of economic activity occurred in effectively competitive product markets. About 20 percent of economic activity occurred in markets that are tightly oligopolistic, and only 5 percent occurred in markets dominated by a single firm. In contrast, in 1950, only about one-quarter of economic activity occurred in markets classified as competitive.

At the aggregate level, there is also no systematic evidence that merger and acquisition activity has, in any meaningful sense, caused a decrease in competition. Instead, the most recent data compiled by the Federal Trade Commission, and presented in Table 6-3, show that in the 5-year period from 1977 through 1981 concentration of assets in the nonfinancial sector fell for the 50, 100, 150, and 200 largest firms.

TABLE 6-3.—Concentration of assets in the nonfinancial sector, 1977-81
[Percent]

Asset size group		1978	1979	1980	1981
Top 50	22.7	22.3	21.9	22.4	22.2
Тор 100		29.2	28.9	29.4	28.8
Top 150	35.5	34.0	33.7	34.0	33.3
Top 200	38.3	37.7	37.4	37.7	36.9

Source: Federal Trade Commission (Bureau of Economics), based on data from Compustat and Internal Revenue Service "Statistics of Income."

The relative stability often found in aggregate concentration series is, however, deceiving because it masks substantial turnover in the rank and identity of the largest firms. For example, of the 500 largest industrial firms measured in terms of 1955 sales (as reported in Fortune magazine), only 262 remained in the top 500 in 1980. Thus, individual firms find the marketplace much more competitive than aggregate concentration data suggest: A large market share today is hardly a guarantee that a firm will be able to retain that share in the face of new competition, changing markets, and evolving technology.

# Tax-Motivated Mergers and Acquisitions

Takeovers can result in tax savings for the combined firm. For example, an acquisition may allow the combined company to make better use of tax loss carryforwards, as well as depreciation deductions and investment tax credits generated by new investment programs. Occasionally, a takeover bid will be accompanied by a proposal to reorganize the company or to spin off assets according to a plan designed to reduce the company's and stockholders' tax liabilities.

These tax incentives for mergers raise difficult policy issues. Because tax laws generally prevent the transfer of deductions and credits among corporations, as well as between corporations and their stockholders, and because tax losses are not refundable, some firms have an incentive to enter into transactions that would not occur but for their tax consequences. Some of these mergers may make little economic sense in the absence of their tax benefits. Accordingly, it is possible that the economy may, as measured by the efficient allocation of resources, be better off without these transactions.

On the other hand, for some companies such transactions provide a means of avoiding at least a portion of the adverse consequences associated with nontransferable tax benefits. To that extent, tax-motivated transactions may actually reduce the risk associated with certain investment strategies and thereby ameliorate some of the distortions induced by the current tax system.

The solution to the potential problems raised by tax-motivated transactions is not, however, to place restraints on mergers and acquisitions. Instead, consideration should be given to modifications of the tax laws that would allow greater transferability of deductions and credits. Such modifications will remove a source of distortions inherent in the current tax system and eliminate incentives to engage in takeovers that are primarily tax motivated.

## Effects on the Availability of Capital

Mergers and acquisitions are often financed by substantial borrowing. Concern is frequently raised that this borrowing, particularly for large takeovers, crowds out more productive applications of bank financing. This concern is unfounded.

As an initial matter, it should be recalled that takeover activity is productive and adds to aggregate wealth. In addition, takeover activity is, in essence, no different from other investment activities in which investors place money at risk by purchasing existing assets, such as real estate or shares of stock. Moreover, the borrowing required for corporate acquisitions does not impose a net new credit demand of equal magnitude on financial markets, because the proceeds are paid to stockholders of the acquired company who use the funds to make other investments or retire other loans. Thus, large portions of borrowings used to finance acquisitions flow back into the capital markets where they again finance credit needs.

The amount of borrowing used for large corporate transactions is also small relative to the size of the total capital market. During the first 7 months of 1984, a particularly active period for leveraged takeovers, loans for the purpose of completing large acquisitions amounted to about \$21.2 billion. This constitutes about 1.3 percent of the \$1.65 trillion of commercial bank loans and investments outstanding during the same period, and a substantially smaller percentage of aggregate borrowing in the economy. Such loans are unlikely to have more than minor, isolated, and transitory effects on interest rates or on the availability of capital.

# Effects on Long-Term Investment by Publicly Traded Companies

Recently, some critics have complained that takeovers reduce longterm business investment. They contend that the stock market undervalues long-term investments. Therefore, in order to prevent takeover attempts induced by allegedly low and "unreasonable" stock market valuations, it is said that managers of publicly traded firms avoid long-term investment projects.

Although this argument is presented by leading executives and prominent takeover attorneys, there is no credible evidence to support it. Proponents of this theory have presented no examples of long-term investments that have been forgone because of a fear of takeovers. Indeed, even if such examples could be found, they would not constitute a loss to the economy unless other firms did not have comparable incentives to make the allegedly forgone investments.

This criticism of takeovers is also internally inconsistent. If a company continually avoids long-term investment, eventually it becomes unable to compete with other firms that have engaged in the appropriate forms of long-term investment. Thus, if a company seeks to maintain its stock price valuation in order to avoid a takeover, then at some point it must engage in appropriate forms of long-term investment simply to remain competitive.

There is also substantial evidence suggesting that the stock market does not penalize investment simply because it is long term. The stock prices of many publicly traded companies reflect high priceearnings ratios because of the market's assessment that these companies' long-term investment programs may be successful. The fact that some companies' long-term investments do not enhance the value of their shares reflects the market's assessment of the likely outcome of the particular investment programs, and is not a criticism of the longterm nature of the program per se. In addition, there is substantial evidence that the market accurately reflects all publicly available information about a corporation's finances and strategic plans. Because research and development, capital expenditure, and other long-term investment information is publicly available, the evidence suggests that these data are accurately incorporated into the stock market's valuation of a corporation's shares along with other publicly available information describing a corporation's prospects.

#### REGULATING BIDDER TACTICS

Recent calls for regulation of bidder tactics in takeover contests are based on claims that some tactics are coercive, and that they fail to allow stockholders adequate time to inform themselves about the bidder's offer. Critics also claim that target managements do not have adequate time to mount defenses against proposed takeovers. In addition, some critics question whether takeovers are, on the whole, beneficial for the economy. These critics suggest that takeovers should be subject to regulations that would make them more expensive and difficult to complete.

There is, however, little credible economic evidence that tactics used by bidders in takeover contests should be subject to further regulation. To the contrary, the available evidence is that any regulatory change that would increase the cost of mounting takeovers is likely to deter takeovers and thereby cause losses for the economy. Viewed from this perspective, proposals to increase regulation of bidder practices are not persuasive.

#### THE ECONOMIC CONSEQUENCES OF THE WILLIAMS ACT

Bidder practices are already subject to extensive regulation under the Williams Act. The Williams Act was adopted in 1968, partially in response to complaints about "Saturday Night Specials," takeover bids that were left open for a short period of time, often only a few days. Congress was concerned that stockholders had inadequate time to evaluate the merits of the proposed takeover bid. In response to this problem, regulations adopted pursuant to the Williams Act require that tender offers be open for a minimum of 20 business days. If an offer is oversubscribed, the offeror must purchase the shares on a pro rata basis, and cannot purchase them on a first-come-first-served basis. Accordingly, the Act ensures that tender offers are made on equal terms to all target company stockholders. In addition, the Williams Act requires that any person who acquires 5 percent of a company's shares make that fact public within 10 days, and disclose plans, if any, for the company in which the stock is acquired.

The Securities and Exchange Commission (SEC) has concluded that the Williams Act successfully provides stockholders with sufficient time to evaluate takeover proposals. In particular, the Commission has found that the 20-business-day minimum offering period has resulted in a negligible number of complaints from stockholders. Thus, it appears that the Act has successfully protected stockholders from whatever abuses might result from short offering periods.

The benefits that the Williams Act generates are not, however, achieved without costs. Since adoption of the Williams Act, takeovers have become more expensive for initial bidders because target managements have more time to mount takeover defenses or to find alternate purchasers. The Williams Act also limits bidders' ability to acquire toehold positions in target companies. These effects of the Williams Act are reflected in the higher premiums that bidders have been required to pay in order to complete takeovers. Estimates are that the Williams Act has increased the average cash tender premium paid to target stockholders from 32 percent before passage of the Act to 53 percent after the Act's passage and that these increased premiums have caused correspondingly lower returns to bidders. Because the Act has decreased the returns to initial bidders, it has likely

caused a decrease in the number of takeovers and a decrease in the gains resulting from takeover activity.

Therefore, although the Williams Act has benefited stockholders of companies that have, in spite of the additional costs imposed by the Act, become subject to takeover attempts, it has imposed two other sorts of costs on stockholders. First, stockholders in companies that would have received takeover bids but for the higher premiums induced by the Act have suffered losses measured by the value of the forgone premiums. Second, stockholders in companies that would have made takeover bids but for the Act's requirements have forgone the gains that would have resulted from the deterred transactions.

The increased premiums paid to target stockholders as a result of the Williams Act do not, however, represent an increase in aggregate national wealth. Instead, the premiums are simply a reallocation of the gains resulting from takeovers away from bidding company stockholders to target company stockholders. The losses caused by the Williams Act are, in contrast, real economic losses and represent wealth forgone as a result of beneficial transactions deterred by the Act. Therefore, unless society places greater value on the redistribution of gains to target stockholders than on aggregate wealth effects, the costs of the Williams Act, at the margin, currently appear to outweigh its benefits.

#### THE DEBATE OVER BIDDER TACTICS

Currently, much of the criticism of bidder tactics emanates from management groups concerned that their companies will become targets of takeover attempts. These managements claim that certain bidder tactics can coerce stockholders into tendering their shares, and that the minimum offering period under the Williams Act is too short.

"Two-Tier Offers"

The bidder practice most frequently criticized as coercive is the "two-tier" tender offer. In a two-tier offer, the bidder makes a uniform proposal to all target company stockholders. Typically, the proposal is to pay a higher price, in cash, for the first half of all securities tendered, and a lower price, in securities, for all remaining shares. Critics claim that two-tier offers can stampede stockholders into tendering their shares, even though they do not want to accept the offer as a whole, because stockholders are afraid that unless they subscribe to the high-valued front end of the offer they will be forced to accept the lower valued back end.

There is, however, no systematic evidence that two-tier offers have such a coercive effect, and there is substantial evidence that the market prevents such abuses from occurring. In particular, the market for takeovers is competitive and bidders who attempt to structure two-tier offers that result in a below-market price for the company's assets can expect to find themselves outbid by a superior offer with a premium closer to the target's actual market value.

Indeed, the SEC has found that, on average, there is no statistically significant difference between the blended premium offered in a two-tier bid (calculated as the weighted average of the higher valued front end and the lower valued back end of the offer) and the premium offered in single-tier bids. Moreover, data collected by the SEC show that in takeover battles between competing single-tier and two-tier bids the outcome of the contest is determined by the relative values of the competing offers. Thus, no single-tier bid has ever lost to a two-tier bid with a lower blended premium, despite the allegedly coercive effect of the two-tier bid.

In addition, two-tier tender offers can be desirable for target stock-holders and managements. SEC data show that two-tier offers are used in friendly takeovers about as often as they are used in hostile takeover attempts. There are at least two reasons that target stock-holders could prefer a two-tier bid. If a two-tier offer is properly structured, target stockholders who accept securities in the back end of the transaction may be able to defer tax due on the appreciated value of their shares. In addition, the acquirer may find that it is easier to finance the transaction by issuing securities for the back end than by borrowing funds from banks or through other financing mechanisms. If these savings induce the bidder to offer a higher blended premium, then the two-tier offer can also be beneficial for the target's stockholders.

# Minimum Offering Periods

Critics of bidder tactics also object to the 20-business-day minimum offering period provided under the Williams Act. They claim 20 business days is not sufficient time for management of the target firm to fend off the offer or to identify higher alternative bids.

The 20-business-day minimum offering period required under the Williams Act provides approximately a calendar month within which a target can mount a defense. A study of 183 takeovers between 1962 and 1980 involving firms listed on the New York and American Stock Exchanges found that approximately 26 percent of these contests involved multiple bidders. The current minimum offering period thus appears to provide ample time for many targets to find alternate bidders. In addition, longer minimum offering periods would probably generate more of the same costs that accompanied adoption of the Williams Act: They would increase the cost of takeovers, reduce the total number of takeovers, reduce the benefits generated by the takeover process, and increase the premiums paid to stockholders of

the fewer companies who receive offers. Such an outcome is not in the national interest because it reduces the aggregate gain from the takeover process and increases the resources spent on nonproductive bargaining over the allocation of these gains.

#### REGULATING DEFENSIVE TACTICS

The debate over defensive tactics is, in form and substance, quite different than the debate over bidder tactics. Some commentators suggest that a target's management should be allowed great latitude in fashioning defensive tactics against takeovers because management must protect stockholders against abusive bidder techniques. However, as just explained, there is little credible evidence that bidder tactics are abusive.

Instead, the more fundamental debate concerns when, if ever, a target management should be permitted to oppose a takeover that promises a significant premium to the corporation's stockholders. This question arises primarily because of the possibility that managements will attempt to maintain control over corporations despite the fact that stockholders would benefit by tendering their shares.

### CONSEQUENCES OF DEFENSIVE TACTICS

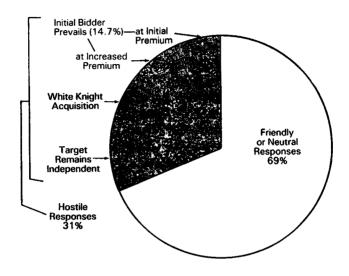
Chart 6-1 describes some of the consequences of target management opposition to takeover attempts. Between 1978 and 1983 there were a total of 429 tender offers involving publicly traded corporations. Sixty-nine percent of these offers were uncontested and 31 percent drew a hostile response.

From target stockholders' perspective, management opposition can improve the premium offered by the bidder either by inducing a higher bid from a "white knight" or by causing the initial bidder to increase its offer. Chart 6-1 shows that white knight bids and increased bids by initial bidders occur in 16.1 percent of all takeovers, or in about half of contested takeovers. In 6.5 percent of all takeovers (or about 21 percent of contested takeovers), managements' opposition has no effect on the identity of the prevailing bidder or on the premium paid. However, in 8.4 percent of all takeovers (or about 27 percent of contested takeovers) management succeeds in defeating the offer. In these cases target stockholders suffer substantial losses that various studies have estimated as ranging from 15 to 52 percent of the value that could have been obtained had the offer not been defeated.

Accordingly, from a target stockholder's perspective, it is significant to determine whether management is opposing a takeover in order to (1) start a bidding war or otherwise induce a higher price

Chart 6-1

# Target Management Responses to and Outcomes of Tender Offers, 1978-83



Note.—Based on 429 tender offers. Source: W.T. Grimm & Co.

for the company's shares, or (2) defeat a profitable bid so that the company remains independent and management retains its position. In the first case, management opposition can benefit stockholders so long as the opposition does not become so vigorous that it drives away all bidders. In the second case, if the opposition succeeds, it is almost certain to harm stockholders' financial interests by causing a substantial decline in the value of their shares.

Management's decision to oppose a tender offer is not, however, a random event. A study of 105 cash tender offers between 1972 and 1977 found that in contested takeovers the average potential wealth gain to management of the target company is significantly lower than in uncontested takeovers. This result occurs, in part, because target managements that oppose takeovers tend to own less stock in their companies than managements that elect not to contest takeovers. A recent survey of senior executives has also found that some executives place stockholder interests secondary to their personal interests in the

survival of the corporation in which they have invested so much of their professional careers. This finding suggests that some managements do in fact respond to takeover bids with tactics designed to serve management's own interest, and not stockholders'.

However, even successful defensive tactics that increase target stockholders' premiums merely transfer wealth and do not increase aggregate wealth (except, perhaps, in instances when defensive tactics attract a higher white knight bid). Such contests over the allocation of gains are nonproductive from society's perspective. Indeed, if defensive tactics deter takeovers that would otherwise be beneficial, they can cause net losses for the economy as a whole. Accordingly, any defensive technique, even if calculated to increase the premium offered to target stockholders, runs the risk of causing a loss for the economy.

This risk is not, however, a sufficient basis on which to ban defensive tactics. There is no economically correct solution to the question of how the gains resulting from acquisitions should be distributed among bidders and targets. Bidders can validly claim that their activities generate the gains resulting from takeovers and that they are therefore entitled to those gains. However, targets can claim that takeover gains are not attainable without their assets, and that they have a right to negotiate for as much of those gains as they can capture. Moreover, a rule that requires stockholders to sell their shares simply because a bid at a premium has been made would not be good public policy. No such requirements are placed on privately held firms, and if there is no market failure in the governance of publicly traded firms, then there is no principled basis on which to prevent stockholders in target firms from negotiating over a share of those gains, even at the risk of losing some of those gains.

#### THE DEFINITION OF ABUSIVE DEFENSIVE TACTICS

The distinction between defensive tactics designed to increase bid premiums and those designed to defeat tender offers suggests a principled basis for distinguishing between abusive and nonabusive defensive tactics. As an initial matter, if a defensive tactic is explicitly adopted or sanctioned by the corporation's stockholders, it should not be considered abusive, regardless of the extent to which it might deter takeovers. Stockholders are responsible for acting in their own best interests. They have strong incentives to adopt whatever defensive measures they believe will maximize the value of the corporation's shares. Some corporations' stockholders might adopt anti-takeover measures including, for example, staggered elections for positions on the board of directors, super-majority requirements for the approval of mergers, or equal price provisions to deter two-tier

offers. Other corporations' stockholders may refuse to adopt any anti-takeover measures and may even take steps designed to invite takeover bids. Indeed, in some publicly traded corporations, large stockholders have specifically sought to induce takeover bids so as to increase the value of their holdings.

The market can be expected to respond to stockholders' decisions about defensive tactics by either depressing the price of the company's shares (if the tactics make takeovers less likely or reduce the expected value of the premium) or by increasing the price of the company's shares (if the tactics make takeovers more likely or increase the expected value of the premium). Thus, the market is composed of a variety of companies with a range of takeover policies, and the implications of each company's takeover policy will be reflected in the market valuation of each firm's shares.

Defensive tactics are abusive only when management exercises its delegated discretion so as to promote management interests over stockholder interests. If a defensive tactic is used to increase the target stockholders' share of gains, but not to defeat the offer, the defensive tactic is being applied to promote the target stockholders' interests and should not be considered abusive. In contrast, a defensive tactic that seeks to prevent a takeover at a premium harms target stockholders by depriving them of the opportunity to accept the bidder's offer. On average, such defensive tactics also prevent bidders from realizing the benefits that result from takeovers. Accordingly, these tactics can be considered abusive and are a legitimate subject of concern to policymakers.

In many instances it will be difficult to distinguish whether a particular tactic is abusive. Indeed, as explained below, many commonly criticized defensive tactics have quite complex effects and cannot be labeled as abusive in all situations. Blanket rules to prohibit certain defensive tactics can therefore have unintended and undesirable side effects. Moreover, it is generally possible for managements to devise new strategies that circumvent specific statutory prohibitions. When potential abuses exist, case-by-case consideration of management defensive tactics by the courts is therefore likely to be a more effective remedy than an inflexible legislative stricture.

#### DEFENSIVE TACTICS FREQUENTLY CRITICIZED AS ABUSIVE

Targeted share repurchases ("greenmail") and severance contracts triggered by successful takeovers ("golden parachutes") are frequently criticized as abusive and are often the subject of debate. These practices are not, however, invariably abusive and are not proper subjects for Federal regulation.

#### Targeted Share Repurchases

Targeted share repurchases occur when a company buys back its stock from a large shareholder at a price greater than that at which the stock trades on the market. Often the stockholder whose shares are repurchased has proposed a takeover or other transaction that is opposed by the target's management. Critics of these repurchases claim the practice is abusive because management is using the corporation's resources to buy out a potential bidder and thereby preclude stockholders from earning a premium for their shares. Critics also claim the practice is unfair because it does not give all stockholders an equal opportunity to tender their shares. Indeed, repurchases can be used by target managements to "buy-off" potential acquirers and to entrench management's position at stockholders' expense. In many situations such repurchases can be abusive. This does not, however, establish that repurchases are invariably abusive or that they should be regulated by Federal law.

Targeted share repurchases have complex effects on the stock price of the repurchasing company. The announcement that a large blockholder has acquired a position causes a significant increase in the price of the target company's shares. The stock price increases because the acquisition signals a potential takeover of the target firm. A subsequent announcement of a repurchase causes a significant decline in the price of the target company's shares because it signals the withdrawal of a potential bidder and because the premium paid dilutes the value of remaining stockholders' equity in the firm.

The evidence regarding the net effect of such repurchases on the price of the target's shares, measured from the initial acquisition through to the repurchase, is mixed. Some studies conclude that stockholders reap substantial and statistically significant benefits over the period spanning the initial acquisition and subsequent repurchase. An examination of the question by the SEC has, however, found statistically insignificant evidence that stockholders suffer small losses over this period. SEC data also show that companies that engage in targeted share repurchases are often either acquired, recapitalized, or involved in management changes following the repurchase. Because a repurchase can act as a signal that the corporation is vulnerable to takeover attempts, the investment leading to the repurchase may therefore be a valuable stimulus for more fundamental and beneficial corporate changes.

.Targeted share repurchases can also be beneficial because they can reduce the expected cost of takeover attempts, thereby increasing the number of such attempts and the number of takeovers. To the extent that the prospect of repurchases increases the volume of beneficial

takeover activity, repurchase premiums can be beneficial for the economy as a whole.

Thus, although there are situations in which repurchases can be abusive, there are also situations in which repurchases are part of a sequence of events that is beneficial for stockholders. Accordingly, an across-the-board ban on targeted share repurchases would be overly broad, and it appears more reasonable to allow the merits of controversial repurchases to be judged on a case-by-case basis by the courts. Moreover, even if the Federal Government sought to prohibit repurchases, the prohibition could easily be evaded. Companies could, for example, trade assets or issue new and complex securities in return for a large stockholder's equity position. Unless the values of these assets and securities were readily ascertainable, it would be most difficult to determine whether the company paid a premium to the large stockholder who is bought out. In addition, corporations that want to ensure that they are not subject to demands for targeted share repurchases can adopt charter amendments prohibiting such transactions. Large New York Stock Exchange traded corporations have recently adopted such amendments. Corporations thus already have it within their power to protect themselves against whatever abuses they perceive in targeted share repurchases and Federal Government regulation can add little to corporations' ability to protect themselves. Indeed, as explained below, it is preferable to allow individual companies to decide whether and how they want to protect themselves than to have the Federal Government dictate an inflexible nationwide policy.

#### Severance Contracts

Another controversial tactic used by defending managements is the granting of lucrative severance agreements that take effect in the event of a change in corporate control. Critics of these "golden parachutes" claim they represent an attempt by target management to protect its own interests at stockholder expense. Defenders of the practice claim that the contracts give management the security it needs in order to negotiate the best possible price for the target's shares, without regard to management's concerns over its own job security.

The available evidence on the effects of these severance contracts is inconclusive. A study of 90 companies that have adopted such contracts shows a small, statistically insignificant positive effect on stock prices. Moreover, the Deficit Reduction Act of 1984 imposes substantial tax burdens on certain severance contracts. The market has not yet had an opportunity to respond fully to these new tax law provisions, and it is too soon to be able to assess the impact of this legislation on takeover-related severance agreements.

In addition, even if the Congress sought to prohibit severance contracts adopted while a takeover bid is pending, firms could readily avoid that prohibition by entering into the contracts prior to announcement of a tender offer. A recent survey of 560 of the Fortune top 1,000 companies showed that about 25 percent already have some form of takeover-related severance agreements with senior management. Indeed, the labor market for senior executives may in some situations require that senior managers be offered takeover-related severance agreements, just as sports stars negotiate "no-cut" and "no-trade" contracts with athletic teams.

Federal regulation of takeover-related severance contracts would thus not have any clear benefits for stockholders or for the economy at large. In addition, such regulations would be difficult to enforce and would constitute a major intrusion into an area that is traditionally subject primarily to State regulation.

#### REMEDIES OTHER THAN FEDERAL LEGISLATION

In addition to these two examples of frequently criticized defensive tactics, there are many other techniques that managements use in order to fend off takeovers. Each of these techniques can be judged by the same criteria applied to repurchases and severance contracts: If they are approved by stockholders, or if they are reasonably calculated to result in an increased expected premium for stockholders, then they are not abusive. However, because a given defensive tactic can often be used both for the purpose of defeating an offer as well as for the purpose of inducing a higher bid, each controversial application of a defensive technique is best judged on a case-by-case basis by the courts, and not under blanket prohibitions established by Federal regulations. Moreover, stockholders already have available to them many avenues of recourse that may be more effective remedies for management misconduct than Federal legislation.

### Stockholder Suffrage

Many experts have long been pessimistic about stockholders' ability to oppose management initiatives. Much of this pessimism is rooted in the view that stockholders, as a group, have interests that are too diffuse to make it reasonable for them to band together to oppose management proposals. Recent developments, however, suggest that this situation is changing and that stockholders potentially have a more powerful voice in corporate governance than previously thought.

According to the SEC, 20 institutional investors in 1978 owned more than 10 percent of the total value of publicly held shares. More recent data show that institutional investors own approximately 36 percent of the voting stock of companies listed on the New York

Stock Exchange. When the holdings of certain trusts and investment funds are added to the total, institutions have the ability to influence or control about 50 percent of the voting power represented by shares traded on the New York Stock Exchange.

A recent study of the distribution of stockholder interests in 511 large corporations also suggests that voting power in larger corporations is not as diffuse as commonly believed. On average, the five largest stockholders in these 511 corporations control about 25 percent of the corporation's shares, and the 20 largest stockholders control about 38 percent of the corporation's shares. Thus, on average, the five largest stockholders in these corporations need to obtain the agreement of stockholders controlling only one-third of the remaining shares in order effectively to control the corporation. A coalition of the 20 largest holders, on average, would need cooperation from stockholders controlling only about one-fifth of the remaining shares in order to control the corporation.

In addition, the SEC has found a trend away from the "Wall Street Rule"—institutional investors' traditional practice of expressing displeasure solely by selling their shares—and a move toward more active participation by institutions in corporate governance. At least two major institutional stockholders have initiated litigation against corporations that have engaged in targeted share repurchases and many institutional stockholders frequently vote against anti-takeover proposals. In at least one instance, institutional investors proved instrumental in requiring that management of a major firm seeking to adopt anti-takeover amendments to the corporate charter abandon these attempts and instead appoint a committee of outside directors to consider takeover proposals. Soon thereafter, the corporation was the object of a takeover that afforded stockholders a handsome premium.

Stockholder self-help therefore has the potential to be a more effective check on management abuse of defensive tactics. A significant benefit of stockholder self-help is that it does not require that the government, either at the Federal or State level, impose restraints on what is essentially a private contractual relationship between a corporation's stockholders and its management. Instead, by relying on self-help mechanisms, each corporation will be able to select the governance structure most suited to its particular circumstances and no single rule will be imposed by law on all companies.

Under such a regime, the capital markets can be relied upon to generate a distribution of governance schemes and associated stock price values. Some companies will have governance rules that make them difficult hostile takeover targets, while others will be relatively easy to purchase with a hostile bid. The stock prices of individual companies will incorporate the effects of each company's defensive posture. If stockholder suffrage is an effective check on management conduct, this situation is far preferable to a world in which all companies are required to adopt identical takeover defense policies.

#### Improved Executive Compensation Contracts

The potential for abusive management conduct can also be diminished by implementing incentives that align management interests more closely with stockholders'. As previously noted, managements of publicly traded corporations tend to oppose takeover bids when the takeover is relatively harmful to management's private financial interests. Typically, this occurs when management has a relatively small equity interest in the company. This problem can be reduced by giving management a stronger private incentive to maximize the value of the corporation's shares in takeover contests. Stock options and incentive contracts that pay management a percentage of the premium offered in takeover contracts are two examples of private contract mechanisms that may be able to resolve large parts of the defensive tactics debate.

#### Recourse to the Courts

Stockholders also have recourse to the courts if they believe management has abused its delegated discretion. In evaluating management's response to a takeover bid, courts typically apply the "business judgment rule." Under that rule, a board of directors historically "enjoys a presumption of sound business judgment, and its decisions will not be disturbed if they can be attributed to any rational business purpose. A court under such circumstances will not substitute its own notions of what is and what is not sound business judgment."

The great latitude afforded to management under the business judgment rule has often made it difficult for shareholders to persuade courts that management has behaved unreasonably in opposing a takeover bid. Recently, however, the Second Circuit Court of Appeals, a particularly authoritative Federal court in matters of corporate governance, has tightened its interpretation of the business judgment rule and has recognized that defensive measures adopted in the course of a takeover battle can involve a measure of management self-interest. The court therefore concluded that, under certain circumstances, defensive tactics adopted in a takeover contest are to be evaluated under a stricter fairness standard that gives substantially less deference to target management judgments. Other courts have also indicated increased sensitivity to problems arising in takeover situations. The state of the law is currently in flux, but it now seems possible that the business judgment rule will, through the natural evolution of

the case law, provide a more powerful deterrent against perceived takeover abuses than it has in the past.

#### The Economic Value of Federalism

Corporate law has traditionally been the subject of State rather than Federal regulation. For many years, State regulation of corporate governance has been criticized by some commentators as the result of a race to the bottom, in which States compete with each other for the revenues generated by corporate charters. According to this theory, decisions about the legal domicile of a corporation are primarily under management's control, and the States compete with each other by fashioning corporation codes that favor management interests over stockholder rights. The States that adopt laws most favorable to management attract the largest number of corporations and win the race to the bottom. From this perspective, State corporation law fails adequately to protect stockholder rights.

The opposing view is that corporations choose domiciles that maximize the value of the firm's shares. Accordingly, competition among the States gives the States an incentive to adopt policies that are beneficial for stockholders. If this view is correct, competition among the States is to be preferred to Federal regulation of corporate charters that would inhibit experimentation and competition in the design of superior governance techniques.

This debate cannot be resolved on a theoretical level, and it is instead necessary to consider the empirical evidence regarding the stock price effects of changes in corporate domicile. The available evidence suggests that changes in corporate domicile are correlated with increased stock price valuations. This finding is consistent with the competitive model of federalism, not with the race to the bottom, which predicts decreased stock prices as a consequence of changes in domicile that elevate management interests over stockholders'. Accordingly, competition among the States appears to be beneficial, and there is no systematic evidence in support of the theory that competition among the States has harmed stockholders.

Because the evidence is that deference to the States in matters of internal corporate governance is beneficial, there is a sound economic rationale for continued reliance on the principle of federalism in the market for corporate control. Of course, if the nature of competition among the States changes, and States that charter a significant percentage of publicly traded corporations adopt protectionist statutes or interpretations of law that promote managements' ability to abuse delegated discretion, then the limits of federalism as applied to the market for corporate control may have to be reconsidered.

#### CONCLUSION

The public has a legitimate interest in the continued strength and vitality of the market for corporate control. Publicly traded corporations account for a substantial portion of the Nation's wealth and productive capacity, and it is important that the management of these firms not be insulated from competition in the market for corporate control. The available evidence is that the operation of this market has generated net benefits for the economy. The evidence also suggests that abusive practices in the market for corporate control are limited largely to tactics employed by target managements who, in opposing takeover bids, defeat or deter tender offers at the expense of their stockholders and the economy.

Remedies for these abuses can often be fashioned within the corporation itself. Stockholders also have recourse to the courts which have recently indicated a willingness to subject target management conduct to closer scrutiny. In addition, abusive conduct by corporate management has traditionally been a subject of State regulation; the available evidence indicates that federalism has served stockholders well. Accordingly, further Federal regulation of the market for corporate control would be premature, unnecessary, and unwise.

# Appendix A REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 1984



#### LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS, Washington, D.C., December 31, 1984.

#### MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1984 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.

Sincerely,

WILLIAM A. NISKANEN, Member
WILLIAM POOLE, Member

#### Council Members and their Dates of Service

Name	Position	Oath of office date	Separation date
Edwin G. Nourse	Chairman	August 9, 1946	November 1, 1949.
Leon H. Keyserling			
con it. Reyselinig	Acting Chairman		
	Chairman		
iohn D. Clark			
OIII D. Clark	Vice Chairman		February 11, 1953.
Day Dlavek			
Roy Blough			January 20, 1953.
Robert C. Turner		September 8, 1932	December 1, 1956.
Arthur F. Burns			December 1, 1930.
Neil H. Jacoby			
Valter W. Stewart			
Raymond J. Saulnier		April 4, 1955	
	Chairman		
oseph S. Davis	Member		
Paul W. McCracken	Member		
(arl Brandt			
Henry C. Wallich	Member		
Walter W. Heller			
lames Tobin	Member		
Kermit Gordon	Member	January 29, 1961	December 27, 1962
Sardner Ackley	Member		
	Chairman		
lohn P. Lewis			
Otto Eckstein			February 1, 1966.
Arthur M. Okun			
with the order than the same	Chairman		
James S. Duesenberry			
Merton J. Peck			
Warren L. Smith			
Paul W. McCracken			
Hendrik S. Houthakker			
Herbert Stein			
herbert Stem			
Fora Calaman	Chairman		March 26, 1973.
Ezra Solomon			August 15, 1973.
Marina v.N. Whitman			
Gary L. Seevers		July 23, 1973	April 15, 1975.
William J. Fellner			February 25, 1975.
Alan Greenspan			
Paul W. MacAvoy			
Burton G. Malkiel			
Charles L. Schultze			
William D. Nordhaus			
Lyle E. Gramley			May 27, 1980.
George C. Eads			
Stephen M. Goldfeld			
Murray L. Weidenbaum			August 25, 1982.
Jerry Ľ. Jordan	Member,	July 14, 1981	July 31, 1982.
William A. Niskanen			
Martin Feldstein	Chairman		
William Poole		December 10, 1982	

## Report to the President on the Activities of the Council of Economic Advisers During 1984

The Council of Economic Advisers was established by the Employment Act of 1946 to provide economic analysis and advice to the President and thus to assist in the development and implementation of national economic policies. The Council also advises the President with regard to decisions on other matters that affect the health and operations of the Nation's economy.

Martin S. Feldstein resigned as Chairman to return to Harvard University as Professor of Economics. Upon his departure, William A. Niskanen, the senior Council Member, assumed the duties of the Chairman. William Poole continued to serve as a Council Member in 1984. Mr. Niskanen is on leave from the University of California at Los Angeles where he is a Professor of Business Administration. Mr. Poole is on leave from Brown University where he is a Professor of Economics.

#### MACROECONOMIC POLICIES

As is its tradition, during 1984 the Council devoted much of its time to assisting the President in the formulation of broad economic policy objectives and the programs to carry them out. The development of economic assumptions and monitoring of current developments, under Mr. Poole, were of major interest. Monetary policy developments received especially close attention.

Mr. Poole chaired the interagency subcabinet forecasting group, consisting of representatives from the Department of the Treasury and the Office of Management and Budget, with participation by the Department of Commerce. He also chaired a Cabinet Council Working Group on Economic Statistics, and he presented several studies of macroeconomic policy issues before the Cabinet Council on Economic Affairs.

The Council continued its responsibility for developing with the Office of Management and Budget and the Department of the Treasury the economic assumptions that are presented to the President.

#### MICROECONOMIC POLICIES

A wide variety of microeconomic issues received Council attention during the year. Mr. Niskanen chaired or participated in numerous Cabinet-level groups, such as the Cabinet Council on Economic Affairs dealing with such issues as international trade, agriculture, alternatives to Federal regulation, Federal housing programs, fuel economy standards, and employee pension legislation.

Mr. Niskanen also actively participated in Cabinet-level reviews of the Federal budget and the second-term economic policy agenda.

#### PUBLIC INFORMATION

The Council's Annual Report is the principal medium through which the Council informs the public of its work and its views. It is also an important vehicle for presenting and explaining the Administration's domestic and international economic policies. Distribution of the Report in recent years has averaged about 50,000 copies. The Council also assumes primary responsibility for the monthly Economic Indicators, a publication prepared by the Council's Statistical Office, under the supervision of Catherine H. Furlong. The Joint Economic Committee issues the Indicators, which has a distribution of approximately 10,000 copies. Information is also provided to members of the public through speeches and other public appearances by the Council Members.

#### ORGANIZATION AND STAFF OF THE COUNCIL

#### OFFICE OF THE CHAIRMAN

The Chairman is responsible for communicating the Council's views to the President. This duty is performed through discussions with the President and written reports on economic developments. The Chairman also represents the Council at Cabinet meetings and at many other formal and informal meetings of government officials. The Chairman exercises ultimate responsibility for directing the work of the professional staff.

#### COUNCIL MEMBERS

The two Council Members are responsible for all subject matter covered by the Council, including direct supervision of the work of the professional staff. Members represent the Council at a wide variety of interagency and international meetings and assume major responsibility for selecting issues for Council attention.

In practice, the small size of the Council permits the Chairman and Council Members to work as a team on most policy issues. There was, however, an informal division of subject matter among them in 1984. Mr. Poole assumed primary responsibility for domestic and international macroeconomic analysis, economic projections, and monetary and financial issues. Mr. Niskanen was primarily responsi-

ble for microeconomic and sectoral analysis, international trade questions, and regulatory issues.

#### PROFESSIONAL STAFF

At the end of 1984 the professional staff consisted of the Special Assistant, the Senior Statistician, 12 senior and staff economists, and 6 junior staff economists.

The professional staff and their special fields at the end of 1984 were:

William S. Haraf..... Special Assistant to the Council

#### Senior Staff Economists

Lincoln F. Anderson..... Macroeconomics

J. Hayden Boyd...... Transportation, Energy, and Environment

Roger D. Feldman ..... Health

Richard T. Freeman ...... International Finance
Marvin S. Goodfriend...... Money and Finance

Joseph A. Grundfest ...... Legal Matters and Regulation
Joel B. Slemrod ...... Public Finance and Taxation

Joe A. Stone...... International Trade

Robert L. Thompson..... Agriculture

Kathleen P. Utgoff...... Labor and Employment

Robert S. Villanueva..... Macroeconomics

Staff Economist

Randall S. Jones ...... International Trade

Statistician

Catherine H. Furlong ...... Senior Statistician

Junior Staff Economists

Alexander S. Berg ...... Macroeconomics

Ann M. Hillberg ...... Agriculture and Trade

Andrew N. Kleit...... Regulation and Transportation

Mark S. Lutz ...... International Finance and Macroeconomics

John F. Navratil ...... Public Finance and Financial Regulation

Thomas R. Rumbaugh ........ Trade and Public Finance

Catherine H. Furlong, Senior Statistician, continued to direct the Council's Statistical Office. Mrs. Furlong has primary responsibility for managing the Council's statistical information system. She supervises the publication *Economic Indicators* and the preparation of all statistical matter in the *Economic Report*. She also oversees the verifica-

tion of statistics in memoranda, testimony, and speeches. Natalie V. Rentfro and Linda A. Reilly assist Mrs. Furlong.

In preparing the *Economic Report* the Council relied upon the editorial services of Joseph Foote.

#### SUPPORTING STAFF

The Administrative Office of the Council of Economic Advisers provides general support for the Council's activities. Serving in the Administrative Office were Elizabeth A. Kaminski, Staff Assistant to the Council, and Catherine Fibich, Administrative Assistant.

The secretaries for the Council Members during 1984 were Patricia A. Lee and Alice H. Williams. Secretaries for the professional staff were Bessie M. Lafakis, Rosemary M. Rogers, Margaret L. Snyder, and Suzanne M. Tudor. Ciara A. Burnham assisted the support staff during the summer months.

#### **DEPARTURES**

The Council's professional staff are in most cases on leave of absence 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 resigned during the year and their subsequent affiliations were Jeffrey A. Frankel (University of California, Berkeley), Stephen K. Halpert (University of Miami), David R. Henderson (Naval Postgraduate School, Monterey), and Lawrence B. Lindsey (Harvard University). Geoffrey O. Carliner, Special Assistant to the Chairman, joined the National Bureau of Economic Research, Cambridge, Massachusetts.

Junior staff economists who resigned in 1984 were Kenneth A. Froot (University of California, Berkeley), Gail G. Ifshin (University of Maryland), William S. Milberg (Rutgers University), and Charles N. Schorin (Princeton University).

Research assistants who resigned in 1984 were Andrew G. Berg (Harvard University), Suzanne G. Greenspun (OECD, Paris), and Andrew R. Myers (Massachusetts Institute of Technology).

Support staff who resigned in 1984 were Carolyn L. Bazarnick, Patricia Byrne, Susan A. Lindsey, Georgia A. O'Connor, Barbara L. Severn, and Lillie M. Sturniolo.

# Appendix B STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION



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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:

P Preliminary.

-- Not available (also, not applicable).

#### NATIONAL INCOME OR EXPENDITURE

TABLE B-1.—Gross national product, 1929-84

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	Personal consumption expenditures						r'			ivate do			nt		
	Gross							No	nresider	Fixed inv	estment		lential		Change
Year or quarter	nation- al prod- uct	Total	Dura- ble goods	Non- dura- ble goods	Serv- ices	Total	Total	Total	Struc- tures	Pro- ducers' dur- able equip- ment	Total	Non- farm struc- tures	Farm struc- tures	Pro- ducers' dur- able equip- ment	in busi- ness inven- tories
1929 1933 1 <b>939</b>	103.4 55.8 90.9	77.3 45.8 67.0	9.2 3.5 6.7	37.7 22.3 <b>35</b> .1	30.3 20.1 <b>25.2</b>	16.2 1.4 <b>9.3</b>	14.5 3.0 8.8	10.6 2.4 5.9	5.1 1.0 2.0	5.5 1.4 <b>3.9</b>	3.9 .6 <b>2.9</b>	3.6 .5 2.7	0.2 .0 .1	0.1 .0 .1	1.7 1.6 .4
1940 1941 1942 1943 1944 1945 1946 1947 1948	125.0 158.5 192.1 210.6 212.4 209.8 233.1 259.5	71.0 80.8 88.6 99.4 108.2 119.5 143.8 161.7 174.7 178.1	7.8 9.7 6.9 6.5 6.7 8.0 15.8 20.4 22.9 25.0	37.0 42.9 50.8 58.6 64.3 71.9 82.7 90.9 96.6 94.9	26.2 28.2 31.0 34.3 37.1 39.6 45.3 50.4 55.3 58.2	13.1 17.9 9.9 5.8 7.2 10.6 30.7 34.0 45.9 35.3	10.9 13.4 8.1 6.4 8.1 11.7 24.3 34.4 41.1 38.4	7.5 9.4 6.0 5.0 6.9 10.1 16.9 23.0 26.3 24.4	2.3 3.0 1.9 1.4 1.9 2.8 6.9 7.7 9.0 8.7	5.2 6.4 4.1 3.7 5.0 7.3 9.9 15.3 17.3 15.7	3.4 4.0 2.2 1.4 1.3 1.5 7.4 11.4 14.9 13.9	3.2 3.6 1.9 1.2 1.1 1.4 6.7 10.4 13.7 12.8	22.22.1.1.5.7.9.8	.1 .1 .0 .0 .0 .2 .3 .3	2.2 4.5 1.8 6 -1.0 -1.0 6.4 5 4.7 -3.1
1950 1951 1952 1953 1954 1955 1956 1956 1957 1958	348.0 366.8 366.8	192.0 207.1 217.1 229.7 235.8 253.7 266.0 280.4 289.5 310.8	30.8 29.8 29.1 32.5 31.8 38.6 37.9 39.3 36.8 42.4	98.2 108.8 113.9 116.5 118.0 122.9 128.9 135.2 139.8 146.4	63.0 68.5 74.0 80.6 86.1 92.1 99.2 105.9 112.8 121.9	53.8 59.2 52.1 53.3 52.7 68.4 71.0 69.2 61.9 78.1	47.0 48.9 49.0 52.9 54.3 62.4 66.3 67.9 63.4 72.5	27.3 31.3 31.3 34.5 34.2 38.5 44.0 47.0 42.0 45.9	9.5 11.4 11.6 12.9 13.4 14.6 17.7 18.4 17.2 17.6	17.8 19.9 19.7 21.5 20.8 23.9 26.3 28.6 24.9 28.3	19.8 17.6 17.7 18.4 20.1 23.9 22.3 20.9 21.4 26.6	18.6 16.4 16.5 17.3 19.0 22.8 21.2 19.7 20.3 25.3	.8 .8 .8 .7 .6 .7 .7 .7	444445556	6.8 10.3 3.1 -4 -1.5 6.0 4.7 1.3 -1.5 5.7
1960	691.1 756.0 799.6 873.4 944.0	324.9 335.0 355.2 374.6 400.5 430.4 465.1 490.3 536.9 581.8	43.1 41.6 46.7 51.4 56.4 63.0 68.0 70.1 80.5 85.7	151.1 155.3 161.6 167.1 176.9 188.6 204.7 212.6 230.6 247.8	130.7 138.1 147.0 156.1 167.1 178.7 192.4 207.6 225.8 248.2	75.9 74.8 85.4 90.9 97.4 113.5 125.7 122.8 133.3 149.3	72.9 72.5 79.2 84.9 91.7 103.7 111.6 112.5 125.4 139.5	48.5 48.0 52.2 54.8 61.0 72.7 83.1 83.9 90.7 101.3	18.8 19.1 20.1 20.5 22.4 27.0 30.1 30.3 32.4 36.7	29.7 28.9 32.1 34.4 38.7 45.8 53.0 53.7 58.2 64.6	24.5 24.5 27.0 30.1 30.7 30.9 28.5 28.6 34.8 38.2	23.3 23.2 25.8 28.9 29.4 29.6 27.1 27.2 33.3 36.5	.6.7.6.7.7.6.7.7.6.7.	.5 .5 .6 .6 .7 .7 .9 1.0	3.0 2.3 6.3 6.0 5.6 9.9 14.1 10.3 7.9 9.8
1970 1971 1972 1973 1974 1975 1976 1977 1978	992.7 1,077.6 1,185.9 1,326.4 1,434.2 1,549.2 1,718.0 1,918.3 2,163.9 2,417.8	621.7 672.2 737.1 812.0 888.1 976.4 1,084.3 1,204.4 1,346.5 1,507.2	85.2 97.2 111.1 123.3 121.5 132.2 156.8 178.2 200.2 213.4	265.7 278.8 300.6 333.4 373.4 407.3 441.7 478.8 528.2 600.0	270.8 296.2 325.3 355.2 393.2 437.0 485.7 547.4 618.0 693.7	144.2 166.4 195.0 229.8 228.7 206.1 257.9 324.1 386.6 423.0	141.0 158.8 184.8 211.3 214.5 213.0 246.0 301.0 360.1 408.8	103.9 107.9 121.0 143.3 156.6 157.7 174.1 205.2 248.9 290.2	38.7 40.5 44.1 51.0 55.9 55.4 58.8 64.4 78.7 98.3	65.2 67.4 76.9 92.3 100.7 102.3 115.3 140.8 170.2 191.9	37.1 50.9 63.8 68.0 57.9 55.3 72.0 95.8 111.2 118.6	35.4 48.9 61.5 65.6 54.8 52.4 68.8 92.0 107.0 114.0	.6 .7 .7 .7 1.3 1.0 1.1 1.5 1.7	1.1 1.3 1.5 1.7 1.8 1.9 2.1 2.3 2.5 2.9	3.2 7.7 10.2 18.5 14.1 6.9 11.8 23.0 26.5 14.3
1980	2,631.7 2,957.8 3,069.3 3,304.8 3,661.3	1,668.1 1,849.1 1,984.9 2,155.9 2,342.3	214.7 235.4 245.1 279.8 318.4	668.8 730.7 757.5 801.7 858.3	784.5 883.0 982.2 1,074.4 1,165.7	401.9 484.2 414.9 471.6 637.3	411.7 458.1 441.0 485.1 580.4	308.8 353.9 349.6 352.9 426.0	110.9 135.3 142.1 129.7 150.3	197.9 218.6 207.5 223.2 275.7	102.9 104.3 91.4 132.2 154.4	98.1 99.8 86.6 127.6 149.3	1.8 1.3 1.5 1.0 1.1	3.0 3.2 3.3 3.6 4.0	-9.8 26.0 -26.1 -13.5 56.8
1982: 	l .	ļ	239.4 241.6 244.5 255.0	746.4 750.6 762.5 770.6	945.4 968.6 994.2 1,020.6	436.2 431.2 415.9 376.2	453.2 442.1 431.3 437.3	365.7 351.2 342.2 339.3	148.8 142.7 138.4 138.4	216.9 208.5 203.8 201.0	87.5 90.9 89.0 97.9	83.4 85.9 84.5 92.5	1.0 1.7 1.3 2.1	3.2 3.3 3.3 3.3	17.0 10.9 15.3 61.1
1983: 	3,173.8 3,267.0 3,346.6 3,431.7	2,070.4 2,141.6 2,181.4 2.230.2	259.4 276.1 284.1 299.8	775.2 796.9 811.7 823.0	1,035.8 1,068.6 1,085.7 1,107.5	405.0 449.6 491.9 540.0	447.9 469.0 496.2 527.3	334.6 339.3 353.9 383.9	130.4 125.6 126.2 136.6	204.2 213.6 227.8 247.3	113.3 129.8 142.3 143.4	108.9 125.3 137.7 138.7	1.0 .9 .9	3.4 3.5 <b>3.7</b> <b>3.8</b>	42.9 19.4 4.3 12.7
1984: 	3,553.3 3,644.7 3,694.6 3,752.5	2,276.5 2,332.7 2,361.4 2,398.6	310.9 320.7 317.2 324.7	841.3 858.3 861.4 872.1	1,124.4 1,153.7 1,182.8 1,201.8	623.8 627.0 662.8 635.5	550.0 576.4 591.0 604.3	398.8 420.8 435.7 448.9	142.2 150.0 151.4 157.5	256.7 270.7 284.2 291.4	151.2 155.6 155.3 155.4	146.4 150.5 150.1 150.2	.9 1.0 1.2 1.1	3.9 4.1 4.0 4.1	73.8 50.6 71.8 31.1

See next page for continuation of table.

#### TABLE B-1.—Gross national product, 1929-84—Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	Net exp	orts of go services	ods and	Gove	rnment ;	ourchases services	of goods	and		Percent from pr peri	ecedine
Year or quarter						Federal			Final	Gross	
real of quarter	Net exports	Exports	Imports	Total	Total	Nation- al defense	Non- de- fense	State and locat	sales	nation- al prod- uct	Final sales
1929	1.1 .4 1.2	7.0 2.4 4.6	5.9 2.0 3.4	8.8 8.2 13.5	1.4 2.1 5.2	1.2	3.9	7.4 6.1 8.3	101.7 57.4 90.5	6.6 -4.2 7.0	-5.6 5.3
1940 1941 1942 1943 1943 1944 1945 1946 1947 1948	1.5 .2 -1.9 -1.7 5 7.8	5.4 6.1 5.0 4.6 5.5 7.4 15.1 20.2 17.5 16.3	3.6 4.7 4.8 6.5 7.2 7.9 7.3 8.3 10.5 9.8	14.2 24.9 59.8 88.9 97.0 82.8 27.5 25.5 32.0 38.4	6.1 16.9 52.0 81.3 89.4 74.6 17.6 12.7 16.7 20.4	2.2 13.7 49.4 79.7 87.4 73.5 14.8 9.0 10.7 13.2	3.9 3.2 2.6 1.6 2.0 1.1 2.8 3.7 6.0 7.2	8.1 8.0 7.8 7.5 7.6 8.2 9.9 12.8 15.3 18.0	97.8 120.6 156.7 192.8 211.6 213.5 203.5 233.5 254.8 261.4	10.0 25.0 26.7 21.3 9.6 .9 —1.2 11.1 11.3 —.5	8.1 23.2 30.0 23.0 9.8 .9 -4.7 14.8 9.1 2.6
1950 1951 1952 1953 1954 1955 1956 1957 1958	4.4 3.2 1.3 2.5 3.0 5.3 7.3	14.4 19.7 19.1 18.0 18.7 21.0 25.0 28.1 24.2 24.8	12.2 15.3 15.9 16.7 16.2 18.0 19.8 20.8 21.0 23.4	38.5 60.1 75.6 82.5 75.8 75.0 79.4 87.1 95.0 97.6	18.7 38.3 52.4 57.5 47.9 44.5 45.9 50.0 53.9 53.9	14.0 33.5 45.8 48.6 41.1 38.4 40.2 44.0 45.6	4.7 4.8 6.5 8.9 6.8 6.0 5.7 5.9 8.3	19.8 21.8 23.2 25.0 27.8 30.6 33.5 37.1 41.1 43.7	279.7 320.5 344.8 366.3 368.4 394.1 417.0 442.6 451.2 482.2	10.9 15.5 5.2 5.4 .0 9.0 5.4 5.3 1.3 8.5	7.0 14.6 7.6 6.2 6 7.0 5.8 6.1 1.9 6.9
1960 1961 1962 1963 1964 1965 1965 1967 1966 1967	6.6 6.4 7.6 10.1 8.8 6.5 6.3 4.3	28.9 29.9 31.8 34.2 38.8 41.1 44.6 47.3 52.4 57.5	23.4 23.3 25.4 26.6 28.8 32.3 38.1 41.0 48.1 53.3	100.3 108.2 118.0 123.7 129.8 138.4 158.7 180.2 199.0 208.8	53.7 57.4 63.7 64.6 65.2 67.3 78.8 90.9 98.0 97.6	44.5 47.0 51.1 50.3 49.0 49.4 60.3 71.5 76.9 76.3	9.3 10.4 12.7 14.3 16.2 17.8 18.5 19.5 21.2 21.2	46.5 50.8 54.3 59.0 64.6 71.1 79.8 89.3 101.0 111.2	503.6 522.2 558.8 590.7 632.1 681.2 741.9 789.3 865.5 934.2	3.8 3.6 7.7 5.6 6.9 8.4 9.4 5.8 9.2 8.1	4.4 3.7 7.0 5.7 7.0 7.8 8.9 6.4 9.7 7.9
1970	4.1 .7 . 14.2 . 13.4 . 26.8 . 13.8 . 4.0	65.7 68.8 77.5 109.6 146.2 154.9 170.9 182.7 218.7 281.4	59.0 64.7 76.7 95.4 132.8 128.1 157.1 186.7 219.8 268.1	220.1 234.9 253.1 270.4 304.1 339.9 362.1 393.8 431.9 474.4	95.7 96.2 101.7 102.0 111.0 122.7 129.2 143.4 153.6 168.3	73.6 70.2 73.1 72.8 77.0 83.0 86.0 92.8 100.3 111.8	22.2 26.0 28.5 29.1 33.9 39.7 43.2 50.6 53.3 56.5	124.4 138.7 151.4 168.5 193.1 217.2 232.9 250.4 278.3 306.0	989.5 1,070.0 1,175.7 1,307.9 1,420.1 1,556.1 1,706.2 1,895.3 2,137.4 2,403.5	5.2 8.6 10.1 11.8 8.1 8.0 10.9 11.7 12.8 11.7	5.9 8.1 9.9 11.2 8.6 9.6 9.6 11.1 12.8 12.4
1980 1981 1982 1983 1984 P.	. 28.0 19.0 - 8.3	338.8 369.9 348.4 336.2 363.7	314.8 341.9 329.4 344.4 429.9	537.8 596.5 650.5 685.5 748.0	197.0 228.9 258.9 269.7 295.5	131.2 153.7 179.5 200.5 221.5	65.9 75.2 79.4 69.3 74.0	340.8 367.6 391.5 415.8 452.4	2,641.5 2,931.7 3,095.4 3,318.3 3,604.4	8.8 12.4 3.8 7.7 10.8	9.9 11.0 5.6 7.2 8.6
1982: 	. 35.5 6.6	359.4 366.3 346.3 321.7	331.7 330.8 339.7 315.4	630.9 633.7 656.3 681.0	249.8 245.0 261.6 279.4	168.4 175.3 183.3 191.0	81.4 69.7 78.2 88.4	381.1 388.7 394.7 401.6	3,043.1 3,072.1 3,095.5 3,170.8	—.2 4.7 2.5 3.9	4.6 3.9 3.1 10.1
1983: 	-6.5 -16.4	328.1 342.0	308.9 334.5 358.4 375.9	678.8 682.2 689.8 691.4	273.0 270.5 269.2 266.3	194.7 199.3 200.9 207.2	78.3 71.3 68.3 59.1	405.8 411.6 420.6 425.1	3,216.8 3,286.4 3,350.9 3,419.0	8.5 12.3 10.1 10.6	5.9 8.9 8.1 8.4
1984: 	58.7 90.6	362.4 368.6	421.1 459.3	704.4 743.7 761.0 782.7	267.6 296.4 302.0 316.1	213.4 220.8 220.3 231.4	54.2 75.6 81.7 84.6	436.8 447.4 458.9 466.6	3,479.5 3,594.1 3,622.8 3,721.4	14.9 10.7 5.6 6.4	7.3 13.8 3.2 11.3

<sup>&</sup>lt;sup>1</sup> Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here. Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-2.—Gross national product in 1972 dollars, 1929-84
[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

		Personal consumption expenditures					Gross private domestic investment									
		<del>                                     </del>	1							Fixed inv	estment				<u> </u>	
Year or	Gross national	1			Ì		l	No	nresiden	tial		Resid	ential		Change in	
quarter	product	Total	Durable goods	Non- durable goods	Services	Total	Total	Total	Struc- tures	Produc- ers' durable equip- ment	Total	Non- farm struc- tures	Farm struc- tures	Produc- ers' durable equip- ment	bust- ness inven- tories	
1929 1933 1939	315.7 222.1 319.8	215.1 170.5 219.8	20.9 10.7 18.6	98.1 82.9 115.1	96.1 76.9 86.1	55.8 8.4 33.6	51.2 13.2 32.0	37.5 10.4 20.9	21.1 5.0 8.7	16.4 5.5 12.1	13.7 2.8 11.1	13.0 2.5 10.4	0.6 .2 .6	0.1 .1 .1	4.6 <b>4.9</b> 1.6	
1940 1941 1942 1943 1944 1945 1946 1947	400.4 461.7 531.6 569.1 560.4 478.3 470.3 489.8	229.9 243.6 241.1 248.2 255.2 270.9 301.0 305.8 312.2 319.3	14.4 25.4 30.1	119.9 127.6 129.9 134.0 139.4 150.3 158.9 154.8 155.0 157.4	102.8 106.3 116.7 120.9	44.5 55.8 29.5 18.1 19.7 27.7 70.9 70.0 82.1	38.3 43.8 24.3 18.0 22.0 31.4 58.7 70.2 76.6	25.8 30.4 17.6 14.0 18.7 27.6 42.1 48.9 51.1	17.4   18.4	15.8 18.5 10.9 9.8 13.2 19.2 23.2 31.5 32.6 28.1	12.5 13.3 6.7 4.0 3.4 16.6 21.3 25.6	11.6 12.3 6.0 3.5 3.0 3.4 15.3 19.7 23.8	.4 .3 1.1 1.3	.1 .1 .0 .0 .1 .2 .3 .3	6.2 12.0 5.2 .1 -2.3 -3.6 12.2 2 5.5	
1949 1950 1951	492.2 534.8 579.4	337.3 341.6	42.6 39.1	161.8 165.3	126.5 132.9 137.2	65.4 93.5 93.9	69.8 83.0 80.2	46.0 50.0 52.9	17.9 19.2 20.7	28.1 30.8 32.2 31.5 33.7	25.6 23.8 33.0 27.3	22.1 31.3 25.7	1.5 1.4 1.3	.3	10.6 13.7	
1952 1953 1954 1955 1956 1957 1958	600.8 623.6 616.1 657.5 671.6 683.8 680.9 721.7	350.1 363.4 370.0 394.1 405.4 413.8 418.0 440.4	38.0 42.1 42.5 51.1 48.8 48.6 45.3 50.7	171.2 175.7 177.0 185.4 191.6 194.9 196.8 205.0	140.9 145.6 150.5 157.6 165.0 170.3 175.9 184.8	83.0 85.3 83.1 103.8 102.6 97.0 87.5 108.0	78.7 83.8 85.3 96.1 96.8 95.5 89.3 100.9	52.1 56.3 55.4 61.3 65.4 66.2 59.3 63.6	20.6 22.6 23.6 25.4 28.3 28.4 26.8 27.4	31.5 33.7 31.8 35.9 37.0 37.8 32.5 36.2	26.6 27.5 29.9 34.8 31.5 29.2 30.0 37.4	25.1 26.1 28.5 33.5 30.0 27.8 28.6 35.9	1.2 1.2 1.1 .9 1.0 1.0 .9	.4	4.3 1.5 -2.2 7.7 5.8 1.5 -1.8 7.0	
1960	800.3 832.5 876.4 929.3 984.8 1,011.4 1,058.1	452.0 461.4 482.0 500.5 528.0 557.5 585.7 602.7 634.4 657.9	51.4 49.3 54.7 59.7 64.8 72.6 78.4 79.5 88.3 91.8	208.2 211.9 218.5 223.0 233.3 244.0 255.5 270.5 277.3	192.4 200.2 208.8 217.8 229.8 240.9 251.8 263.7 275.6 288.8	104.7 103.9 117.6 125.1 133.0 151.9 163.0 154.9 161.6 171.4	101.2 100.9 109.7 117.5 125.9 140.1 146.2 142.7 152.6 160.4	66.9 66.7 72.0 75.1 82.7 97.4 108.0 105.6 109.5 116.8	29.5 30.2 31.6 31.9 34.4 40.6 43.4 42.0 42.8 45.0	37.4 36.5 40.4 43.1 48.3 56.8 64.5 63.6 66.8 71.8	34.2 34.3 37.7 42.5 43.1 42.7 38.2 37.1 43.1 43.6	32.9 32.8 36.3 40.9 41.5 41.2 36.6 35.4 41.3	.8 1.0 .9 .9 .9 .8 .9	.5 .6 .6 .7 .7 .8 .8 .9	3.5 3.0 7.8 7.5 7.1 11.8 16.8 12.2 9.0 11.1	
1970 1971 1972 1973 1974 1975 1976 1977 1978	1,085.6 1,122.4 1,185.9 1,254.3 1,246.3 1,231.6 1,298.2		89.1 98.2 111.1 121.3 112.7 126.6 138.0 146.8 147.2	283.7 288.7 300.6 307.4 302.5 307.5 321.9 333.4 344.4 353.1	299.3 309.9 325.3 339.2 348.0	158.5 173.9 195.0 217.5 195.5 154.8 184.5 214.2 236.7 236.3	154.8 165.8 184.8 200.4 183.9 161.5 176.7 200.9 220.7	113.8 112.2 121.0 138.1 135.7 119.3 125.6 140.3 158.3 169.9	43.9 42.8 44.1 47.4 43.6	69.9 69.3 76.9 90.7 92.1 81.1 86.1 99.9 113.7 120.8	41.0 53.7 63.8 62.3 48.2 42.2 51.2 60.7 62.4 59.1	39.2 51.6 61.5 59.9 45.3 39.8 48.7 57.9 59.5	.6 .7 .7 .6 1.1 .8 .8 1.0	1.1 1.3 1.5 1.7 1.7 1.6 1.7 1.8	2.0	
1980 1981 1982 1983 1984 *	1,475.0	931.8 950.5 963.3 1,009.2 1,062.6	137.5 140.9 140.5 157.5 177.9	355.6 360.8 363.1 376.3 394.2	438.8 448.8 459.8 475.4 490.6	208.5 230.9 194.3 221.0 289.7	212.9 219.6 204.7 224.6 265.5	165.8 175.0 166.9 171.0 205.2	48.8 53.2 53.3 49.2 56.9	117.0 121.8 113.5 121.8 148.3	47.1 44.5 37.9 53.7 60.3	44.2 42.0 35.3 51.2 57.6	.8 .5 .6 .4		-4.4 11.3 10.4 3.6 24.2	
1982: 	1.480.5	953.7 958.9 964.2 976.3	138.5 138.8 139.3 145.2	360.5 362.0 363.7 366.0	454.7 458.1 461.2 465.1	204.7 200.4 194.3 177.8	211.4 204.5 200.7 202.4	175.2 166.9 163.9 161.5	55.4 53.7 52.4 51.9	119.8 113.2 111.5 109.7	36.2 37.6 36.8 40.8	33.9 35.0 34.4 38.1	.4 .7 .5	1.9 1.9 1.9 1.9	-6.7 -4.0 -6.4 -24.6	
 	1,491.0 1,524.8 1,550.2 1,572.7	982.5 1,006.2 1,015.6 1,032.4	146.8 156.2 159.6 167.2	368.8 374.9 378.5 383.2	466.8 475.1 477.6 482.0	191.3 212.6 230.6 249.5	207.8 218.7 229.8 242.2	161.6 165.3 172.6 184.5	49.0 48.1 48.3 51.4	112.5 117.2 124.3 133.1	46.2 53.4 57.2 57.8	43.8 51.0 54.7 55.2	.4 .4 .4	2.0 2.1 2.1 2.2	-16.5 6.1 .9 7.2	
1984: 	1,610.9 1,638.8 1,645.2 1,661.1	1,044.1 1,064.2 1,065.9 1,076.2	173.7 178.6 177.0 182.1	387.1 396.6 395.5 397.5	483.4 488.9 493.5 496.6	285.5 283.9 300.2 289.1	253.9 263.7 269.6 274.9	193.3 202.9 209.5 215.1	54.1 56.8 57.1 59.6	139.2 146.0 152.4 155.5	60.6 60.8 <b>60.1</b> 59.8	58.0 58.1 57.3 57.0	44.54	2.2 2.3 2.3 2.4	31.6 20.3 30.6 14.2	

See next page for continuation of table.

TABLE B-2.—Gross national product in 1972 dollars, 1929-84—Continued

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	Net expo	orts of go services	ods and	Gove	rnment p	urchases services	of goods	and		Percent from pro	eceding
Year or quarter						Federal			Final	Gross	
rear or quarter	Net exports	Exports	Imports	Total	Total	Nation- al de- fense	Non- de- fense	State and local	sales	nation- al prod- uct	Final sales
1929	3.7 .4 3.4	16.7 9.1 14.3	12.9 8.6 10.9	41.0 42.9 63.0	7.0 10.9 22.8			33.9 32.0 40.3	311.0 227.0 318.2	6.6 -2.2 7.8	-3.1 6.3
1940	-6.2 -3.7 13.2 18.9 10.8	15.5 16.4 11.4 9.8 10.5 13.8 27.3 32.2 26.3 25.8	11.1 13.2 12.0 15.7 16.8 17.5 14.0 13.3 15.5 15.2	65.3 97.8 191.6 271.3 300.4 265.4 93.1 75.7 84.7 96.8	233.7 58.2 36.3 42.8 49.2			31.7 34.9 39.4 41.9 47.5	337.9 388.4 456.5 531.5 571.4 564.0 466.1 470.6 484.3 496.6	7.6 16.3 15.3 15.1 7.1 -1.5 -14.7 -1.7 4.1	6.2 14.9 17.5 16.4 7.5 -1.3 -17.4 1.0 2.9 2.5
1950 1951 1952 1953 1954 1955 1955 1956 1957 1958	10.1 7.9 4.8 6.9 7.3 10.1 11.8 5.6	23.6 28.6 27.9 26.6 27.8 30.7 35.3 38.0 33.2 33.8	17.7 18.5 20.0 21.8 20.9 23.4 25.2 26.1 27.6 31.1	98.1 133.7 159.8 170.1 156.0 152.3 153.5 161.2 169.8 170.6					524.2 565.6 596.5 622.1 618.2 649.8 665.8 682.2 682.7 714.7	8.7 8.3 3.7 3.8 -1.2 6.7 2.1 1.8 4 6.0	5.6 7.9 5.5 4.3 6 5.1 2.5 2.5 .1 4.7
1960 1961 1962 1963 1964 1964 1965 1966 1967 1967	8.5 7.5 9.4 12.8 10.1 6.5 5.4	38.4 39.3 41.8 44.8 50.3 51.7 54.4 56.7 61.2 65.0	30.7 30.9 34.3 35.4 37.5 41.6 47.9 51.3 59.3 64.1	172.8 182.9 193.2 197.6 202.6 209.8 229.7 248.5 260.2 257.4	90.4 95.3 102.8 101.8 100.2 100.3 112.6 125.1 128.1 121.8			82.4 87.5 90.4 95.8 102.4 109.5 117.1 123.4 132.1 135.6	733.7 753.7 792.4 825.0 869.3 917.5 968.0 999.2 1,049.1 1,076.6	2.2 2.6 5.8 4.0 5.3 6.0 6.0 2.7 4.6 2.8	2.7 2.7 5.1 4.1 5.5 5.5 3.2 5.0 2.6
1970 1971 1972 1973 1974 1975 1976 1977 1977 1978	1.6 .7 15.5 27.8 32.2 25.4 22.0 24.0	70.5 71.0 77.5 97.3 108.5 103.5 110.1 112.9 126.7 146.2	66.6 69.3 76.7 81.8 80.7 71.4 84.7 90.9 102.7 109.0	251.1 250.1 253.1 253.3 260.3 265.2 265.2 269.2 274.6 278.3	110.6 103.7 101.7 95.9 96.6 97.4 96.8 100.4 100.3 102.1	66.4 64.9	28.5 27.6 29.7 31.0 31.8 35.0 34.7 34.8	140.5 146.4 151.4 157.4 163.6 167.8 168.4 168.8 174.3	1,081.8 1,114.3 1,175.7 1,237.1 1,234.7 1,238.4 1,290.4 1,356.4 1,422.6 1,472.2	2 3.4 5.7 5.8 6 -1.2 -1.2 5.4 5.5 5.0 2.8	.5 3.0 5.5 5.2 2 3 4.2 5.1 4.9 3.5
1980	43.8 29.7 12.6	159.1 160.2 147.6 139.5 145.8	118.0 126.9	284.3 287.0 292.7 291.9 302.2	106.4 110.3 117.0 116.2 122.4	84./	36.4 36.7 37.9 31.5 32.9	177.9 176.8 175.7 175.7 179.8	1,479.4 1,500.9 1,490.4 1,538.3 1,614.8	3 2.5 -2.1 3.7 6.8	.5 1.5 7 3.2 5.0
1982: 	34.1 25.7	152.2 155.1 146.6 136.7	117.3 121.0 120.9 112.6	290.2 287.0 292.8 300.6	114.8 111.0 117.2 124.8	78.1 80.6	39.1 32.9 36.6 42.9	175.4 176.0 175.7 175.8	1,490.3 1,484.5 1,483.5 1,503.4	-4.6 8 9	1.0 1.5 3 5.5
1983: 	13.6 11.9	141.6	1 1297	294.3 292.4 292.0 288.8	119.0 117.2 115.6 113.0	84.8 84.4	35.7 32.3 31.2 26.7	175.3 175.2 176.4 175.8	1,507.5 1,530.9 1,549.3 1,565.4	3.3 9.4 6.8 5.9	1.1 6.4 4.9 4.2
1984: 	-8.3 -11.4 -27.0 -15.2	147.4	156.2 174.4	289.5 302.1 306.1 311.0	112.2 123.2 125.0 129.1	87.1 89.6 89.1 92.1	25.2 33.6 36.0 37.0	177.3 178.9 181.1 181.9	1,579.3 1,618.5 1,614.6 1,646.9	10.1 7.1 1.6 3.9	3.6 10.3 1.0 8.3

<sup>&</sup>lt;sup>1</sup> Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here. Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-3.—Implicit price deflators for gross national product, 1929-84

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

		P	ersonal c	onsumpti ditures	on	Gross private domestic investment <sup>1</sup>							
			Expen	uitures	·				ixed inve	stment			
	Gross						N	Ionresidentia	1		Resid	ential	
Year or quarter	national product	Total	Durable goods	Non- durable goods	Services	Total	Total	Structures	Pro- ducers' dur- able equip- ment	Total	Non- farm struc- tures	Farm struc- tures	Pro- ducers dur- able equip- ment
1929 1933 1939	32.76 25.13 28.43	35.9 26.9 30.5	44.2 32.5 35.9	38.4 26.8 30.5	31.6 26.1 29.2	28.3 22.4 27.7	28.3 22.9 28.2	24.3 19.2 23.0	33.4 26.2 32.0	28.2 20.7 26.6	27.8 19.8 26.3	28.6 19.5 23.4	77.2 58.8 61.1
1940 1941 1942 1943 1944 1945 1945 1946 1947	37,01	30.9 33.2 36.7 40.1 42.4 44.1 47.8 52.9 56.0	36.7 40.0 43.7 46.7 51.3 55.5 62.1 67.8 70.3	30.9 33.6 39.1 43.7 46.2 47.8 52.1 58.7 62.3	29.5 30.8 32.4 34.2 36.1 37.3 38.8 41.7 44.4	28.5 30.7 33.5 35.7 37.0 37.2 41.3 49.0 53.7	29.1 31.0 33.9 35.9 36.8 36.7 40.0 46.9 51.5	23.4 24.9 28.4 32.4 33.8 33.9 36.6 44.0 48.8	32.8 34.9 37.3 37.3 38.0 37.9 42.8 48.6 53.0	27.4 30.0 32.4 34.9 38.1 40.8 44.6 53.7 58.1	27.2 29.7 31.8 34.3 37.3 40.0 43.9 53.0 57.5	23.6 26.6 30.7 35.7 40.8 42.9 46.6 52.8 57.3	59.6 63.1 71.7 75.0 84.6 95.1
1949	52.49	55.8 56.9 60.6 62.0 63.2 63.7 64.4 65.6 67.8	70.5 72.2 76.3 76.7 77.2 75.0 75.6 77.7 80.9	60.3 60.7 65.8 66.5 66.3 66.6 66.3 67.3 69.4	46.0 47.4 49.9 52.6 55.4 57.2 58.4 60.1 62.2	54.9 56.7 60.9 62.3 63.1 63.6 65.0 68.5 71.1	53.0 54.5 59.1 60.1 61.2 61.7 62.9 67.3 71.0	48.4 49.3 55.1 56.3 57.6 57.6 62.4 64.9	56.0 57.8 61.7 62.6 63.8 65.5 66.6 71.1 75.5 76.6	58.7 60.0 64.4 66.4 66.9 67.1 68.7 71.0 71.4	58.1 59.5 63.8 65.8 66.3 66.6 68.2 70.5 70.9	58.0 59.4 63.8 65.7 66.2 66.5 68.3 70.6 70.9	107.9 107.9 114.9 114.0 114.0 1109.1 104.1
1958 1959 1960 1961 1962 1963 1964 1965 1965 1966 1967	68.70 69.33 70.61	69.2 70.6 71.9 72.6 73.7 74.8 75.9 77.2 79.4	81.3 83.8 83.8 84.3 85.4 86.2 87.1 86.8 86.7	71.0 71.4 72.6 73.3 73.9 74.9 75.8 77.3 80.1	64.1 66.0 67.9 69.0 70.4 71.7 72.7 74.2	71.0 71.8 72.1 71.8 72.2 72.3 72.9 74.0 76.3	70.9 72.2 72.5 72.0 72.5 73.1 73.8 74.7	63.9 64.2 63.7 63.3 63.6 64.1	78.3 79.4 79.3 79.4 79.7 80.1	71.2 71.1 71.4 71.3 71.5 70.9 71.2 72.3	70.7 70.6 70.9 70.9 71.1 70.5 70.8 72.0	70.8 70.7 71.1 70.7 71.2 70.6 70.9 72.2 74.2	101. 101. 100. 99. 96. 95. 94. 92.
1970 1971 1972	91.45 96.01 100.00	81.4 84.6 88.4 92.5 96.5 100.0 105.7	98.2 91.1 93.3 95.7 99.0 100.0 101.7	81.9 85.3 89.4 93.6 96.6 100.0 108.5	76.4 78.7 81.9 86.0 90.5 95.6 100.0	78.8 82.2 87.0 91.1 95.7 100.0	79.5 82.8 86.7 91.3 96.2 100.0	66.4 69.2 72.2 75.8 81.5 88.2 94.5 100.7	82.1 84.3 87.2 89.9 93.2 97.2 100.0	74.6 77.0 80.7 87.7 90.5 94.8 100.0	74.3 76.7 80.5 87.5 90.3 94.7 100.0 109.4	76.7 80.6 87.5 90.6 95.0 100.0 109.2	91. 93. 95. 97. 99.
1974 1975 1976 1977 1978	125.79 132.34 140.05 150.42 163.42	116.4 125.3 131.7 139.3 149.1 162.5	108.2 117.3 123.9 129.2 136.4 145.0	123.4 132.5 137.2 143.6 153.4 169.9	104.7 113.0 121.6 129.6 139.3 150.0 162.3	105.5 116.7 131.9 139.2 149.8 163.2 178.5	103.8 115.4 132.2 138.6 146.3 157.2 170.8	107.7 128.2 144.8 149.0 159.4 176.4 200.2	101.8 109.3 126.2 133.9 141.0 149.7 158.8	109.1 120.3 131.0 140.7 158.0 178.3 200.5	120.8 131.6 141.3 159.0 179.8 202.7	120.5 131.9 140.7 157.0 180.0 202.7	100. 106. 116. 122. 126. 132. 140.
1980	215.34 223.38	179.0 194.5 206.0 213.6 220.4	156.2 167.1 174.5 177.7 179.0	188.1 202.5 208.7 213.0 217.7	178.8 196.8 213.6 226.0 237.6	193.4 208.6 215.4 216.0 218.6	186.2 202.2 209.5 206.4 207.6	227.4 254.2 266.4 263.7 264.1	169.1 179.4 182.8 183.3 186.0	218.5 234.1 241.3 246.4 255.9	221.6 237.7 245.1 249.4 259.2	218.1 235.7 249.3 247.3 261.8	149.1 159.1 168.6 172.6 173.2
		202.5 204.5 207.6 209.6 210.7	172.8 174.0 175.5 175.6	207.1 207.4 209.6 210.5	207.9 211.4 215.6 219.4	214.4 216.2 214.9 216.1	208.7 210.4 208.8 210.1	268.7 265.8 264.1 266.8	181.0 184.2 182.8 183.2	241.7 241.8 241.8 240.0	246.0 245.7 245.8 243.1	243.2 249.5 245.4 254.5	165.7 168.2 169.6 170.8
 	215.89 218.21	212.8 214.8 216.0	176.8 178.0 179.3	212.6 214.5 214.8	221.9 224.9 227.3 229.7	215.6 214.4 216.0 217.7	207.1 205.2 205.1 208.1	266.0 261.3 261.4 265.9	181.4 182.2 183.2 185.8	245.2 243.0 248.7 248.3	248.5 245.9 251.7 251.2	249.8 245.4 245.7 248.0	171. 171. 172. 174.
1	220.58 222.40 224.57 225.90	218.0 219.2 221.5 222.9	179.0 179.5 179.2 178.3	217.4 216.4 217.8 219.4	232.6 236.0 239.7 242.0	216.6 218.6 219.2 219.9	206.3 207.4 208.0 208.8	262.6 264.1 265.2 264.5	184.4 185.4 186.5 187.4	249.4 255.9 258.6 259.8	252.3 259.2 262.1 263.4	258.5 261.7 261.1 265.7	174.1 173.6 172.3 173.0

See next page for continuation of table.

TABLE B-3.—Implicit price deflators for gross national product, 1929-84—Continued [Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

	Export imports and se	of goods	Govern	ment pur	chases of p	goods and	services		Percent from pr peri	eceding
Year or quarter	Exports	Imports	Total	Total	National defense	Non- defense	State and local	Final sales	GNP implicit price deflator	Final sales implicit price deflator
929 933 939	42.2 26.5 32.1	45.5 23.6 31.0	21.5 19.2 21.4	20.5 19.4 22.7			21.8 19.1 20.7	32.7 25.3 28.4	0.0 -2.1 8	-2.0 
940. 941. 942. 943. 944. 945. 945. 946. 947.	34.9 37.3 43.6 46.8 51.9 53.6 62.8 66.5 63.1	32.8 35.4 40.0 41.3 42.7 44.9 51.8 62.3 67.8 64.6	21.7 25.5 31.2 32.8 32.3 31.2 29.6 33.6 37.7 39.7	22.7 27.8 33.0 34.0 33.1 31.9 30.2 35.0 39.0 41.4			20.9 21.7 22.8 23.7 24.8 25.8 28.5 32.4 36.4 37.8	29.0 31.0 34.3 36.3 37.0 37.9 43.7 49.6 52.6 52.6	2.2 7.5 9.9 5.3 2.4 2.4 15.7 12.9 6.9	1. 7. 10. 5. 2. 2. 15. 13. 6.
950. 951. 952. 953. 954. 955. 955. 956. 957.	61.0 68.8 68.6 67.5 67.2 68.5 71.0 74.0 73.1 73.5	68.8 82.6 79.9 76.7 77.2 77.1 78.4 79.6 76.1 75.2	39.2 45.0 47.3 48.5 48.6 49.2 51.7 54.0 56.0 57.2	39.6 46.6			38.9 42.3	53.3 56.7 57.8 58.9 59.6 60.6 62.6 64.9 66.1 67.5	2.1 6.6 1.4 1.6 1.2 2.2 3.2 3.4 1.7 2.4	1. 6. 2. 1. 3. 3. 1. 2.
960. 961. 962. 963. 964. 965. 965. 966. 967.	75.2 76.1 76.0 76.3 77.2 79.4 81.9 83.5 85.5	76.1 75.5 74.2 75.2 76.8 77.7 79.4 79.9 81.1 83.2	58.0 59.1 61.1 62.6 64.1 66.0 69.1 72.5 76.5 81.1	62.0 63.5 65.1 67.1 70.0 72.7 76.5			56.5 58.0 60.1 61.6 63.1 64.9 68.2 72.4 76.4 82.0	68.6 69.3 70.5 71.6 72.7 74.2 76.6 79.0 82.5 86.8	1.6 .9 1.8 1.5 1.5 2.2 3.2 3.0 4.4 5.1	1. 1. 1. 2. 3. 4. 5.
970. 971. 972. 973. 974. 975. 977. 977.	93.2 • 97.0 100.0 112.7 134.8 149.6 155.3 161.9 172.6 192.5	88.6 93.3 100.0 116.7 164.6 179.6 185.6 205.5 214.1 246.1	87.7 93.9 100.0 106.7 116.8 128.2 136.6 146.3 157.3 170.4	86.6 92.7 100.0 106.3 114.9 126.0 133.5 142.8 153.1 164.8	100.0 106.6 115.1 124.9 132.4 141.9 152.7 166.0	100.0 105.6 114.2 128.2 135.7 144.6 153.8 162.5	88.6 94.7 100.0 107.0 118.0 129.4 138.3 148.4 159.7 173.7	91.5 96.0 100.0 105.7 115.0 125.7 139.7 150.3 163.3	5.4 5.0 4.2 5.8 8.8 9.3 5.2 5.8 8.8	5. 4. 5. 8. 9. 5. 7. 8.
980	236.0	289.4 293.8 279.3 271.5 266.6	189.2 207.8 222.2 234.9 247.5	185.2 207.6 221.4 232.1 241.4	187.5 209.1 227.0 236.6 247.6	180.8 204.7 209.8	191.5 208.0 222.8 236.7 251.6	178.6 195.3 207.7 215.7 223.2	9.2 9.6 6.0 3.8 3.7	9. 9. 6. 3. 3.
982: 	236.2 236.2 236.2 235.3	282.9 273.3 280.9 280.1	217.4 220.8 224.1 226.5	217.6 220.7 223.2 223.8	222.5 224.5 227.4 233.1	208.2 211.7 213.9 206.2	217.2 220.8 224.7 228.4	204.2 206.9 208.7 210.9	4.6 5.6 3.4 3.4	5. 5. 3. 4.
983: 	237.7 239.4 241.5 245.4	267.8 271.0 276.3 270.3	230.6 233.3 236.2 239.4	229.4 230.8 232.8 235.6	233.7 234.8 237.9 240.0		231.5 234.9 238.4 241.8	213.4 214.7 216.3 218.4	5.0 2.6 3.1 4.4	4. 2. 3 4
1984: 	247.7	267.9 269.6 263.3 265.8	243.3 246.2 248.6 251.6	238.5 240.6 241.5 244.8	245.1 246.4 247.4	215.5 225.1 227.1	246.4 250.0 253.5 256.5	220.3 222.1 224.4 226.0	4.4 3.3 3.9 2.4	3. 3. 4. 2.

<sup>&</sup>lt;sup>1</sup> Separate deflators are not calculated 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 changes computed from data shown here. Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-4.—Fixed-weighted price indexes for gross national product, 1972 weights, 1959-84 [Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

				private do nvestment		Export imports and se	of goods		Govern	ment purch is and serv	ases of ices		Percent change from
	ĺ		Fix	ed investm	ent	310 30	VICC3			Federal			preced-
Year or quarter	Gross national product	Personal con- sumption expendi- tures	Total	Nonresi- dential	Residen- tial	Exports	Imports	Total	Total	National defense	Non- defense	State and local	period, gross national product fixed- weight- ed price index 2
1959	69.8	73.1	74.4	74.1	74.9	73.4	75.0	56.9	58.5			55.8	
1960	71.6 72.4 73.2	74.1 74.8 75.5 76.3 77.2	74.7 74.4 74.2 74.0 74.3	74.5 74.3 74.4 74.7 75.3	74.9 74.7 73.9 72.6 72.6	75.0 76.0 76.0 76.3 77.1	76.0 75.2 73.7 74.7 76.3	58.3 59.5 61.3 62.8 64.4	60 5			57.4 58.9 61.0 62.5 63.9	1.5 1.1 1.2 1.1 1.2
1965	77.5 79.8 83.1	78.2 80.1 82.0 85.0 88.7	75.2 77.0 79.3 82.5 87.3	76.1 77.9 80.3 83.3 87.0	73.5 75.3 77.5 81.0 87.8	79.4 81.8 83.3 85.5 88.5	77.1 78.8 79.3 80.7 83.0	66.2 69.2 72.4 76.4 81.3	/1.5 75.7			65.6 68.8 73.1 76.9 82.3	1.7 2.9 3.0 4.1 5.0
1970 1971 1972 1973 1974	96.2 100.0	92.7 96.6 100.0 106.1 117.1	91.2 95.8 100.0 105.8 117.9	91.6 96.3 100.0 104.0 116.5	90.6 94.9 100.0 109.2 120.5	93.1 97.0 100.0 112.6 137.4	88.4 93.3 100.0 116.7 161.5	87.9 94.0 100.0 106.9 117.9	86.7 92.9 100.0 106.7 117.0	100.0 106.9 117.5	100.0 106.1 115.6	88.7 94.8 100.0 107.0 118.4	5.2 4.8 4.0 6.0 9.4
1975	133.7 142.2 153.3	126.3 133.0 141.2 151.6 166.3	132.3 140.2 151.8 167.0 185.4	132.9 139.9 148.5 160.9 177.2	131.2 140.8 158.0 178.4 200.8	151.8 156.9 164.0 174.9 197.2	175.1 178.7 195.0 210.1 244.5	129.2 137.3 147.0 158.4 173.2	128.0 135.4 145.0 155.4 169.5	127.9 135.6 145.5 156.5 171.7	128.3 135.0 143.6 152.6 164.0	130.0 138.5 148.4 160.4 175.7	9.1 5.8 6.3 7.8 9.5
1980	201.9 214.8 223.8	184.8 202.1 213.9 222.4 231.1	204.1 221.2 231.4 234.5 240.6	195.9 213.8 225.9 230.4 234.8	219.5 235.3 241.7 242.3 252.2	218.4 238.4 243.8 248.0 250.6	304.4 317.2 309.0 299.9 299.3	193.8 211.8 225.6 236.5 249.2	192.7 214.1 228.7 236.7 246.6	196.7 218.9 234.0 242.3 252.7	182.6 201.9 215.1 222.3 230.7	194.5 210.2 223.6 236.4 250.9	9.8 9.7 6.4 4.2 4.2
1982: 	213.4 216.4	210.1 212.0 215.4 218.0	229.8 231.1 232.6 232.5	222.6 225.3 227.4 228.9	243.5 242.3 242.5 239.5	244.0 244.8 244.0 243.5	315.5 308.5 306.1 307.0	221.4 223.9 226.4 230.9	225.4 226.9 228.2 234.3	230.8 232.1 233.0 240.0	211.6 213.3 215.8 219.5	218.8 221.8 225.3 228.6	5.6 4.7 5.8 4.6
1983: 	22 <b>2.9</b> 225.5	219.1 221.5 223.6 225.5	235.6 234.5 237.1 237.5	230.4 230.0 231.0 231.7	245.5 242.9 248.7 248.4	244.5 246.8 249.0 252.7	304.1 299.4 299.4 298.7	232.7 234.8 237.8 240.7	234.6 234.8 237.2 239.9	240.1 240.1 242.5 246.1	220.7 221.0 223.7 224.0	231.4 234.7 238.2 241.2	3.3 4.1 4.7 3.9
1984: 	232.8 235.1	228.2 230.0 232.2 234.4	238.6 242.2 244.0 244.9	232.9 234.7 236.1 236.7	249.4 256.4 259.0 260.4	254.4 257.2 256.3 255.5	300.3 302.1 299.3 297.8	245.0 248.2 250.6 252.8	244.1 246.4 247.3 248.3	250.2 252.9 253.4 254.4	228.5 230.0 231.6 232.8	245.5 249.4 252.8 255.8	5.0 4.3 4.0 3.5

<sup>&</sup>lt;sup>1</sup> Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.
<sup>2</sup> Quarterly changes are at annual rates.

TABLE B-5.—Changes in gross national product, personal consumption expenditures, and related price measures, 1929-84

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

		Gross	national p	roduct		Personal consumption expenditures							
Year or quarter	Current dollars	Con- stant (1972) dollars	Implicit price deflator	Chain price index	Fixed- weight- ed price index (1972 weights)	Current dollars	Con- stant (1972) dollars	Implicit price deflator	Chain price index	Fixed- weight ed pric index (1972 weights			
29	6.6	6.6	0.0		************		•••••••••••••••••••••••••••••••••••••••		·····				
)33 )39	-4.2 7.0	-2.2 7.8	-2.1 8			-5.7 4.6	-2.0 5.3	-3.8 7					
)40	10.0	7.6				6.0	4.6			[			
41	25.0	16.3	2.2 7.5			13.8	5.9	1.3 7.4					
142	26.7	15.3	9.9	l		9.7 12.2	-1.0	10.8		<b></b>			
43	21.3 9.6	15.1 7.1	9.9 5.3 2.4			12.2	-1.0 2.9 2.8	9.0 5.8					
)44						8.8		1					
945	.9	-1.5	2.4 15.7			10.5	6.2	4.1					
)46 )47	-1.2 11.1	-14.7 -1.7	12.9			20.3 12.5	11.1	8.3 10.7		••••••			
48	11.3	4.1	6.9			8.0	1.6 2.1 2.3	5.8					
149	5	.5	9			1.9	2.3	3					
950	10.9	8.7	2.1			7.8	5.6	2.0					
951	15.5	8.3 3.7	6.6			7.9	1.3	6.5					
152	15.5 5.2	3.7	1.4	ļ	<b></b>	4.8	2.5	2.3 1.9					
)53	5.4	3.8 1.2	1.6			5.8 2.7	3.8 1.8	1.9 .9	ļ				
)54			1.2	1		1		1					
955	9.0	6.7	2.2			7.6	6.5	1.0					
56 57	5.4 5.3	2.1 1.8	3.2 3.4			4.9 5.4	2.9	1.9					
58	1.3	4	1.7			3.2	2.9 2.1 1.0	3.3 2.2					
59	8.5	6.0	2.4			3.2 7.4	5.4	1.9					
60	3.8	22	1.6	1.6	1.5	4.5	2.6	1.9	1.7	] :			
61 62	3.6	2.2 2.6	ě,	1.2	1.1	3.1	2.6 2.1 4.5	1.0 1.5	1.1 1.1	'			
962	7.7	5.8	1.8	1.4	1.2	6.0	4.5	1.5	1.1	١.			
963	5.6	4.0	1.5 1.5	1.3	1.1	5.5 6.9	3.8 5.5	1.6 1.4	1.4				
064	1 1	5.3		1.4	1.2		1	1	1.2	l .			
965	8.4	6.0	2.2 3.2 3.0	1.9	1.7	7.5	5.6	1.8	1.5	,			
966	9.4 5.8	6.0 2.7	3.2	3.1 3.0	2.9 3.0	8.1 5.4	3.1	2.9 2.4	2.7 2.5				
967 968	9.2	4.6	4.4	4.3	4.1	9.5	5.3	4.0	3.8				
969	8.1	2.8	5.1	5.0	5.0	8.4	5.1 2.9 5.3 3.7	4.5	4.5				
70	5.2	2	5.4	5.3	5.2	6.9		4.6	4.6				
371	3.0	3.4 5.7	5.0	4.9	4.8	8.1	2.2 3.7	4.3 3.7	4.3				
972 973	10.1	5.7	4.2	4.1	4.0	9.6	5.8	3.7	3.6				
973	11.8	5.8	5.8	6.0	6.0	10.2 9.4	4.2 —.7	5.7 10.1	6.1	10			
974		6	8.8	9.1	9.4	1		1	10.4				
975	8.0	-1.2	9.3 5.2	9.2	9.1	9.9 11.0	2.2 5.6	7.6	7.7	1 :			
976 977	10.9 11.7	-1.2 5.4 5.5	5.2	5.7 6.1	5.8 6.3	11.1	5.0	5.1 5.8	5.3 6.0				
977 978	12.8	5.0 2.8	5.8 7.4	7.6	7.8 9.5	11.8 11.9	4.5 2.7	7.0	7.3				
979	11.7		8.6	8.9		1	2.7	9.0	9.3				
980	8.8	3	9.2	8.9	9.8	10.7	.5	10.2	10.7	1			
981 982	12.4	2.5	9.6	9.5	9.7	10.9	2.0	8.7	9.2 6.1				
982 983	3.8 7.7	-Z.1 37	6.0	6.6 4.3	6.4 4.2	7.3 8.6	1.4 4.8	8.7 5.9 3.7	4.1	.;			
984 P	10.8	2.5 -2.1 3.7 6.8	3.8 3.7	4.0	4.2	8.6	5.3	3.2	3.9				
982:			1	1	1				1				
<u></u>	4.7	-4.6	4.6	6.0	5.6	8.6 6.3	2.9	5.5	5.7				
B	1 4/	8	5.6	5.3 5.8	4.7	6.3	2.2	4.0	4.2	1			
III	2.5 3.9	9 .5	5.6 3.4 3.4	5.8 5.0	5.8 4.6	8.5 9.3	2.9 2.2 2.2 5.1	6.1 4.0	6.3 5.0				
	. 3.9	.5	3.4	3.0	4.0	3.3	J.1	*.0	J.0	Ι ΄			
983: 	0 =	22	5.0	3.4	3.3	4.8	20	2.2	2.5	1			
II	8.5 12.3	3.3 9.4	2.6	4.3	4.1	14.5	2.6 10.0	4.1	4.4				
<u>  </u>	.[ 10.1	6.8	2.6 3.1	4.4	4.7	14.5 7.6	3.8 6.8	1 3.7	3.7	1			
IV	10.6	5.9	4.4	4.1	3.9	9.2	6.8	2.3	3.6	1			
984:	ŀ		i	1	1	1		I	1	]			
Ī	14.9	10.1	4.4	4.9	5.0	8.6	4.6	3.8 2.2	4.7	1			
H	. 10.7 5.6	7.1 1.6	3.3 3.9	4.1 3.9	4.3 4.0	10.2 5.0	7.9	4.3	3.3 3.9				
			. 14		. 40	. 50							

Note.—Changes are based on unrounded data and may differ slightly from changes computed from data shown elsewhere in these tables.

TABLE B-6.—Gross national product by major type of product, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

							Goods					25.00	
Year or	Gross	Final	Inven-		Total		Durable	goods	Nondural	ole goods		Struc-	Auto
quarter	national product	sales	tory change	Total	Final sales	Inven- tory change	Final sales	Inven- tory change	Final sales	Inven- tory change	Services	tures	output
1929 1933 1939	103.4 55.8 90.9	101.7 57.4 90.5	1.7 1.6 .4	56.1 27.0 49.0	54.4 28.6 48.6	1.7 -1.6 .4	16.1 5.4 12.4	1.4 5 .3	38.3 23.2 36.2	0.3 -1.1 .1	35.9 25.9 34.4	11.4 2.9 7.5	
1940 1941 1942 1943 1944 1945 1946 1947 1948	100.0 125.0 158.5 192.1 210.6 212.4 209.8 233.1 259.5 258.3	97.8 120.6 156.7 192.8 211.6 213.5 203.5 233.5 254.8 261.4	2.2 4.5 1.8 6 1.0 1.0 6.4 5 4.7 3.1	56.0 72.5 93.7 120.4 132.3 128.9 125.3 139.8 154.4 147.7	53.8 68.0 91.9 121.0 133.3 129.9 118.9 140.3 149.7 150.8	2.2 4.5 1.8 6 -1.0 -1.0 6.4 5 4.7 -3.1	15.4 23.8 34.5 54.2 58.5 50.1 31.8 44.4 48.0 50.0	1.2 3.1 1.0 6 -1.3 5.3 1.4 1.0 -1.8	38.4 44.2 57.4 66.8 74.8 79.8 87.1 95.9 101.7 100.9	1.0 1.4 .7 6 3 .2 1.1 -1.9 3.7 -1.3	35.7 40.8 50.8 63.0 72.3 77.0 68.8 71.6 77.2 82.2	8.3 11.8 14.0 8.7 6.1 6.5 15.7 21.7 28.0 28.4	7.2 8.8 11.9
1950	286.5 330.8 348.0 366.8 366.8 400.0 421.7 444.0 449.7 487.9	279.7 320.5 344.8 366.3 368.4 394.1 417.0 442.6 451.2 482.2	6.8 10.3 3.1 .4 -1.5 6.0 4.7 1.3 -1.5 5.7	162.4 189.5 194.6 203.1 196.1 214.5 223.3 232.3 228.2 248.5	155.6 179.2 191.5 202.7 197.6 208.5 218.6 231.0 229.7 242.9	6.8 10.3 3.1 -4 -1.5 6.0 4.7 1.3 -1.5 5.7	56.2 66.4 72.5 77.8 73.9 81.4 85.9 91.3 84.4 90.8	3.6 6.1 1.2 1.5 -2.5 3.4 2.1 .5 -2.8 3.1	99.4 112.8 119.0 124.9 123.7 127.1 132.7 139.6 145.3 152.1	3.2 4.2 2.0 -1.1 1.0 2.6 2.6 1.3 2.5	88.5 103.5 113.9 121.6 126.2 136.1 146.2 158.7 167.7 179.8	35.6 37.8 39.4 42.0 44.5 49.5 52.2 53.0 53.8 59.5	15.4 13.3 12.0 16.1 14.7 21.2 16.9 19.4 14.4 19.4
1960	506.5 524.6 565.0 596.7 637.7 691.1 756.0 799.6 873.4 944.0	503.6 522.2 558.8 590.7 632.1 681.2 741.9 789.3 865.5 934.2	3.0 2.3 6.3 6.0 5.6 9.9 14.1 10.3 7.9 9.8	254.2 257.4 278.5 290.3 309.8 338.4 375.0 389.4 421.3 450.2	251.3 255.0 272.2 284.3 304.2 328.5 360.9 379.1 413.4 440.4	3.0 2.3 6.3 6.0 5.6 9.9 14.1 10.3 7.9 9.8	93.3 92.7 102.9 109.4 118.9 131.6 147.0 153.5 167.9 178.5	1.6 1 3.4 2.7 4.0 6.7 10.2 5.5 4.7 6.4	158.0 162.4 169.3 174.9 185.3 196.9 213.9 225.6 245.5 261.9	1.3 2.4 2.8 3.3 1.6 3.2 3.9 4.9 3.1	237 1	58.5 60.2 64.5 69.3 72.9 79.3 82.0 83.6 94.0 101.8	21.3 17.8 22.5 25.2 25.9 31.2 30.4 28.0 35.1 34.9
1970	992.7 1,077.6 1,185.9 1,326.4 1,434.2 1,549.2 1,718.0 1,918.3 2,163.9 2,417.8	989.5 1,070.0 1,175.7 1,307.9 1,420.1 1,556.1 1,706.2 1,895.3 2,137.4 2,403.5	3.2 7.7 10.2 18.5 14.1 6.9 11.8 23.0 26.5 14.3	459.9 485.3 529.6 604.1 646.7 694.0 771.1 855.0 958.6 1,065.6	456.6 477.7 519.4 585.6 632.5 700.9 759.3 832.0 932.1 1,051.3	3.2 7.7 10.2 18.5 14.1 -6.9 11.8 23.0 26.5 14.3	179.2 187.1 207.4 237.6 250.7 279.4 312.5 354.9 402.1 454.3	1 2.8 7.2 13.1 12.0 -8.4 7.7 10.4 19.1 10.5	277.5 290.6 312.0 348.0 381.8 421.5 446.7 477.2 530.1 597.0	3.3 4.8 3.0 5.3 2.2 1.5 4.2 12.6 7.3 3.8	429.9 472.0 519.0 571.5 636.1 705.2 779.3 867.2 972.2 1,089.7	102.9 120.3 137.3 150.8 151.4 150.0 167.6 196.1 233.1 262.5	28.7 39.1 41.6 46.2 39.2 40.7 55.9 65.1 69.5 68.0
1980 1981 1982 1983	2,631.7 2,957.8 3,069.3	2,641.5 2,931.7 3,095.4 3,318.3 3,604.4	-9.8 26.0 -26.1 -13.5 56.8	1,140.6 1,294.8 1,276.8 1,355.7 1,540.4	1,150.4 1,268.8 1,302.9 1,369.2 1,483.5	-9.8 26.0 -26.1 -13.5 56.8	482.0 523.2 517.9 557.5 623.9	-4.1 7.3 18.0 2.1 29.0	668.4 745.6 785.0 811.7 859.6	-5.7 18.8 -8.1 -11.3 27.8	1,225.2 1,373.0 1,510.8 1,639.3 1,763.6	265.9 289.9 281.7 309.8 357.3	60.8 70.6 67.0 88.7 105.1
1982: 11 III	3,080.1 3,109.6	3,043.1 3,072.1 3,095.5 3,170.8	17.0 10.9 15.3 61.1	1,282.8 1,286.0 1,276.3 1,261.9	1,299.9 1,296.9 1,291.6 1,323.1	-17.0 -10.9 -15.3 -61.1	516.7 515.0 515.2 524.7	16.6 7.5 4.6 43.4	783.1 781.9 776.4 798.4	4 -3.5 -10.7 -17.8	1,459.1 1,493.7 1,527.8 1,562.5	284.1 281.5 276.0 285.2	59.7 68.3 75.3 64.8
1983: 	3,173.8 3,267.0 3,346.6 3,431.7	3,216.8 3,286.4 3,350.9 3,419.0	- <b>42.9</b> -19.4 -4.3 12.7	1,288.7 1,337.1 1,373.2 1,423.9	1,331.6 1,356.5 1,377.5 1,411.2	42.9 19.4 4.3 12.7	526.0 546.5 564.5 592.9	-30.0 -5.5 12.5 14.5	805.6 810.0 813.0 818.3	-12.9 -13.9 -16.8 -1.7	1,594.1 1,627.2 1,654.5 1,681.3	291.1 302.6 319.0 326.5	79.2 79.4 96.6 99.6
1984: 	3,553.3 3,644.7 3,694.6 3,752.5	3,479.5 3,594.1 3,622.8 3,721.4	73.8 50.6 71.8 31.1	1,498.0 1,544.8 1,549.2 1,569.4	1,424.2 1,494.2 1,477.4 1,538.3	73.8 50.6 71.8 31.1	597.5 629.7 613.1 655.4	34.9 18.2 41.7 21.2	826.8 864.6 864.3 882.8	38.9 32.4 30.1 9.9	1,713.7 1,742.6 1,783.3 1,814.7	341.6 357.2 362.1 368.4	114.8 98.7 99.0 107.9

TABLE B-7.—Gross national product by major type of product in 1972 dollars, 1929-84
[Billions of 1972 dollars; quarterly data at seasonally adjusted annual rates]

				Ι			Goods						Ī
Year or	Gross	Final	Inven-		Total		Durable	goods	Nondurat	ie goods		Struc-	Auto
quarter	national product	sales	tory change	Total	Final sales	inven- tory change	Final sales	Inven- tory change	Final sales	Inven- tory change	Services	tures	output
1929 1933 1939	315.7 222.1 319.8	311.0 227.0 318.2	4.6 4.9 1.6	144.3 97.5 154.3	139.7 102.3 152.7	4.6 -4.9 1.6	40.4 17.5 35.5	3.5 -2.1 .7	99.3 84.9 117.2	1.1 2.8 .9	127.4 110.7 135.2	30.3	
1940	344.1 400.4 461.7 531.6 569.1 560.4 478.3 470.3 489.8 492.2	337.9 388.4 456.5 531.5 571.4 564.0 466.1 470.6 484.3 496.6	6.2 12.0 5.2 .1 -2.3 -3.6 12.2 2 5.5 -4.4	171.7 198.6 221.4 263.3 287.3 278.5 238.3 237.7 244.8 240.3	165.5 186.6 216.2 263.3 289.6 282.2 226.2 237.9 239.4 244.7	6.2 12.0 5.2 .1 -2.3 -3.6 12.2 2 5.5 -4.4	43.1 57.8 75.7 118.8 135.9 121.2 60.3 75.5 77.3 78.3	3.4 8.2 3.5 .7 -1.8 -3.7 10.8 1.4 1.6 -2.9	122.4 128.7 140.5 144.4 153.7 161.0 165.8 162.4 162.1 166.4	2.8 3.8 1.7 6 5 .1 1.3 -1.6 3.8 -1.5	139.9 158.5 193.9 242.0 263.7 263.0 200.8 188.1 192.5 198.3	32.5 43.3 46.3 26.2 18.1 18.8 39.1 44.6 52.4 53.6	12.3 13.9 18.0
1950	534.8 579.4 600.8 623.6 616.1 657.5 671.6 683.8 680.9 721.7	524.2 565.6 596.5 622.1 618.2 649.8 665.8 682.2 682.7 714.7	10.6 13.7 4.3 1.5 -2.2 7.7 5.8 1.5 -1.8	261.5 283.7 292.1 306.8 292.7 316.7 320.9 321.7 311.6 332.5	250.9 270.0 287.8 305.3 294.9 309.0 315.1 320.2 313.4 325.5	10.6 13.7 4.3 1.5 -2.2 7.7 5.8 1.5 -1.8 7.0	86.1 98.2 107.9 116.2 109.0 117.2 117.8 119.4 109.2 113.6	5.5 9.0 1.7 2.3 -3.7 4.5 2.9 .9 -3.4 3.9	164.8 171.8 179.9 189.1 185.9 191.9 197.2 200.8 204.3 211.9	5.1 4.7 2.6 8 1.5 3.2 2.9 .6 1.6 3.1	207.4 231.3 243.2 247.5 249.1 260.1 270.2 282.4 287.6 299.4	65.9 64.3 65.5 69.3 74.3 80.7 80.5 79.7 81.7 89.8	23.0 19.3 17.1 22.6 21.6 29.8 23.0 24.5 18.6 23.2
1960	737.2 756.6 800.3 832.5 876.4 929.3 984.8 1,011.4 1,058.1 1,087.6	733.7 753.7 792.4 825.0 869.3 917.5 968.0 999.2 1,049.1 1,076.6	3.5 3.0 7.8 7.5 7.1 11.8 16.8 12.2 9.0 11.1	335.8 338.0 361.3 372.2 393.8 422.6 456.4 463.4 483.1 496.0	332.3 335.0 353.5 364.7 386.7 410.8 439.6 451.2 474.1 484.9	3.5 3.0 7.8 7.5 7.1 11.8 16.8 12.2 9.0 11.1	115.6 114.7 125.7 132.5 143.0 157.2 174.0 178.3 187.4 193.0	2.0 1 4.2 3.4 5.1 8.2 12.3 6.6 5.4 7.2	216.6 220.3 227.8 232.2 243.7 253.6 265.6 272.9 286.7 291.9	1.6 3.0 3.7 4.2 1.9 3.6 4.5 5.6 3.9	312.5 326.9 341.5 356.2 374.0 390.7 412.6 434.1 453.0 469.2	89.0 91.7 97.4 104.1 108.6 116.0 115.9 113.9 122.0 122.5	25.3 21.2 26.0 28.7 29.4 35.7 34.8 31.8 38.5 37.4
1970 1971 1972 1973 1974 1975 1976 1977 1978	1,085.6 1,122.4 1,185.9 1,254.3 1,246.3 1,231.6 1,298.2 1,369.7 1,438.6 1,479.4	1,081.8 1,114.3 1,175.7 1,237.1 1,234.7 1,238.4 1,290.4 1,356.4 1,422.6 1,472.2	3.8 8.1 10.2 17.2 11.6 -6.7 7.8 13.3 16.0 7.3	486.9 497.2 529.6 572.3 562.5 547.4 587.2 628.1 662.0 677.7	483.2 489.1 519.4 555.1 550.9 554.2 579.4 614.8 645.9 670.4	3.8 8.1 10.2 17.2 11.6 -6.7 7.8 13.3 16.0 7.3	187.5 188.7 207.4 236.1 234.1 230.2 242.7 264.7 285.4 299.1	.0 3.0 7.2 12.7 9.4 -6.4 5.4 6.9 11.8 6.2	295.7 300.4 312.0 319.0 316.8 324.0 336.7 350.1 360.5 371.3	3.7 5.1 3.0 4.5 2.2 3 2.4 6.3 4.3	482.4 497.8 519.0 542.8 562.8 575.9 595.0 617.3 644.7 670.7	116.3 127.3 137.3 139.1 121.0 108.3 116.0 124.4 131.9 131.0	29.8 38.9 41.6 46.4 37.1 35.7 45.3 50.7 50.3 47.0
1980 1981 1982 1983 1984 P	1,475.0 1,512.2 1,480.0 1,534.7 1,639.0	1,479.4 1,500.9 1,490.4 1,538.3 1,614.8	-4.4 11.4 -10.4 -3.6 24.2	668.1 693.1 660.6 688.6 763.6	672.5 681.8 671.1 692.2 739.4	-4.4 11.3 -10.4 -3.6 24.2	290.4 291.9 277.4 296.1 327.9	-1.9 3.2 -7.8 5 12.6	382.1 389.9 393.7 396.1 411.5	-2.5 8.1 -2.6 -3.2 11.6	687.7 699.9 707.8 723.2 736.9	119.1 119.2 111.6 122.9 138.6	39.4 42.8 38.9 49.9 57.5
1982: 1 11 11 1V		1,490.3 1,484.5 1,483.5 1,503.4	-6.7 -4.0 -6.4 -24.6	669.0 662.0 657.9 653.6	675.7 666.0 664.3 678.2	-6.7 -4.0 -6.4 -24.6	281.0 275.6 274.0 278.8	-7.5 -3.5 -1.6 -18.6	394.7 390.4 390.3 399.4	.8 6 -4.8 -6.0	702.9 707.1 709.4 711.9	111.6 111.5 109.8 113.4	34.9 39.3 43.5 37.7
1983:           V	1,491.0 1,524.8 1,550.2 1,572.7	1,507.5 1,530.9 1,549.3 1,565.4	-16.5 -6.1 .9 7.2	658.9 681.6 698.1 715.5	675.4 687.7 697.2 708.2	-16.5 -6.1 .9 7.2	280.5 292.3 299.6 311.9	-12.0 -2.1 5.6 6.6	394.9 395.4 397.7 396.3	4.5 4.0 4.8	716.8 721.9 725.4 728.7	115.2 121.3 126.6 128.5	45.2 45.3 53.9 55.1
1984: 	.1 1.638.8	1,579.3 1,618.5 1,614.6 1,646.9	31.6 20.3 30.6 14.2	744.9 767.4 766.8 775.3	713.3 747.1 736.1 761.1	31.6 20.3 30.6 14.2	316.4 331.4 322.4 341.4	14.7 8.1 17.8 9.6	396.9 415.7 413.7 419.7	16.9 12.2 12.8 4.6	739.0	134.6 138.5 139.4 141.6	62.5 54.4 54.4 58.7

TABLE B-8.—Gross national product by sector, 1929-84 [Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	1		· · · · · · · · · · · · · · · · · · ·	(	ross dom	estic produ	çt				
	Gross			Busines	iS <sup>1</sup>		House-	Go	Rest		
Year or quarter	national product	Total	Total <sup>1</sup>	Nonfarm 1	Farm	Statis- tical discrep- ancy	holds and insti- tutions	Total	Federal	State and local	of the world
929 933 939	103.4 55.8 90.9	102.6 55.5 90.5	95.4 49.1 80.6	84.7 43.8 72.9	9.7 4.6 6.3	1.1 .7 1.4	2.9 1.7 2.3	4.3 4.7 7.6	0.9 1.2 3.4	3.5 3.5 4.2	0.8
940	125.0 158.5 192.1 210.6 212.4 209.8 233.1 259.5	99.6 124.5 157.9 191.6 210.1 212.0 209.0 231.8 257.9 256.9	89.4 112.6 139.9 162.8 174.2 172.8 183.8 210.0 234.9 231.5	81.8 103.1 127.7 149.3 156.2 152.7 164.4 188.2 213.1 212.2	6.4 8.9 13.0 15.3 16.0 18.8 20.2 23.3 18.8	1.1 .6 8 -1.8 2.7 4.1 .5 1.5 -1.6	2.45 2.29 3.7 4.5 5.6 5.9	7.8 9.4 15.1 25.6 32.2 35.2 20.8 16.7 17.4 19.4	3.5 5.0 10.6 20.9 27.2 29.8 14.6 9.4 8.9 10.0	4.3 4.4 4.5 4.7 4.9 5.4 6.2 7.3 8.5	1.0 1.0 1.0
950	286.5 330.8 348.0 366.8 366.8 400.0 421.7 444.0	284.8 328.7 345.7 364.6 364.5 397.3 418.5 440.5 446.6 484.6	257.5 294.4 307.3 324.9 323.9 354.0 372.1 390.8 393.1 428.3	236.3 268.3 283.4 302.3 302.3 333.9 355.7 373.7 373.7	20.0 22.9 22.2 20.3 19.7 18.8 18.6 18.4 20.7	1.3 3.2 1.7 2.3 2.0 1.3 -2.1 -1.2 -1.3	6.4 6.9 7.2 7.8 8.1 9.1 9.8 10.5 11.4 12.3	20.9 27.4 31.2 31.9 32.5 34.2 36.6 39.1 42.1 44.0	10.7 16.2 18.9 18.6 17.8 18.4 19.0 19.6 20.5 20.9	10.1 11.2 12.3 13.3 14.7 15.8 17.6 19.6 21.6 23.1	1. 2. 2. 2. 3. 3. 3. 3.
1960 1961 1962 1963 1964 1965 1966 1967	506.5 524.6 565.0 596.7 691.1 756.0 799.6 873.4	502.9 520.7 560.5 591.8 632.3 685.2 750.3 793.7 866.7 937.1	442.0 455.7 490.6 517.2 551.6 598.4 652.6 685.1 745.4 803.2	424.2 435.7 468.1 495.0 532.2 577.7 628.4 663.3 725.0 782.1	20.2 20.4 20.5 19.3 21.9 22.8 22.1 22.6 25.1	-2.4 -1 2.1 1.7 -12 1.4 -3 -2.1 -3.9	13.8 14.4 15.5 16.6 17.8 19.2 21.1 23.4 26.1 29.4	47.1 50.5 54.3 58.0 62.9 67.6 76.5 85.1 95.2 104.5	21.7 22.6 24.1 25.2 27.0 28.3 32.4 35.6 39.3 41.9	25.5 27.9 30.2 32.9 35.9 39.3 44.1 49.5 55.9 62.6	3.3.4.4.5.5.5.5.6.6.
970	992.7 1,077.6 1,185.9 1,326.4 1,434.2 1,549.2 1,718.0 1,918.3 2,163.9 2,417.8	985.4 1,068.5 1,175.0 1,310.4 1,414.4 1,531.9 1,697.5 1,894.9 2,134.3 2,375.2	837.3 907.1 998.6 1,118.7 1,206.4 1,301.7 1,447.3 1,624.0 1,837.2 2,052.1	813.1 875.4 963.4 1,058.0 1,155.0 1,247.3 1,396.3 1,574.2 1,781.0 1,982.1	25.8 27.6 31.9 49.9 47.7 48.9 45.9 48.4 58.7 71.6	-1.5 4.1 3.3 .8 3.7 5.5 5.1 1.4 -2.6 -1.5	32.3 35.4 38.6 42.1 45.8 50.6 55.6 67.8 75.6	115.8 126.0 137.8 149.6 162.2 179.6 194.6 210.3 229.3 247.4	44.8 46.8 50.1 51.9 54.9 59.0 62.4 66.3 71.7 75.7	71.1 79.3 87.7 97.7 107.3 120.6 132.3 144.0 157.6 171.8	7. 9. 10. 16. 19. 17. 20. 23. 29.
980 981 982 983 984 P	2,631.7 2,957.8 3,069.3 3,304.8 3,661.3	2,586.4 2,907.5 3,021.3 3,256.5 3,616.3	2,228.1 2,511.9 2,589.0 2,790.8 3,117.6	2,158.2 2,425.4 2,514.4 2,728.9 3,046.9	67.7 80.8 75.1 61.5 78.8	2.3 5.6 5 .5 -8.2	85.3 96.2 107.4 116.5 123.5	273.0 299.4 324.9 349.2 375.3	82.9 92.6 101.2 107.8 114.6	190.0 206.8 223.7 241.4 260.7	45. 50. 48. 48. 44.
1982: 	3,026.0 3,061.2	2,978.2 3,011.0 3,032.3 3,063.7	2,558.3 2,583.2 2,597.1 2,617.6	2,484.5 2,512.7 2,529.2 2,531.3	82.1 73.6 68.8 75.8	8.3 3.1 9 10.5	103.4 105.9 108.8 111.3	316.5 321.9 326.5 334.7	99.3 100.0 100.8 104.6	217.2 221.9 225.7 230.2	47. 50. 47. 46.
1983: 11	3,173.8 3,267.0 3,346.6	3,127.1 3,219.6 3,295.2 3,384.1	2,672.6 2,757.6 2,826.2 2,906.8	2,596.6 2,695.2 2,769.3 2,854.3	68.6 58.3 61.7 57.3	7.5 4.1 4.8 4.8	113.5 115.6 117.3 119.6	341.0 346.4 351.6 357.7	106.3 107.3 108.1 109.5	234.7 239.1 243.6 248.2	46. 47. 51. 47.
1984: 	3,553.3 3,644.7 3,694.6	3,505.7 3,602.6 3,650.1 3,706.9	3,017.2 3,106.8 3,148.5 3,197.7	2,943.4 3,037.5 3,078.0 3,128.9	71.6 78.3 83.5 81.8	2.2 9.0 13.0 13.0	121.0 123.1 123.8 126.0	367.4 372.7 377.7 383.2	113.8 114.4 114.7 115.3	253.6 258.3 263.0 267.8	47. 42. 44. 45.

Includes compensation of employees in government enterprises.
 Compensation of government employees.
 Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-9.—Gross national product by sector in 1972 dollars, 1929-84 [Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

					Gross dom	estic produ	ct				1.36 1.41.7.1.5.3.7.1.1.1.1.8.2.5.0.7.2.2.2.0.0.3.7.0.3.7.0.3.0.7.9.3.7.0.3.7.0.3.7.0.3.7.0.3.7.7.5.5.6.9.5.7.7.9.4.5.1.5.6.9.5.7.7.9.4.5.1.5.6.9.5.7.7.9.4.5.1.5.6.9.5.7.7.9.4.5.1.5.6.9.5.1.7.3.8.5.1.7.8.8.1.5.6.9.9.3.7.2.2.2.3.5.1.2.2.2.3.3.7.3.9.7.4.9.2.2.3.3.7.3.9.7.4.5.1.3.8.1.5.6.9.9.3.2.2.3.5.1.3.8.1.5.6.9.9.3.2.2.2.3.5.1.3.8.1.5.6.9.9.3.2.2.2.3.5.1.3.8.1.5.6.9.9.3.2.2.2.3.3.7.0.3.3.7.0.3.3.9.7.4.5.1.3.8.1.5.6.9.9.3.2.2.2.3.5.3.3.9.7.4.9.3.3.7.0.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.7.3.3.9.3
•	Gross			Busines	is <sup>1</sup>		House-	G	overnment	2	Rest
Year or quarter	national product	Total	Total 1	Nonfarm 1	Farm	Statisti- cal discrep- ancy	holds and insti- tutions	Total	Federal	State and local	of the
1929 1933 1939	315.7 222.1 319.8	313.2 220.9 318.2	271.5 180.0 2 <b>61.0</b>	244.7 152.5 231.3	23.6 24.9 25.2	3.1 2.6 <b>4.6</b>	15.6 12.2 15.1	26.2 28.8 <b>42.</b> 1	5.2 6.6 16.9	21.0 22.1 <b>25.2</b>	2.4 1.3 1.6
1940	461.7 531.6 569.1 560.4 478.3 470.3 489.8 492.2	342.8 398.7 460.1 530.3 567.7 559.3 476.4 467.8 486.8 489.4	282.7 327.6 361.8 385.6 403.6 397.9 385.5 393.8 412.0 409.8	254.6 299.8 335.3 362.1 370.1 362.8 358.6 367.0 389.0 383.4	24.5 26.2 28.6 27.7 27.1 25.6 25.8 24.0 25.8 25.8	3.6 1.6 -2.1 -4.2 6.4 9.4 1.1 2.9 -2.8	16.1 15.9 16.4 15.2 15.1 15.0 15.1 16.0 16.7 17.3	44.0 55.2 81.9 129.4 149.1 146.4 75.9 58.0 58.1 62.3	18.6 29.6 56.7 105.0 125.2 121.8 49.7 29.8 29.2 31.3	25.4 25.6 25.2 24.5 23.9 24.6 26.2 28.2 29.0 31.0	1.7 1.5 1.3 1.4 1.1 1.8 2.5
1950 1951 1952 1953 1954 1955 1956 1957 1957	534.8 579.4 600.8 623.6 616.1 657.6 671.6 683.8 680.9 721.7	531.8 575.6 596.9 619.8 612.1 653.0 666.5 678.3 676.2 716.8	448.7 478.0 492.8 515.6 508.5 547.0 557.4 566.1 600.0	419.4 447.2 463.7 484.3 477.0 516.0 531.5 539.5 532.0 574.0	27.0 25.8 26.4 27.7 28.4 29.3 28.9 28.2 29.3 27.8	2.4 5.0 2.6 3.6 3.1 1.8 -3.0 -1.7 .3 -1.9	18.3 18.7 18.6 19.3 19.4 21.4 22.5 23.1 24.2 24.7	64.7 79.0 85.5 85.0 84.1 84.6 86.7 89.1 90.3	32.7 46.2 51.6 49.6 47.2 45.9 45.6 45.8 44.5	32.0 32.8 33.9 35.4 36.9 38.6 41.0 43.3 45.8 47.7	3.7 4.0 4.5 5.1 5.5 4.6
1960 1961 1962 1962 1963 1964 1965 1966 1967 1968	737.2 756.6 800.3 832.5 876.4 929.3 984.8 1,011.4 1,058.1	732.0 751.0 793.8 825.6 868.9 921.4 977.5 1,003.9 1,050.0 1,079.7	610.1 625.1 663.2 691.6 730.3 777.7 824.0 842.0 882.1	584.2 596.3 631.5 659.7 701.3 749.6 794.1 812.8 855.6 881.9	29.2 28.9 28.8 29.6 28.8 29.8 29.5 29.0 29.5	-3.3 -2 2.9 2.3 -1.6 1.7 -3 -2.5 -4.4	26.6 27.0 28.1 28.9 29.8 30.9 32.6 34.3 35.4 37.0	95.3 98.9 102.5 105.2 108.8 112.7 120.8 127.7 132.4 135.7	45.2 46.2 48.3 48.2 48.5 53.0 57.2 58.0 58.2	50.1 52.7 54.3 57.0 60.4 64.0 67.9 70.5 74.4 77.4	5.2 5.7 6.5 6.9 7.5 7.9 7.4
1970	1,085.6 1,122.4 1,185.9 1,254.3 1,246.3 1,231.6 1,298.2 1,369.7 1,438.6 1,479.4	1,077.6 1,112.8 1,175.0 1,239.2 1,229.0 1,217.8 1,282.6 1,352.8 1,418.7 1,453.2	904.8 938.6 998.6 1,060.7 1,047.4 1,032.4 1,095.4 1,163.7 1,224.3 1,255.6	875.4 901.7 963.4 1,028.4 1,012.4 994.5 1,059.5 1,129.5 1,129.5 1,123.5	31.1 32.6 31.9 31.8 33.6 32.1 32.1 32.6 34.2	-1.7 4.2 3.3 7 3.2 4.4 3.8 1.0 -1.8 -1.0	36.7 37.6 38.6 39.4 39.3 40.5 40.9 41.5 43.3 44.6	136.1 136.7 137.8 139.1 142.3 144.9 146.3 147.7 151.2 153.0	55.2 52.5 50.1 48.2 48.5 48.4 48.5 48.6 49.3	80.9 84.2 87.7 90.8 93.8 96.5 97.8 99.1 101.9	8.0 9.5 10.9 15.1 17.3 13.8 15.6 16.9
1980 1981 1982 1983 1984 P	1,475.0 1,512.2 1,480.0	1,449.3 1,486.3 1,456.7 1,512.1 1,618.8	1,248.2 1,283.8 1,253.4 1,307.8 1,413.0	1,211.9 1,240.6 1,214.8 1,273.8 1,377.0	35.0 40.3 38.9 33.8 39.7	1.3 2.9 3 .2 -3.7	45.5 46.3 46.7 47.3 47.8	155.6 156.2 156.5 157.0 158.0	49.6 50.0 50.5 51.3 51.9	106.0 106.2 106.0 105.7 106.1	25.9 23.3
1982: 	1,483.5 1,480.5 1,477.1	1,459.9 1,456.0 1,453.9 <b>1,456.8</b>	1,256.9 1,252.6 1,250.7 1,253.5	1,218.8 1,215.6 1,216.1 1,208.5	42.2 38.4 35.1 40.0	-4.1 -1.5 5 5.0	46.5 46.7 46.8 46.9	156.4 156.8 156.4 <b>156.5</b>	50.2 50.4 50.6 50.8	106.2 106.4 105.8 105.7	23.7 24.5 23.1 22.0
1983: 	1,491.0 1,524.8 1,550.2 1,572.7	1,468.9 1,502.6 1,526.2 1,550.7	1,265.2 1,298.5 1,321.9 1,345.7	1,225.4 1,264.1 1,289.3 1,316.3	36.2 32.5 34.8 31.6	3.5 1.9 -2.3 -2.2	47.1 47.2 47.3 47.5	156.7 156.9 157.0 <b>157.</b> 5	51.0 51.2 51.4 51.7	105.6 105.6 105.6 105.8	22.1 22.2 24.0 21.9
1984: 	1,610.9 1,638.8 1,645.2 1,661.1	1,589.2 1,619.8 1,625.3 1,640.9	1,384.0 1,414.1 1,419.5 1,434.3	1,347.5 1,380.1 1,383.5 1,396.9	35.6 38.1 41.8 43.3	1.0 4.1 5.9 5.8	47.6 47.9 47.7 48.2	157.7 157.8 158.1 158.3	51.8 51.9 52.0 52.0	105.8 105.9 106.2 106.3	21.6 19.0 19.9 20.3

Includes compensation of employees in government enterprises.
 Compensation of government employees.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-10.—Gross national product by industry, 1947-83
[Billions of dollars]

-	<u> </u>			· · · · · · · · · · · · · · · · · · ·		Gr	oss dome	estic produ	ct					
	Gross nation-	Agricul-			M	anufactur	ing	Trans-	Whole-	Fi- nance,		Govern- ment	Statisti-	Rest
Year	al prod- uct	ture, forestry, and fisheries	Mining	Con- struction	Total	Dura- ble goods	Non- durable goods	portation and public utilities	sale and retail trade	insur- ance, and real estate	Services	and govern- ment enter- prises	cal discrep- ancy	of the world
1947	233.1	20.8	6.8	9.1	66.2	33.5	32.7	20.5	44.2	23.2	20.2	19.3	1.5	1.2
1948	259.5	24.0	9.4	11.5	74.7	38.1	36.5	23.1	48.4	26.2	21.9	20.2	-1.6	1.6
1949	258.3	19.5	8.1	11.5	72.1	37.1	35.0	23.4	48.0	28.6	22.6	22.5	.6	1.4
1950	286.5	20.8	9.3	13.0	83.7	45.8	37.9	25.7	51.3	31.9	24.0	23.8	1.3	1.6
1951	330.8	23.8	10.2	15.4	98.7	55.4	43.3	29.2	56.4	35.2	25.9	30.8	3.2	2.1
1952	348.0	23.1	10.1	16.6	103.0	58.9	44.1	31.0	58.5	38.7	27.5	35.3	1.7	2.3
1953	366.8	21.3	10.6	17.1	112.1	65.9	46.2	32.9	59.8	42.8	29.4	36.4	2.3	2.2
1954	366.8	20.7	10.9	17.2	106.4	60.8	45.6	32.6	60.8	46.5	30.5	36.9	2.0	2.3
1955	400.0	19.9	12.4	18.5	120.9	70.6	50.3	35.6	66.2	50.0	34.0	38.5	1.3	2.8
1956	421.7	19.7	13.4	20.6	126.8	73.7	53.2	38.3	70.4	53.5	37.3	40.7	-2.1	3.2
1957	444.0	19.5	13.5	21.4	131.4	77.7	53.7	40.2	73.9	57.6	40.2	44.0	-1.2	3.5
1958	449.7	21.9	12.4	21.0	123.8	69.7	54.1	40.4	75.2	62.4	42.3	47.1	-2	3.0
1959	487.9	20.2	12.3	22.8	141.3	81.2	60.0	43.7	81.9	67.3	46.3	50.0	-1.3	3.3
1960	506.5	21.4	12.6	23.2	143.8	82.1	61.7	45.8	84.2	71.6	49.2	53.4	-2.4	3.6
1961	524.6	21.5	12.7	24.0	144.4	81.3	63.1	47.4	86.3	75.4	52.3	56.7	1	3.9
1962	565.0	21.9	12.8	25.7	157.9	91.5	66.4	50.2	92.1	80.6	56.1	61.1	2.1	4.6
1963	596.7	22.0	13.1	27.4	167.4	97.6	69.8	53.0	96.1	85.3	60.0	65.9	1.7	4.9
1964	637.7	21.0	13.4	29.8	179.4	105.3	74.2	56.3	104.7	91.0	65.3	71.2	.1	5.5
1965 1966 1967 1968 1969	799.6 873.4 944.0	23.8 24.8 24.2 25.0 27.8	13.5 14.2 14.6 15.3 16.1	32.8 35.9 37.5 41.3 46.3	197.7 216.6 222.3 242.8 256.7	118.0 130.4 133.6 146.0 154.5	79.7 86.3 88.7 93.8 102.2	60.5 65.3 68.6 74.0 80.0	112.6 121.5 130.1 144.4 157.0	98.0 105.9 114.2 123.8 133.6	70.8 <b>78.4</b> <b>86.1</b> <b>94.2</b> <b>105.3</b>	76.7 86.4 96.3 108.1 118.2	-1.2 1.4 3 -2.1 -3.9	5.9 5.6 5.9 6.7 6.9
1970		28.6	17.6	48.9	252.2	146.2	105.9	85.7	166.5	142.4	114.4	130.5	-1.5	7.3
1971		30.8	17.4	53.6	265.6	153.9	111.7	93.8	181.4	156.4	123.6	141.8	4.1	9.2
1972		35.4	19.0	59.4	292.5	173.2	119.3	104.3	199.5	169.8	136.5	155.4	3.3	10.9
1973		53.8	21.7	66.3	326.1	195.9	130.2	114.3	221.5	184.9	153.1	167.8	.8	16.0
1974		52.2	32.2	69.2	340.7	201.3	139.4	122.9	241.5	202.0	167.5	182.7	3.7	19.8
1975 1976 1977 1978 1979			38.8 43.0 47.4 52.0 66.8	69.9 76.6 86.6 102.1 115.7	358.2 410.4 464.8 518.7 563.2	207.6 240.0 277.7 316.7 344.3	150.6 170.4 187.1 202.0 218.9	135.7 152.6 170.9 193.3 209.6	266.2 291.4 322.3 362.3 401.4	216.2 238.6 275.5 317.4 358.3	186.2 208.2 234.3 265.9 302.4	202.0 220.4 237.2 259.1 279.6	5.5 5.1 1.4 2.6 1.5	17.3 20.5 23.5 29.6 42.6
1980	2,631.7	76.8	96.0	119.8	581.5	350.4	231.1	231.9	428.8	398.7	342.6	308.1	2.3	45.3
1981	2,957.8	90.4	132.3	122.8	643.6	386.8	256.8	261.2	474.1	450.1	389.4	338.1	5.6	50.3
1982	3,069.3	85.5	125.1	123.7	630.6	364.0	266.5	280.7	489.6	491.0	430.9	364.7	5	48.0
1983	3,304.8	72.7	112.4	130.7	685.2	389.7	295.5	306.8	536.2	542.5	477.5	392.1	.5	48.3

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-11.—Gross national product by industry in 1972 dollars, 1947-83
[Billions of 1972 dollars]

							Gross d	omestic	product						
Year	Gross national product	Agri- culture, forest- ry, and fisher- ies	Min- ing	Con- struc- tion	Ma Total	Dura- ble goods	Non- durable goods	Trans- por- tation and public util- ities	Whole- sale and retail trade	Fi- nance, insur- ance, and real estate	Serv- ices	Govern- ment and govern- ment enter- prises	Sta- tis- tical dis- crep- ancy	Resid- ual <sup>1</sup>	Rest of the world
1947	470.3	26.3	10.8	22.9	114.9	68.5	46.4	42.3	75.9	54.7	55.9	68.7	2.9	-7.4	2.5
1948	489.8	28.2	11.3	26.5	121.4	72.0	49.4	42.1	78.0	56.6	57.5	69.2	-2.8	-1.2	3.0
1949	492.2	28.0	9.9	26.5	115.1	66.3	48.8	39.2	79.8	59.8	57.6	73.3	.8	6	2.7
1950	534.8	29.3	11.1	29.3	131.1	78.1	53.0	41.2	87.5	63.9	59.7	75.6	2.4	.8	3.0
1951	579.4	28.4	12.1	32.5	146.0	89.9	56.1	45.5	88.3	66.7	60.8	90.0	5.0	.2	3.7
1952	600.8	29.2	11.9	33.8	150.8	94.3	56.5	45.5	91.0	70.9	61.6	96.9	2.6	2.6	3.9
1953	623.6	30.5	12.2	34.8	161.1	102.6	58.5	46.6	93.9	73.9	62.7	96.3	3.6	4.1	3.7
1954	616.1	31.3	11.8	36.0	149.6	91.7	57.9	45.8	94.5	77.3	62.9	95.2	3.1	4.6	4.0
1955	657.5	32.1	13.2	38.2	165.7	103.4	62.3	49.7	103.1	81.8	67.6	95.7	1.8	4.2	4.5
1956	671.6	31.7	13.9	40.9	166.9	102.5	64.4	52.1	106.2	85.8	70.9	97.8	-3.0	3.4	5.1
1957	683.8	31.1	13.8	40.9	167.7	102.9	64.8	53.2	107.9	89.8	74.1	100.4	-1.7	.9	5.5
1958	680.9	32.2	12.7	42.1	153.3	88.8	64.5	51.9	107.8	93.4	76.2	101.7	.3	4.5	4.6
1959	721.7	30.6	13.3	45.5	171.2	100.9	70.3	55.4	115.4	98.5	80.8	104.0	-1.9	4.0	4.9
1960	737.2	32.1	13.5	46.1	171.8	101.0	70.8	57.5	117.5	102.7	83.5	107.7	-3.3	3.1	5.2
1961	756.6	31.8	13.6	46.7	172.0	99.5	72.5	58.6	118.7	107.3	86.6	111.6	2	4.4	5.7
1962	800.3	31.7	13.9	48.4	186.7	110.0	76.7	61.5	126.3	113.3	90.3	115.5	2.9	3.2	6.5
1963	832.5	32.5	14.5	49.9	202.2	119.5	82.8	65.0	131.1	116.8	94.0	118.7	2.3	-1.5	6.9
1964	876.4	31.8	15.1	52.2	216.7	129.8	86.8	68.1	139.1	122.1	98.8	123.1	.2	1.7	7.5
1965 1966 1967 1968 1969	929.3 984.8 1 011 4	32.8 31.3 32.6 32.1 32.7	15.7 16.5 17.0 17.6 18.2	54.4 54.6 53.4 56.9 55.8	236.7 254.9 254.3 268.2 277.2	144.6 157.3 157.4 165.5 170.3	92.0 97.6 96.9 102.7 106.8	73.4 79.4 81.6 88.2 92.6	148.2 156.3 160.1 169.9 173.6	128.5 133.9 139.4 145.7 152.9	103.1 109.0 115.0 118.8 124.0	127.8 136.9 144.1 148.9 152.5	-1.6 1.7 3 -2.5 -4.4	2.3 3.0 6.7 6.2 4.6	7.9 7.4 7.5 8.2 7.9
1970	1,085.6	34.4	18.9	53.4	261.2	155.2	106.0	94.9	176.4	155.8	126.7	152.9	-1.7	4.7	8.0
1971	1,122.4	35.9	18.4	57.9	266.8	156.4	110.4	97.9	185.5	162.6	128.4	153.9	4.2	1.2	9.5
1972	1,185.9	35.4	19.0	59.4	292.5	173.2	119.3	104.3	199.5	169.8	136.5	155.4	3.3	.0	10.9
1973	1,254.3	35.3	19.2	60.1	325.3	<b>194.2</b>	131.1	110.6	211.1	177.2	144.8	157.2	.7	-2.5	15.1
1974	1,246.3	35.8	19.2	53.3	311.7	186.3	125.3	111.9	207.0	184.5	147.9	161.2	3.2	-6.5	17.3
1975 1976 1977 1978	1,231.6	37.1 35.8 36.9 37.0 38.9	18.9 19.1 19.5 20.1 <b>20.8</b>	48.3 52.8 55.0 58.8 58.2	289.6 317.4 339.2 357.2 367.0	168.8 187.2 202.9 217.4 223.4	120.8 130.1 136.3 139.8 143.6	113.5 118.6 125.1 134.2 140.0	209.7 220.2 231.0 244.6 250.7	187.9 194.8 207.2 217.8 229.4	148.5 154.7 164.3 174.2 183.0	164.3 165.7 167.5 171.7 174.3	4.4 3.8 1.0 -1.8 -1.0	-4.2 2 6.0 4.9 -8.1	13.8 15.6 16.9 19.9 <b>26.3</b>
1980 1981 1982 1983	1,512.2 1,480.0	39.9 45.3 44.1 39.1	21.6 22.5 21.6 21.0	52.2 50.1 48.9 50.2	351.0 359.7 336.6 354.1	210.2 216.3 196.9 208.2	140.8 143.4 139.7 145.9	139.6 142.8 138.6 142.5	246.0 252.7 250.3 266.7	235.6 243.6 248.1 253.5	189.1 197.6 200.2 206.8	177.5 178.1 177.9 178.3	1.3 2.9 3 .2	-4.6 -8.9 -9.4 4	25.7 25.9 23.3 22.5

<sup>\*</sup> Equals GNP in constant dollars measured as the sum of incomes less GNP in constant 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-12.—Gross domestic product of nonfinancial corporate business, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

					_			Net dom	estic p	roduct					
	Gross domes-	Capital consump-							Dom	estic in	come				
	tic product	tion allow- ances		Indi-			C	orporate	profits co	with i	nvento ion ad	ry valuatio justments	n and ca	pital	1.0 9.1 1.2 1.3 1.5 1.6 1.7 2.7 3.1 3.5 4.8 4.5 4.8 7.4 10.1 113.1 17.0 19.1 23.6 30.8 50.8
Year or quarter	of non- Ifinancial	with capital	Total	rect busi- ness		Compen- sation				Profit	s		Inven-	Capital	
	corpo-	consump- tion		tax, etc.1	Total	of employ-	loy- Total Profits Profits after tax valu-	consump- tion							
	business					ees	, , , , ,	before tax	tax liabil- ity	Total	Divi- dends	Undis- tributed profits	ation adjust- ment	adjust- ment	
1929 1933 1939	24.4 43.7	5.5 4.3 4.8	44.5 20.2 39.0	3.4 3.8 5.1	41.2 16.3 33.9	32.3 16.7 28.2	7.5 2.1 4.2	8.4 .6 6.1	1.2 .5 1.4	7.3 .1 4.7	5.1 2.0 3.3	2.2 -1.9 1.4	0.5 2.1 7	-1.4 6 -1.1	1.4 1.7 1.5
1940 1941	1 656	4.9 5.4	45.4 60.2	5.5 6.4 6.8	40.0 53.8	31.2 39.8	7.4 12.7 17.7	8.8 16.4 20.1	2.7 7.5 11.2	6.1 9.0 8.9	3.5 3.9	2.6 5.0	2 2.5 1.2 8 3	-1.2 -1.3	1.4 1.3
1942 1943	82.9 98.7 102.1	6.1 6.2 6.3	76.8 92.4 95.8	6.8 7.3 8.1	70.0 85.2 87.7	51.0 62.2 65.1	21.8 21.6	20.1 23.6 22.2	11.2 13.8 12.6	9.8 9.6	3.7 3.9 4.1	5.2 5.8 5.6	-1.2 8 3	-1.3 -1.2 9 3 2 -3.0 -3.5 -4.0	1.1
1944 1945 1946	99.1	6.5 7.6	88.8 91.8	20	79.9 81.6	61.9 67.2	17.1 13.8	17.8 22.0	10.2 8.6 10.8	7.6 13.4	4.1	3.5 8.6	0	_3.0	1.0
1947 1948 1949	120.0	6.1 6.2 6.3 6.5 7.6 9.3 10.9 11.7	110.7 126.4 121.8	10.1 11.2 12.1 12.6	99.6 114.3 109.2	79.1 87.8 85.3	19.7 25.6 22.9	29.1 31.8 24.9	10.8 11.8 9.3	18.3 20.0 15.6	5.5 6.0 6.0	12.8 14.0 9.6	-5.9 -2.2 1.9	-3.5 -4.0 -3.9	.8 .9
1950 1951	151 9	12.6 14.6	139.3 159.9	14.1 15.2	125.2	94.7	296	38.5 39.1	16.9 21.2	21.6 17.9	7.5	14.1 10.8	-5.0	3.9	.9
1952	195.0	15.8 16.8	166.6 178.2	16.8 18.2 17.4	144.7 149.7 160.0	110.2 118.3 128.7	33.4 30.2 30.0	33.8 34.9 32.1	17.8	16.0 16.4	7.1	8.8 9.1	1.0 -1.0	-4.5 -3.9	
1954	191.9 216.7	17.9 19.1	174.0 197.6	19.2	156.6 178.4	126.5 138.5	28.6 38.3 35.9	42.0	18.5 15.6 20.2	16.4 21.8 21.8	7.4 8.5	9.0 13.4	3 -1.7	-3.2 -2.0	1.5 1.6
1956 1957 1958	242.3	21.8 23.8 24.8	209.8 218.5 211.6	20.8 22.4 22.8	189.0 196.1 188.8	151.4 159.1 155.9	35.9 34.9 30.2 40.1	41.8 39.8 33.7	20.1 19.1	21.8 20.7 17.5	9.3	12.7 11.4 8.2	-2.7 -1.5 3	-3.9 -3.2 -2.0 -3.2 -3.4 -3.2 -2.7	2.2 2.7
1959	266.0	25.8 26.8	240.2 250.2	25.4 28.3	214.8 221.9	155.9 171.6 181.1		43.1 39.7	16.2 20.7 19.2	22.4	10.0	12.4 9.9	3	-2.7 -2.1	
1961	285.0 311.3	27.5 28.4	257.5	30.1 33.0	227.3 249.9	185.1 199.8	37.4 38.3 45.6	39.5	19.5 20.6	20.1	106	9.5	2 .3 .0	-1.5 1.4 2.3 2.9	3.9 4.5
1963 1964 1965	331.8 358.4	29.4 30.8	283.0 302.3 327.6	35.6 38.4 41.1	266.8 289.3	210.7	45.6 51.2 57.7	44.2 48.9 55.4	22.8 24.0 27.2	23.5 26.2 31.4	12.6 13.7	12.2 13.5 17.7	15	2.3 2.9	4.8 5.3
1965	431.5	32.7 35.6 38.9	360.9 395.9 415.2	42.9 45.8	319.8 353.0 369.5	246.1 273.5 291.9	67.7 72.2 68.8	55.4 65.2 70.3 66.3 72.9	27.2 29.5 27.7	38.0 40.8 38.6	16.8	22.4 24.0 21.2	-1.2 -2.1 -1.6	3.7 3.9 4.0	7.4 8.7
1968 1969	1 500.2	42.6 47.1	457.6 497.0	51.5 58.0	406.1 439.1	322.8 358.5	68.8 73.3 67.5	72.9 69.4	33.4 33.1	39.5 36.2	l 19.1	20.4 17.1	-3.7 -5.9	4.0 4.0	10.1
1970 1971	l eud d	52.2 57.3	511.4 552.6 615.5	63.4 70.5	448.1 482.1	378.4 402.0	52.7 62.1	56.8 65.4 76.6	27.0 29.8 33.6	29.8 35.6	18.5 18.5	11.3 17.1	-6.6 -4.6 -6.6	2.4 1.3	18.0
1972 1973 1974	678.0 <b>759.4</b> <b>818.9</b>	62.6 67.9 79.5	691.6	76.7 83.7 89.7 97.1	538.7 607.9	447.0 506.2 556.5	72.7 78.6 63.6	96.0	I 40.0	43.0 56.0 63.3	20.1 21.1 21.4	22.9 35.0 41.9	-6.6 -20.0 -40.0	2.7 2.6 —1.8	23.0
1974 1975 1976	1 001 3	94.9 104.8	739.4 795.1 896.5	105.3	649.7 697.9 791.2	581.1 654.4	86.1 107.3	105.3 107.3 135.0	42.0 41.2 52.6	66.1 82.3	25.7 30.1	40.4 52.2	-11.6 -14.7	9.7 13.0	30.8
1977 1978 1979	1,128.4	115.7 130.9 149.6	896.5 1,012.7 1,145.3 1,267.3	112.6 122.0 130.5	900.1 1,023.3 1,136.7	738.5 844.3 958.1	129.5 142.1 134.7	156.5 178.4 191.8	59.6 66.9 69.2	96.8 111.5 122.5	31.9 37.7 39.8	64.9 73.8 82.8	-16.2 -24.0 -43.1	-10.8 -12.3 -13.9	32.1 36.9
1980	1 540 7	170.0 192.0 209.7	1,370.7 1,547.1		1,223.0 1,369.4		120.3 147.4	177.8	67 N	110 8	43.7	67.1 60.0	-42.9 -23.6	14.7 6.3	
1983	1.917.7	218.0	1,568.7 1,699.7 1,919.7	147.6 177.7 180.2 196.7	1,388.4 1,503.0 1,704.9	1,198.1 1,263.1 1,392.4	118.1 171.0	177.3 123.5 148.8 182.7	63.9 44.3 58.0	113.4 79.2 90.8	56.8 62.8	22.4 28.0	-23.6 -9.5 -11.2	4.1 33.4 55.7	72.3 69.0
1984 » 1982:	2,150.6	231.0		214.8		ŀ		182.7	70.0	112.7	69.9	42.9	-5.7	55.7	79.8
l II	1,770.6 1,782.7	203.8 208.1 212.0	1,566.9 1,574.7 1,575.8 1,557.3	177.9 178.3 180.8	1,388.9 1,396.4 1,395.0	1,187.2 1,199.2 1,205.2 1,200.9	125.9 121.4 120.9	132.5 128.5 125.6	49.3 46.6 44.8	83.1 81.8	56.8 55.5 57.5	26.3 26.3 23.4	-6.3 -8.9 -10.1	—.3 1.9	75.9 75.8
IV	1,787.8	212.0 215.1	1,575.8 1,557.3	180.8 183.9	1,395.0 1,373.4	1,205.2 1,200.9	120.9 104.1	125.6 107.4	44.8 36.4	80.9 71.0	57.5 <b>57.6</b>	23.4 13.4	-10.1 -12.6	5.4 9.3	69.0 68.5
1983:	1,812.3	214.2 215.3	1,598.2	186.3	1,411.9	1,215.9	128.8 161.2	110.8	41.9	68.9	61.1	7.8	4.3	22.3 30.7	67.2
II III IV	1,812.3 1,887.6 1,956.6 2,014.2	215.3 220.0 222.5	1,598.2 1,672.3 1,736.6 1,791.8	186.3 196.4 200.4 203.7	1,411.9 1,475.9 1,536.2 1,588.0	1,215.9 1,247.7 1,277.8 1,310.8	161.2 188.0 205.8	142.5 170.4 171.5	56.4 67.0 66.7	86.1 103.4 104.8	61.1 62.9 63.2 63.9	23.1 40.2 40.9	-12.1 -19.3 -9.2	30.7 36.9 43.6	67.1 70.4 71.3
1984:															}
1 11 110	2,146.9	225.6 229.3 232.9	1,858.6 1,917.6 1,936.0	207.3 213.4 216.9	1,651.2 1,704.2 1,719.1	1,354.0 1,384.5 1,405.2	223.0 240.8 231.6	188.9 195.9 173.8	77.2 64.4	114.5 118.6 109.5	65.9 70.3 70.9	48.5 48.3 38.5	-13.5 -7.3 2	47.5 52.2 58.0	78.9 82.4
IV P		236.1		221.6		1,425.9					72.2		-1.7	65.0	83.5

<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-13.—Output, costs, and profits of nonfinancial corporate business, 1948-84 [Quarterly data at seasonally adjusted annual rates]

	Gross do	mestic		Current-dol	lar cost	and profit p	er unit of	f output (	dollars) 1			<del> </del>
Year_or	nonfine corpo business of dol	incial rate (billions	Total	Capital consump- tion allow- ances	Indi- rect	Compen- sation	invento capit	rate profit ory valuati al consum idjustment	on and ption		Output per hour of all employ-	Compen- sation per hour of all
quarter	Current dollars	1972 dollars	cost and profit <sup>2</sup>	with capital consump- tion adjust- ment	busi- ness tax, etc.3	of employ- ees	Total	Profits tax liability	Profits after tax 4	Net interest	ees (1972 dollars)	employ- ees (dollars)
1948 1949	137.3 133.5	229.7 219.9	0.598 .607	0.047 .053	0.053 .057	0.382 .388	0.112 .104	0.051 .042	0.060 .062	0.004 .004		
1950 1951 1952 1953 1954	151.9 174.5 182.3 195.0 191.9	247.5 270.2 275.2 292.0 283.4	.614 .646 .663 .668 .677	.051 .054 .057 .058 .063	.057 .056 .061 .062 .061	.383 .408 .430 .441 .446	.120 .124 .110 .103 .101	.068 .079 .065 .063 .055	.051 .045 .045 .040 .046	.004 .004 .004 .004		
1955 1956 1957 1958 1959	216.7 231.6 242.3 236.3 266.0	315.1 324.1 328.3 313.4 347.4	.688 .715 .738 .754 .766	.061 .067 .073 .079 .074	.061 .064 .068 .073 .073	.439 .467 .484 .497 .494	.122 .111 .106 .097 .116	.064 .062 .058 .052 .060	.057 .049 .048 .045	.005 .005 .007 .009	5.206 5.433	
1960 1961 1962 1963 1964	277.0 285.0 311.3 331.8 358.4	358.4 367.2 399.7 426.3 455.6	.773 .776 .779 .778 .787	.075 .075 .071 .069 .068	.079 .082 .083 .083	.505 .504 .500 .494 .497	.104 .104 .114 .120 .127	.054 .053 .052 .053 .053	.051 .051 .062 .067	.010 .011 .011 .011 .012	5.536 5.727 5.997 6.248 6.469	2.797 2.887 2.998 3.089 3.213
1965 1966 1967 1968 1969	393.6 431.5 454.1 500.2 544.1	495.2 530.7 543.0 578.9 604.0	.795 .813 .836 .864 .901	.066 .067 .072 .074 .078	.083 .081 .084 .089	. <b>497</b> .515 .538 .558 .594	.137 .136 .127 .127 .112	.055 .056 .051 .058 .055	.082 .080 .076 .069 .057	.012 .014 .016 .017 .022	6.673 6.776 6.847 7.074 7.092	3.316 3.492 3.680 3.945 4,209
1970 1971 1972 1973 1974	563.7 609.9 678.0 759.4 818.9	599.6 626.8 678.0 731.9 708.2	.940 .973 1.000 1.038 1.156	.087 .091 .092 .093 .112	.106 .113 .113 .114 .127	.631 .641 .659 .692 .786	.088 .099 .107 .107 .090	.045 .047 .049 .055 .059	.043 .052 .058 .053 .030	.028 .029 .028 .031 .042	7.115 7.450 7.664 7.849 7.555	4.491 4.778 5.052 5.429 5.937
1975 1976 1977 1978 1979	890.0 1,001.3 1,128.4 1,276.2 1,416.8	694.2 745.5 795.8 846.3 876.1	1.282 1.343 1.418 1.508 1.617	.137 .141 .145 .155 .171	.140 .141 .141 .144 .149	.837 .878 .928 .998 1.094	.124 .144 .163 .168 .154	.059 .071 .075 .079 .079	.065 .073 .088 .089 .075	.044 .040 .040 .044 .050	7.774 7.998 8.141 8.209 8.194	6.507 7.021 7.555 8.191 8.961
1980 1981 1982 1983 1984 P	1,540.7 1,739.2 1,778.4 1,917.7 2,150.6	859.5 883.3 857.4 896.4 976.5	1.793 1.969 2.074 2.139 2.202	.198 .217 .245 .243 .237	.172 .201 .210 .219 .220	1.218 1.307 1,397 1.409 1.426	.140 .167 .138 .191 .238	.078 .072 .052 .065 .072	.062 .095 .086 .126 .167	.065 .076 .084 .077 .082	8.118 8.271 8.357 8.634	9.884 10.811 11.677 12.166
1982:      	1,770.6 1,782.7 1,787.8 1,772.4	865.1 859.6 858.5 846.5	2.047 2.074 2.083 2.094	.236 .242 .247 .254	.206 .207 .211 .217	1.372 1.395 1.404 1.419	.145 .141 .141 .123	.057 .054 .052 .043	.088 .087 .089 .080	.088 .088 .080 .081	8.317 8.313 8.406 8.398	11.413 11.596 11.801 11.913
1983:      	1,812.3 1,887.6 1,956.6 2,014.2	855.7 886.2 912.4 931.1	2.118 2.130 2.144 2.163	.250 .243 .241 .239	.218 .222 .220 .219	1.421 1.408 1.400 1,408	.151 .182 .206 .221	.049 .064 .073 .072	.102 .118 .133 .149	.079 .076 .077 .077	8.464 8.617 8.728 8.725	12.027 12.131 12.224 12.283
1984:   	2,084.2 2,146.9 2,168.9	956.9 979.5 980.0	2.178 2.192 2.213	.236 .234 .238	.217 .218 .221	1.415 1.414 1.434	.233 .246 .236	.078 .079 .066	.155 .167 .171	.078 .081 .084	8.801 8.863 8.807	12.454 12.528 12.628

<sup>Output is measured by gross domestic product of nonfinancial corporate business in 1972 dollars.
This is equal to the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.
Indirect business tax and nontax liability plus business transfer payments less subsidies.
With inventory valuation and capital consumption adjustments.</sup> 

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

Table B-14.—Personal consumption expenditures, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

						Ourable goods		Nondurab	le goods
Year or quarter	Personal consump- tion expendi- tures	Durable goods	Nondura- ble goods	Services	Motor vehicles and parts	Furniture and household equip- ment	Other	Food	Clothing and shoes
1929 1933 1939	77.3 45.8 67.0	9.2 3.5 6.7	37.7 22.3 35.1	30.3 20.1 25.2	3.3 1.1 2.3	4.7 1.9 3.4	1.2 .5 1.0	19.5 11.5 19.1	9.4 4.6 7.1
1940	99.4 108.2 119.5 143.8 161.7 174.7	7.8 9.7 6.9 6.5 8.0 15.8 20.4 22.9 25.0	37.0 42.9 50.8 58.6 64.3 71.9 82.7 90.9 96.6 94.9	26.2 28.2 31.0 34.3 37.1 39.6 45.3 50.4 55.3 58.2	2.8 3.5 .7 .8 1.0 4.1 6.6 8.0 10.6	3.8 4.6 3.9 3.8 4.5 8.4 10.6 11.5 11.3	1.1 1.3 1.6 1.9 2.1 2.5 3.2 3.3 3.4 3.2	20.2 23.4 28.4 33.2 36.7 40.6 47.4 52.3 54.2 52.5	7.5 8.8 11.0 13.4 14.6 16.5 18.2 20.1
1950	207.1 217.1 229.7 235.8 253.7 266.0 280.4 289.5	30.8 29.8 29.1 32.5 31.8 38.6 37.9 39.3 36.8 42.4	98.2 108.8 113.9 116.5 118.0 122.9 128.9 135.2 139.8 146.4	63.0 68.5 74.0 80.6 86.1 92.1 99.2 105.9 112.8 121.9	13.7 12.2 11.3 13.9 13.0 17.8 15.8 17.2 14.8 18.9	13.7 14.0 14.6 14.6 16.2 17.1 16.9 16.6 17.8	3.3 3.6 3.9 4.1 4.2 4.6 5.2 5.4 5.8	53.9 60.4 63.4 64.4 65.4 67.2 69.9 73.6 76.4 79.1	19.0 21.1 22.2 22.2 23.24.24.24.24.26.
1960	374.6 400.5 430.4 465.1 490.3 536.9	43.1 41.6 46.7 51.4 56.4 63.0 68.0 70.1 80.5 85.7	151.1 155.3 161.6 167.1 176.9 188.6 204.7 212.6 230.6 247.8	130.7 138.1 147.0 156.1 167.1 178.7 192.4 207.6 225.8 248.2	19.7 17.8 21.5 24.4 26.1 30.0 30.4 30.1 36.3 38.7	17.7 17.9 18.9 20.3 22.8 24.7 27.7 29.5 32.3 34.1	5.8 5.8 6.3 6.7 7.6 8.3 9.9 10.5 11.8 13.0	81.1 83.2 85.5 87.8 92.7 98.9 106.6 109.6 118.7 127.5	26. 27. 28. 29. 31. 33. 36. 42. 45.
1970 1971 1972 1973 1974 1975 1976 1976 1977 1977	737.1 812.0 888.1 976.4 1,084.3 1,204.4	85.2 97.2 111.1 123.3 121.5 132.2 156.8 178.2 200.2 213.4	265.7 278.8 300.6 333.4 373.4 407.3 441.7 478.8 528.2 600.0	270.8 296.2 325.3 355.2 393.2 437.0 485.7 547.4 618.0 693.7	36.2 45.4 52.4 57.1 50.4 55.8 72.6 84.8 95.7 96.6	35.2 37.2 41.7 47.1 50.6 53.5 59.1 65.7 72.8 81.8	13.9 14.6 16.9 19.2 20.5 22.9 25.2 27.7 31.7 35.1	138.9 144.2 154.9 172.1 193.7 213.6 230.6 249.8 275.9 311.6	46. 50. 55. 61. 64. 69. 75. 82. 92.
1980	1,668.1 1,849.1 1,984.9 2,155.9 2,342.3	214.7 235.4 245.1 279.8 318.4	668.8 730.7 757.5 801.7 858.3	784.5 883.0 982.2 1,074.4 1,165.7	90.7 101.9 108.7 129.3 149.5	86.3 92.3 94.4 104.1 117.1	37.7 41.2 42.1 46.4 51.8	345.1 373.9 392.8 416.5 444.3	104.6 114.3 118.8 127.0 140.3
1982: 	i	239.4 241.6 244.5 255.0	746.4 750.6 762.5 770.6	945.4 968.6 994.2 1,020.6	106.2 105.1 108.1 115.3	92.1 94.4 94.5 96.6	41.2 42.1 41.9 <b>43.</b> 1	384.2 390.6 396.0 <b>400.3</b>	118.0 118.0 119.0 120.0
1983: 	2,070.4 2,141.6 2,181.4	259.4 276.1 284.1 299.8	775.2 796.9 811.7 823.0	1,035.8 1,068.6 1,085.7 1,107.5	115.3 128.4 132.0 141.7	99.1 102.4 105.2 109.8	45.0 45.3 46.9 48.2	406.7 413.6 420.5 425.1	121.0 127. 126.0 132.0
1984: 	2,276.5 2,332.7	310.9 320.7 317.2 324.7	841.3 858.3 861.4 872.1	1,124.4 1,153.7 1,182.8 1,201.8	147.7 152.3 148.6 149.4	113.0 116.6 116.8 122.0	<b>50.3</b> 51.7 51.9 53.3	<b>433.9</b> 442.1 448.6 452.6	136.1 142.1 139.1 143.1

See next page for continuation of table.

TABLE B-14.—Personal consumption expenditures, 1929-84—Continued [Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Nondur	able goods	cont'd				Services			
Year or quarter	Gasoline	Fuel oil			Hou	sehold opera	tion	Transpar	.Oth	ier
quarter	and oil	and coal	Other	Housing 1	Total	Electricity and gas	Other	Transpor- tation	Total	Medical care
1929 1933 1939	1.8 1.5 2.2	1.6 1.2 1.4	5.4 3.5 5.3	11.7 8.1 9.4	4.0 2.8 3.8	1.2 1.1 1.4	2.9 1.7 2.4	2.6 1.5 2.0	12.0 7.7 10.0	2.2 1.5 2.1
1940 1941 1942 1943 1944 1945 1946 1946 1947 1948	2.3 2.6 2.1 1.3 1.4 1.8 3.4 4.0 4.8 5.3	1.5 1.7 1.9 2.0 2.0 2.2 2.5 3.0 3.4 3.1	5.6 6.4 7.5 8.7 9.6 10.8 11.3 12.8 14.1	9.7 10.4 11.2 11.8 12.3 12.8 14.2 16.0 17.9 19.6	4.0 4.3 4.8 5.2 5.9 6.4 6.8 7.5 8.1	1.5 1.6 1.7 1.8 1.9 2.1 2.3 2.6 2.9	2.6 2.7 3.5 4.1 4.5 5.1 5.4 5.6	2.1 2.4 2.7 3.4 3.7 4.0 5.0 5.3 5.8 5.9	10.3 11.2 12.2 13.9 15.2 16.4 19.4 21.7 23.6 24.1	2.2 2.4 2.6 3.3 3.6 4.5 5.5 6.4
1950	5.5 6.8 7.4 7.8 8.6 9.4 10.2 10.6 11.3	3.4 3.5 3.4 3.5 3.8 3.9 4.1 4.2 4.0	15.8 17.6 18.3 19.3 19.2 20.3 21.6 23.0 24.0 25.9	21.7 24.3 27.0 29.8 32.2 34.3 36.7 39.3 42.0 45.0	9.5 10.4 11.1 12.0 12.6 14.0 15.2 16.2 17.3 18.5	3.3 3.7 4.1 4.5 5.0 5.5 6.1 6.5 7.1 7.6	6.2 6.7 7.0 7.5 7.6 8.5 9.2 9.7 10.2 10.9	6.2 6.7 7.1 7.8 7.9 8.2 8.6 9.0 9.3 10.1	25.6 27.0 28.8 31.0 33.3 35.6 38.7 41.4 44.3 48.3	6.9 7.3 8.6 9.7 10.3 11.0 12.0 13.1
1960	12.0 12.0 12.6 12.9 13.5 14.7 16.0 17.0 18.6 20.7	3.8 3.7 3.7 4.0 4.1 4.4 4.7 4.8 4.7	27.5 29.0 31.1 32.8 34.6 37.2 40.9 43.0 46.5 49.6	48.1 51.2 54.7 58.0 61.4 65.5 69.5 74.1 79.8 87.0	20.1 21.0 22.2 23.4 24.8 26.3 28.0 30.0 32.2 35.0	8.3 8.8 9.4 9.9 10.4 10.9 11.5 12.2 13.1 14.2	11.8 12.2 12.8 13.6 14.4 15.4 16.5 17.8 19.2 20.8	10.7 11.2 11.7 12.2 12.8 13.7 15.0 16.2 17.6 19.5	51.7 54.8 58.3 62.5 68.1 73.3 79.9 87.2 96.2 106.8	15.4 16.4 18.0 19.5 22.3 23.9 26.0 28.4 31.4
1970	22.4 23.9 25.4 28.6 36.6 40.4 44.0 48.1 51.2 66.6	4.4 4.5 5.0 6.2 7.7 8.2 9.8 10.7 11.9 16.1	53.2 55.5 59.8 65.0 70.5 75.5 82.1 87.6 96.9	93.9 102.7 112.5 123.8 137.4 149.8 166.5 185.9 236.0	37.7 41.0 45.2 49.6 55.2 63.3 71.6 81.1 90.1	15.4 17.0 18.8 20.5 24.0 29.2 32.9 38.5 42.9 47.8	22.2 24.0 26.4 29.1 31.2 34.1 38.7 42.6 47.2 51.5	22.0 25.1 27.5 28.8 30.9 33.2 38.6 46.4 51.2 56.3	117.2 127.4 140.1 153.0 169.8 190.7 209.0 234.1 267.1 302.0	41.0 45.5 51.4 57.4 64.9 73.7 83.3 96.5 108.4
1980 1981 1982 1983 1984 P	84.8 94.6 90.4 90.0 91.7	18.6 20.7 20.6 21.0 21.3	115.7 127.1 135.0 147.2 160.7	266.2 302.0 333.8 363.3 397.8	113.0 127.5 143.4 153.8 164.1	<b>57.6</b> 65.8 75.2 81.3 85.8	55.4 61.7 68.2 72.5 78.3	61.1 65.0 68.2 72.5 78.2	344.3 388.5 436.8 484.8 525.5	145.1 170.6 193.1 209.5 227.4
1982: I	93.4 88.6 89.9 89.6	20.6 20.1 21.1 20.7	130.2 133.3 136.5 139.9	323.4 329.3 337.3 345.2	140.0 142.0 144.4 147.3	74.5 74.4 <b>75.2</b> <b>76.9</b>	65.5 67.7 69.2 70.5	66.0 67.9 69.7 69.3	415.9 429.5 442.9 458.7	184.5 191.1 196.3 200.5
1983:             V	86.7 89.5 92.1 91.7	18.6 21.0 22.4 22.1	141.7 145.7 149.8 151.5	352.6 359.2 366.8 374.7	147.0 155.0 155.7 157.5	75.1 82.6 83.6 84.0	71.9 72.5 72.1 73.5	70.2 71.1 73.9 74.8	466.1 483.2 489.3 500.5	203.6 208.4 211.3 216.3
1984: 	1 90.0	22.5 21.6 21.1 19.8	156.7 159.7 162.5 163.9	382.4 392.4 403.3 413.3	158.8 163.3 167.6 166.8	82.6 86.1 88.4 86.1	76.2 77.2 79.2 80.7	76.1 77.6 78.5 80.5	507.1 520.4 533.4 541.2	219.4 224.9 230.0 235.1

<sup>&</sup>lt;sup>1</sup> Includes imputed rental value of owner-occupied housing. Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-15.—Gross and net private domestic investment, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	1	Less: Capital			1	quals: Ne	t private (	domestic i	nvestment			_
	Gross	con-				I	Net fixed i	nvestmeat	1			
	private	sumption allow-			No	nresident	ial		Resid	ential		Change
Year or quarter	domes- tic invest- ment	ances with capital con- sumption adjust- ment	Total	Total	Total	Struc- tures	Pro- ducers' durable equip- ment	Total	Non- farm struc- tures	Farm struc- tures	Pro- ducers' durable equip- ment	In busi- ness inven- tories
929 933 939	16.2 1.4 9.3	9.7 7.4 8.7	6.5 -6.0 .6	4.8 -4.5 .1	3.1 -3.5 6	1.7 1.6 1.0	-1.4 -1.8 .3	-1.7 -1.0 .8	1.7 9 .8	-0.1 1 0	0.0 0 0	1.7 -1.6
940	30.7 34.0 45.9 35.3	9.1 10.0 11.2 11.5 11.7 12.2 14.0 17.3 20.2 21.8	4.1 7.9 -1.3 -5.7 -1.6 -1.6 16.6 25.6 13.5	1.9 3.4 -3.0 -5.0 -3.6 6 10.3 17.1 20.9 16.6	.7 2.0 -2.5 -3.5 -1.7 1.3 6.6 10.2 11.3 8.1	7 3 -1.7 -2.6 -2.0 -1.2 .2.4 2.1 2.7 2.3	1.4 2.2 7 9 .3 2.4 4.2 8.2 8.6 5.8	1.2 1.5 6 1.6 1.8 1.8 3.7 6.8 9.7 8.5	1.1 1.4 5 -1.4 -1.7 -1.6 3.4 6.4 9.1 7.9	1 1 2 2 .3 .4	.0 .0 0 1 1 1 1 .2 .2	2.2 4.5 1.8 -1.0 -1.0 6.4 5 4.7
950 951 952 953 954 955 955 995 995 995	53.8 59.2 52.1 53.3 52.7 68.4 71.0 69.2 61.9 78.1	23.5 27.2 29.3 31.0 32.7 34.8 38.7 41.7 43.5 44.9	30.3 32.8 22.4 20.0 33.6 32.3 27.5 18.4 33.2	23.5 21.7 19.7 21.9 21.6 27.6 27.6 26.1 19.9 27.5	9.6 10.7 9.1 10.8 9.1 11.9 13.9 14.3 8.1 10.6	2.9 3.8 4.8 5.1 5.9 7.9 6.4 6.4	6.7 6.7 5.3 6.0 4.0 6.0 6.4 1.8 4.2	13.9 11.0 10.6 11.1 12.5 15.7 13.7 11.8 11.8 16.9	13.4 10.6 10.3 10.8 12.2 15.6 13.4 11.7 11.6 16.7	.3 .3 .3 .2 .0 .1	.2 .1 .1 .1 .1 .1 .1 .1 .2	6.8 10.3 3.1 -1.5 6.0 4.7 1.3 -1.5 5.7
960. 961. 962. 963. 964. 965. 966. 967. 968.	75.9 74.8 85.4 90.9 97.4 113.5 125.7 122.8 133.3 149.3	46.3 47.5 49.0 50.6 52.9 56.0 60.7 65.9 72.1 80.0	29.6 27.3 36.5 40.3 44.5 57.0 657.0 69.3	26.7 24.9 30.2 34.4 38.9 47.6 50.9 46.6 53.3 59.5	12.3 10.9 14.0 15.3 19.7 28.9 35.4 31.9 33.6 38.1	7.3 7.9 7.8 9.1 12.9 14.8 13.8 14.5 16.6	5.0 3.6 6.1 7.5 10.6 10.6 18.2 19.1 21.5	14.4 14.0 16.2 19.0 19.1 18.7 15.5 14.7 19.8 21.3	14.3 13.9 16.1 18.8 18.9 18.6 15.3 14.5 19.6 21.0	0 .0 .0 .0 0 0	.1 .1 .1 .2 .2 .2 .2 .3	3.0 2.3 6.0 5.6 9.9 14.1 10.3 7.9
970 971 972 973 974 975 976 977 977	144.2 166.4 195.0 229.8 228.7	88.1 96.5 106.4 116.5 136.0 159.3 175.0 195.2 222.5 256.0	56.2 69.9 88.6 113.3 92.7 46.8 82.8 128.9 164.1	52.9 62.3 78.4 94.8 78.5 53.7 71.0 105.9 137.7 152.7	33.9 31.1 37.0 51.9 49.2 30.3 34.3 57.7 73.6 89.0	16.3 15.6 16.6 20.7 18.9 13.1 14.1 16.0 23.3 33.7	17.6 15.5 20.4 31.2 30.3 17.3 20.2 34.7 50.4 55.3	19.0 31.2 41.3 42.9 29.3 23.4 36.8 55.2 64.0 63.7	18.9 30.9 40.9 42.5 28.4 23.1 36.5 54.5 63.3 63.2	-2 -2 -2 -4 -2 -2 -2 -1 -1	.4 .5 .6 .7 .7 .5 .6 .6 .7	3.2 7.1 10.2 18.1 14.1 -6.9 11.8 23.0 26.1
980	401.9 484.2	293.2 330.3 358.8 377.1 402.9	108.7 153.9 56.0 94.5 234.4	118.5 127.9 82.1 108.0 177.6	77.0 90.6 61.3 49.8 107.2	36.2 50.9 49.9 35.4 52.9	40.9 39.7 11.4 14.3 54.3	41.5 37.3 20.9 58.2 70.4	41.2 37.7 21.3 59.1 70.8	3 9 7 -1.3 -1.1	.6 .5 .3 .5 .7	-9.8 26.0 -26.1 -13.5 56.8
1982: 	436.2 431.2 415.9 376.2	350.4 356.1 361.4 367.5	85.8 75.1 54.5 8.7	102.8 86.0 69.8 69.8								-17.0 -10.9 -15.3 -61.3
1983: 	405.0 449.6 491.9 540.0	368.2 371.2 382.8 386.4	36.8 78.4 109.1 153.6	79.7 97.8 113.4 140.9								42.9 19.4 4.3 12.7
1984: 	623.8 627.0 662.8 635.5	391.8 400.0 406.9 412.8	232.0 227.0 255.9 222.7	158.2 176.4 184.1 191.6								73.8 50.6 71.8 31.1

TABLE B-16.—Gross and net private domestic investment in 1972 dollars, 1929-84
[Billions of 1972 dollars; quarterly data at seasonally adjusted annual rates]

		Less: Capital				quais: Ne	t private o	lomestic i	nvestment			
*	Gross	con- sumption						nvestment				
Year or quarter	private domes- tic invest- ment	allow- ances with capital con- sumption adjust- ment	Total	Total	Total	Struc- tures	Pro- ducers' durable equip- ment	Total	Resid Non- farm struc- tures	Farm struc- tures	. Pro- ducers' durable equip- ment	Change in busi- ness inven- tories
1929 1933 1939	55.8 8.4 33.6	33.6 33.0 32.1	22.3 -24.6 1.5	17.7 -19.8 1	11.7 -14.7 -3.1	7.8 -8.5 -4.0	3.8 -6.2 .9	6.0 -5.1 3.0	6.2 4.6 3.0	-0.2 5 .0	0.0 .0 .0	4.6 4.9 1.6
1940	29.5 18.1 19.7	32.4 33.1 33.3 32.6 32.1 32.3 34.0 36.1 38.5 40.7	12.2 22.7 -3.8 -14.6 -12.4 -4.6 36.9 33.9 43.6 24.7	6.0 10.6 -9.0 -14.7 -10.1 -1.0 24.8 34.1 38.1 29.1	1.6 5.7 -7.3 -10.2 -5.1 3.6 16.6 21.5 21.6 14.8	-2.6 7 -5.8 -8.2 -6.6 -3.6 6.8 5.0 5.8	4.2 6.3 -1.5 -2.0 1.5 7.2 9.8 16.5 15.8 9.7	4.3 5.0 -1.8 -4.5 -5.0 -4.6 8.2 12.6 16.5 14.4	4.1 4.7 -1.6 -4.1 -4.6 -4.1 7.7 11.9 15.6 13.5	.2 .2 1 3 4 4 .6 .8	.1 .0 1 1 .0 .1 .2 .2	6.2 12.0 5.2 .1 -2.3 -3.6 12.2 2 5.5 -4.4
1950 1951 1952 1953 1954 1955 1956 1956 1957 1957	83.0 85.3 83.1 103.8 102.6 97.0 87.5	42.8 45.3 47.5 49.8 52.1 54.2 56.5 58.6 60.3 61.6	50.7 48.7 35.4 35.6 31.1 49.5 46.1 38.4 27.2 46.4	40.1 35.0 31.1 34.1 33.3 41.8 40.3 36.9 29.0 39.3	17.0 17.8 15.1 17.5 14.7 19.0 21.1 20.4 12.2 15.4	6.1 7.2 6.9 8.5 9.1 10.4 12.8 12.3 10.2	10.9 10.6 8.2 9.0 5.6 8.6 8.3 8.1 2.0 5.2	23.2 17.1 16.0 16.6 18.6 22.8 19.2 16.5 16.9 23.9	22.4 16.5 15.5 16.1 18.2 22.7 18.8 16.3 16.6 23.6	.6 .5 .4 .4 .3 .0 .2 .1	.2 .1 .1 .1 .1 .1 .1 .1	10.6 13.7 4.3 1.5 -2.2 7.7 5.8 1.5 -1.8 7.0
1960	103.9 117.6 125.1 133.0	63.3 65.0 66.9 69.0 71.6 74.8 78.7 82.8 87.1 91.6	41.4 38.9 50.7 56.0 61.4 77.2 84.3 72.1 74.5 79.8	37.9 35.9 42.9 48.5 54.3 65.4 67.5 59.9 65.5 68.8	17.6 16.1 20.1 21.6 27.3 39.4 46.7 40.8 41.0	11.8 11.9 12.8 12.4 14.3 19.8 21.7 19.3 19.2 20.5	5.8 4.2 7.3 9.1 13.0 19.7 25.0 21.5 21.8 23.9	20.3 19.8 22.8 26.9 27.0 26.0 20.8 19.1 24.5 24.3	20.2 19.6 22.6 26.7 26.8 25.8 20.6 18.9 24.3	1 .0 .0 .1 1 .0 .0 1 1	1112222234	3.5 3.0 7.8 7.5 7.1 11.8 16.8 12.2 9.0
1970	158.5 173.9 195.0 217.5	96.1 100.2 106.4 110.8 116.1 120.8 125.1 125.1 125.9 135.8 143.0	62.4 73.6 88.6 106.8 79.3 34.0 59.4 84.3 100.9 93.3	58.7 65.6 78.4 89.6 67.7 40.8 51.6 71.1 84.9	37.7 32.7 37.0 50.3 43.4 23.0 25.6 36.3 49.2 54.6	18.6 16.6 16.6 19.4 14.9 8.8 9.3 9.3 13.0	19.1 16.1 20.4 30.9 28.5 14.2 16.3 26.8 36.2 38.1	21.0 32.9 41.3 39.3 24.3 17.8 26.0 34.7 35.6 31.4	20.9 32.6 40.9 38.9 23.5 17.5 25.8 35.1 31.0	3 2 3 3 2 1 .1 .0	.4.5.6.7.6.4.4.5.5.5.5.5	3.8 8.1 10.2 17.2 11.6 6.7 7.8 13.3 16.0 7.3
1980	208.5 230.9 194.3	149.8 156.3 161.9 168.1 175.1	58.7 74.5 32.4 52.9 114.6	63.1 63.2 42.9 56.5 90.4	44.3 47.7 34.6 33.0 62.9	15.3 18.7 17.6 12.4 19.1	29.1 29.1 16.9 20.5 43.8	18.7 15.5 8.3 23.6 27.5	18.4 15.6 8.4 23.8 27.5	1 4 3 5 4	.4 .3 .2 .3 .4	-4.4 11.3 -10.4 -3.6 24.2
1982: 	204.7 200.4 194.3 177.8	159.7 161.0 162.3 164.5	45.0 39.4 32.0 13.3	51.7 43.4 38.4 37.9								-6.7 -4.0 -6.4 -24.6
1983: I	191.3 212.6 230.6 249.5	165.0 166.7 170.1 170.6	26.3 45.9 60.5 78.9	42.8 52.0 59.6 71.7								-16.5 -6.1 .9 7.2
1984: 	285.5 283.9 300.2 289.1	172.2 174.1 176.0 178.1	113.3 109.8 124.2 111.0	81.7 89.5 93.6 96.8								31.6 20.3 30.6 14.2

TABLE B-17.—Inventories and final sales of business, 1946-84 [Billions of dollars, except as noted; seasonally adjusted]

			Inv	entories 1					Inventor	y-final
<u>.</u>					Nonfarm			Final	sales	ratio
Quarter	Total	Farm	Total	Manu- facturing	Whole- sale trade	Retail trade	Other	sales <sup>2</sup>	Total	Non- farm <sup>3</sup>
Fourth quarter:										
1946	72.0	22.7	49.3	26.7	10.1	11.4	3.5	16.0	4.50	3.08
	82.6	25.1	57.5	29.3	10.5	13.1	4.6	18.3	4.51	3.14
	87.2	22.9	64.3	32.5	11.7	15.1	5.0	19.6	4.44	3.27
	78.7	19.8	59.0	28.9	11.8	14.0	4.3	19.5	4.03	3.02
1950	98.0	26.1	71.9	35.2	13.8	17.5	5.4	21.7	4.53	3.32
	110.5	28.3	82.2	43.4	14.6	18.0	6.1	24.6	4.49	3.34
	109.2	26.0	83.1	44.4	14.8	17.7	6.2	26.1	4.18	3.18
	110.1	24.6	85.5	46.4	15.0	18.3	5.8	27.2	4.05	3.15
	107.6	23.8	83.9	<b>44.</b> 3	15.3	18.5	<b>5.9</b>	27.5	3.91	3.05
1955	114.8	22.5	92.2	48.8	16.6	20.9	6.0	29.7	3.86	3.10
	124.0	22.9	101.0	54.5	17.9	21.7	6.9	31.4	3.95	3.22
	127.6	24.3	103.3	54.8	18.2	22.9	7.3	32.7	3.90	3.16
	127.3	25.6	101.7	53.2	18.3	22.9	7.3	33.7	3.77	3.01
	132.0	24.4	107.6	55.7	20.0	23.9	8.0	35.6	3.71	3.02
1960	136.0	25.6	110.4	56.6	20.4	25.3	8.1	36.9	3.69	2.99
	137.9	25.9	112.1	57.7	20.9	24.9	8.7	38.8	3.55	2.89
	144.6	27.3	117.3	60.9	21.5	26.3	8.6	41.1	3.52	2.85
	150.4	<b>27.6</b>	122.7	<b>62.9</b>	23.1	27.6	9.2	43.7	3.44	2.81
	156.2	<b>26.5</b>	129.7	<b>66.4</b>	24.4	29.0	9.9	46.2	3.38	2.81
1965	170.5	29.9	140.6	71.5	26.3	31.9	10.9	51.0	3.34	2.76
	187.4	29.6	157.8	81.7	29.9	34.6	11.6	54.1	3.46	2.92
	199.4	29.5	169.9	88.7	32.4	35.3	13.5	57.6	3.46	2.95
	213.5	30.6	182.9	95.2	34.3	39.0	14.4	63.3	3.37	2.89
	234.6	33.3	201.3	104.8	37.7	42.8	16.0	67.4	3.48	2.99
1970	244.0	32.3	211.6	108.4	41.7	44.3	17.3	70.8	3.45	2.99
1971	260.8	36.7	224.1	109.9	44.9	50.5	18.8	77.2	3.38	2.90
1972	288.7	45.6	243.1	116.8	49.4	55.7	21.2	85.8	3.37	2.83
1973	357.7	66.6	291.2	141.1	60.2	64.8	25.0	94.5	3.79	3.08
1974	434.4	62.4	372.0	189.6	76.9	74.1	31.3	102.0	4.26	3.65
1975	439.4	64.5	374.9	189.8	77.3	74.6	33.3	113.6	3.87	3.30
	473.6	60.6	413.0	207.5	86.9	82.9	35.7	124.1	3.82	3.33
	519.5	59.9	459.6	224.7	98.7	93.7	42.5	138.9	3.74	3.31
	602.3	73.9	528.3	254.2	114.6	109.0	50.6	159.5	3.78	3.31
	705.0	81.9	623.1	306.6	135.7	121.0	59.8	176.9	3.99	3.52
1980	775.4	86.3	689.0	341.4	155.9	128.0	63.8	194.6	3.98	3.54
	826.6	83.7	742.8	363.3	164.1	139.5	75.9	211.9	3.90	3.51
	806.7	80.2	726.5	343.4	161.3	140.1	81.7	223.2	3.61	3.25
	818.4	80.6	737.8	339.5	163.6	151.0	83.6	241.2	3.39	3.06
	876.5	83.8	792.7	364.0	177.4	164.4	86.9	263.9	3.32	3.00
1982: 	821.0 824.7 823.4 806.7	87.5 89.0 85.2 80.2	733.5 735.7 738.3 726.5	357.7 353.2 350.7 343.4	160.6 163.4 162.9 161.3	137.7 138.5 142.0 140.1	77.6 80.6 82.7 81.7	214.6 216.2 217.7 223.2	3.83 3.82 3.78 3.61	3.42 3.40 3.39 3.25
1983: 	<b>799.8</b> 800.1 809.3 818.4	82.1 78.0 76.5 80.6	717.7 722.1 732.8 737.8	335.2 336.3 339.3 339.5	157.8 157.6 161.5 163.6	141.9 144.6 147.2 151.0	<b>82.8</b> 83.6 84.8 83.6	226.3 231.4 235.9 241.2	3.53 3.46 3.43 3.39	3.17 3.12 3.11 3.06
1984:	845.2	85.3	759.9	348.3	167.6	159.2	84.8	245.3	3.45	3.10
	856.4	85.0	771.4	356.6	171.0	159.7	84.1	254.7	3.36	3.03
	870.7	84.2	786.5	364.4	175.6	160.8	85.7	256.4	3.40	3.07
	876.5	83.8	792.7	364.0	177.4	164.4	86.9	263.9	3.32	3.00

End of quarter.
 Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of the world, and includes a small amount of final sales by farms.
 Ratio based on total business final sales, which includes 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 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-18.—Inventories and final sales of business in 1972 dollars, 1947-84 [Billions of 1972 dollars, except as noted; seasonally adjusted]

			lnv	entories 1				,	Inventor	y-final
0					Nonfarm			Final	sales	ratio
Quarter	Total	Farm	Total	Manu- facturing	Whole- sale trade	Retail trade	Other	sales <sup>2</sup>	Total	Non- farm <sup>3</sup>
Fourth quarter:										•
1947	116.1	25.7	90.5	47.4	16.0	18.3	8.7	33.2	3.50	2.73
1948 1949	121.6 117.2	26.7 26.2	94.8 91.0	48.8 46.2	17.2 17.2	20.3 19.8	8.6 7.8	34.4 34.6	3.53 3.38	2.76 2.63
1950	127.7	27.5	100.2	49.3	19.2	23.0 23.0 23.0 23.6	8.7	36.9	3.46	2.72
1951 1952	141.4 145.7	29.1 30.4	112.3	60.0 62.7	19.7 20.1	23.0	9.5 9.6	39.8 41.6	3.55 3.51	2.82 2.78
1953	147.2	30.2	112.3 115.4 117.1	64.5	20.3	23.6	8.7	43.0	3.42	2.72
1954	145.0	31.1	114.0	60.9	20.6	23.7	8.8	43.1	3.36	2.64
1955	152.8	31.5	121.2 127.8	64.3	22.1	26.5	8.4	45.6	3.35	2.66
1956 1957	158.6 160.1	30.7 31.4	127.8	69.1 68.7	22.8 22.5 22.5 22.5	26.8 27.8	9.2 9.8	46.5 47.1	3.41 3.40	2.75 2.73
1958	158.3 165.3	32.4	128.7 125.9 132.9	66.1	22.5	27.5	9.8	48.1	3.29	2.62
1959	165.3	32.4	132.9	69.1	24.6	28.7	10.5	49.7	3.33	2.68
1960	168.8	32.8	136.1	69.9	25.1 25.7	30.3	10.7	50.7 53.1	3.33	2.68
1961 1962	171.8 179.7	33.2 34.5	138.6 145.2	71.7 75.6	26.6	29.8 31.6	11.4 11.4	55.3 55.3	3.24 3.25	2.61 2.62
1963	187.2	35.7	151.5	78.2	28.4	33.0	12.0	58.3	3.21	2.60
1964	194.3	35.1	159.2	82.0	29.9	34.5	12.8	60.9	3.19	2.61
1965 1966	206.1 222.9	36.2 36.0	169.9 186.8	87.0 97.2	31.6 35.3	37.4 40.0	13.8 14.3	66.1 67.5	3.12 3.30	2.57 2.77
1967	235.1	36.8	198.3	104.1	37.8	40.0	16.3	70.1	3.36	2.83
1968	244.1	37.0	207.0	108.4	38.9	43.0	16.8	73.8	3.31 3.41	2.81 2.92
1969	255.1	37.3	217.8	112.8	41.2	45.9	17.9	74.7		
1970	258.9 267.0	37.7 39.2	221.2 227.8	112.9 111.8	44.0 45.9	46.1 51.2	18.2 19.0	75.2 78.9	3.44 3.38	2.94 2.89
1971 1972	277.2	39.8	237.4	114.4	47.9	54.6	20.5	84.7	3.36	2.80
19/3	294.4	42.1	252.3	121.8	50.4	58.8	21.4	87.2	3.38	2.89
1974	306.0	41.8	264.2	130.9	54.1	58.3	20.9	85.0	3.60	3.11
1975 1976	299.2 307.0	43.0 41.1	256.3 265.9	127.1 130.9	52.2 55.5	55.8 58.8	21.1 20.8	88.1 92.2	3.40 3.33	2.91 2.88
1977	320.3	40.8	279.5	134.1	59.7	63.1	22.6	97.6	3.28	2.86
1978 1979	336.3 343.6	40.8 43.2	295.5 300.4	139.8 145.0	63.5 64.7	67.3 66.1	24.9 24.6	103.0 105.4	3.27 3.26	2.87 2.85
1				]					i .	1
1980 1981	339.2 350.5	40.9 44.3	298.4 306.2	145.9 148.1	66.2 67.0	63.2 65.7	23.0	104.9 105.3	3.23 3.33	2.84 2.91
1982	340.1	43.1	297.0	139.4	65.9	64.5	25.5 27.1	106.5	3.19	2.79
1983 1984 P	336.5 360.6	38.9 42.8	297.6 317.8	135.9 144.8	65.4 71.1	67.9 73.2	28.3 28.8	111.5 118.3	3.02 3.05	2.67 2.69
	300.0	42.0	317.0	144.0	/1.1	75.2	20.0	110.5	3.03	2.03
1982:	348.8	44.8	304.0	146.7	66.3	64.9	26.1	105.3	3.31	2.89
II	347.8	44.6	303.2	144.7	67.1 66.7	64.5	26.9	104.7	3.31 3.32 3.30	290
W	346.2 340.1	44.1 43.1	302.2 297.0	142.8 139.4	65.9	65.6 64.5	27.1 27.1	104.8 106.5	3.19	2.88 2.79
1983:										
	336.0 334.4	41.9 40.5	294.0 293.9	136.5 136.2	64.5 63.8	65.2 65.8	27.8 28.1	106:8 108.7	3.15 3.08	2.75 2.70
II	334.6	38.8	295.8	135.9	64.6	66.5	28.8	110.1	3.04	2.69
iv	336.5	38.9	297.6	135.9	65.4	67.9	28.3	111.5	3.02	2.67
1984:	344.3	40.2	304.1	138.2	66.6	70.7	28.6	112.7	3.06	2.70
II	349.4	40.6	308.8	141.6	67.9	71.1	28.1	116.2	3.01	2.66
III	357.1	41.7	315.4	144.9	70.3	71.8 73.2	28.4 28.8	115.7 118.3	3.09 3.05	2.73 2.69
V P	360.6	42.8	317.8	144.8	71.1	/3.2	25.8	110.3	3.03	2.03

Note.—The industry classification of inventories 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.

<sup>&</sup>lt;sup>1</sup> End of quarter.
<sup>2</sup> Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of world, and includes a small amount of final sales by farms.
<sup>3</sup> Ratio based on total business final sales, which includes a small amount of final sales by farms.

TABLE B-19.—Relation of gross national product, net national product, and national income, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

		Less:			Less:		Plus: Subsidies	
Year or quarter	Gross national product	Capital consump- tion allowances with capital consump- tion adjustment	Equals: Net national product	Indirect business tax and nontax liability	Busi- ness transfer pay- ments	Statis- tical discrep- ancy	less current surplus of govern- ment enter- prises	Equals: National income
1929	103.4 55.8 90.9	9.7 7.4 8.7	93.7 48.4 82.2	7.1 7.1 9.4	0.6 .7 .5	1.1 .7 1.4	-0.2 0 .4	84.8 39.9 71.4
1940	100.0 125.0 158.5 192.1 210.6 212.4 209.8 233.1 259.5 258.3	9.1 10.0 11.2 11.5 11.7 12.2 14.0 17.3 20.2 21.8	91.0 115.0 147.3 180.7 198.9 200.2 195.8 215.7 239.3 236.5	10.1 11.3 11.8 12.8 14.2 15.5 17.1 18.4 20.1 21.3	45555555678	1.1 8 -1.8 -1.8 2.7 4.1 .5 -1.6 .6	.4 .1 .1 .6 .7 .9 2 1 3	79.7 102.7 135.9 169.3 182.1 180.7 178.6 194.9 219.9 213.6
1950	366.8 366.8 400.0 421.7 444.0 449.7	23.5 27.2 29.3 31.0 32.7 34.8 38.7 41.7 43.5 44.9	263.0 303.6 318.7 335.8 334.1 365.3 383.0 402.3 406.2 443.0	23.4 25.3 27.7 29.7 29.6 32.2 35.1 37.5 38.7 41.8	.8 .9 1.0 1.2 1.1 1.2 1.4 1.5 1.6 1.8	1.3 3.2 1.7 2.3 2.0 1.3 -2.1 -1.2 -2.2 -1.3	.1 3 5 3 0 .7 .7 1.1	237.6 274.1 287.9 302.1 301.1 330.5 349.4 365.2 366.9 400.8
1960 1961 1962 1963 1963 1964 1965 1966 1967 1966	524.6 565.0 596.7 637.7 691.1 756.0 799.6 873.4	46.3 47.5 49.0 50.6 52.9 56.0 60.7 65.9 72.1 80.0	460.2 477.0 516.1 546.1 584.8 635.0 695.3 733.7 801.3 864.0	45.4 48.0 51.6 54.6 58.8 62.6 65.3 70.2 78.9 86.6	2.0 2.0 2.1 2.4 2.7 2.8 3.0 3.1 3.4 3.9	-2.4 1 2.1 1.7 -1.2 -1.4 3 -2.1 -3.9	.4 1.7 1.8 1.1 1.7 1.6 2.5 1.6 1.4	415.7 428.8 462.0 488.5 524.9 572.4 628.1 662.2 722.5 779.3
1970	1,326.4 1,434.2 1,549.2 1,718.0 1,918.3 2,163.9	88.1 96.5 106.4 116.5 136.0 159.3 175.0 195.2 222.5 256.0	904.7 981.1 1,079.5 1,209.9 1,298.2 1,389.9 1,543.0 1,723.2 1,941.4 2,161.7	94.3 103.7 111.5 120.9 129.1 140.1 151.7 165.7 178.2 189.6	4.1 4.4 4.9 5.5 5.8 7.4 7.9 8.6 9.3 10.3	-1.5 4.1 3.3 8 3.7 5.5 5.1 1.4 -2.6 -1.5	2.9 2.6 3.8 3.4 1.1 2.4 1.0 3.1 3.7 3.4	810.7 871.5 963.6 1,086.2 1,160.7 1,239.4 1,379.2 1,550.5 1,760.3 1,966.7
1980	2 957 8	293.2 330.3 358.8 377.1 402.9	2,338.5 2,627.5 2,710.4 2,927.7 3,258.4	213.4 251.3 258.8 280.4 304.3	11.7 12.9 14.1 15.6 17.3	2.3 5.6 5 .5 -8.2	5.5 6.1 8.8 15.6 14.4	2,116.6 2,363.8 2,446.8 2,646.7 2,959.4
1982: 	3.061.2	350.4 356.1 361.4 367.5	2,675.7 2,705.1 2,718.8 2,742.2	254.7 256.1 260.1 264.2	13.6 13.9 14.3 14.7	8.3 3.1 9 10.5	6.6 5.7 7.0 15.9	2,422.3 2,443.9 2,452.4 2,468.6
1983: 	3,173.8 3,267.0 3,346.6 3,431.7	368.2 371.2 382.8 386.4	2,805.6 2,895.8 2,963.9 3,045.4	266.9 279.9 284.7 290.1	15.0 15.4 15.8 16.2	7.5 4.1 -4.8 -4.8	10.8 12.7 16.2 22.6	2,527.0 2,609.0 2,684.4 2,766.5
1984: 	3,553.3 3,644.7 3,694.6 3,752.5	391.8 400.0 406.9 412.8	3,161.5 3,244.7 3,287.7 3,339.8	295.5 301.3 306.6 313.7	16.7 17.1 17.5 18.0	2.2 -9.0 -13.0	26.4 9.6 <b>8.4</b> 13.3	2,873.5 2,944.8 2,984.9

TABLE B-20.—Relation of national income and personal income, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Le	SS:	,	ļ	Ple	JS:		Equals:
Year or quarter	National income	Corporate profits with inventory valuation and capital consumption adjustments	Net interest	Contribu- tions for social insurance	Wage accruals less disburse- ments	Govern- ment transfer payments to persons	Personal interest income	Personal dividend income	Business transfer payments	Personal income
1929 1933 1939	84.8 39.9 71.4	9.0 -1.7 5.3	4.7 4.1 3.6	0.2 .3 2.1	0.0 .0 .0	0.9 1.5 2.5	6.9 5.5 5.4	5.8 2.0 3.8	0.6 .7 .5	85.0 47.0 72.4
1940 1941 1942 1943 1944 1944 1945 1946 1947 1948	79.7 102.7 135.9 169.3 182.1 180.7 178.6 194.9 219.9 213.6	8.6 14.1 19.3 23.5 23.6 19.0 16.6 22.3 29.4 27.1	3.3 3.3 3.1 2.7 2.4 2.2 1.8 2.3 2.4 2.7	2.3 2.8 3.5 4.5 5.2 6.1 5.8 5.4 5.9	.0 .0 .2 2 0 0	2.7 2.6 2.7 2.5 3.1 5.6 10.8 11.2 10.6	5.3 5.3 5.2 5.1 5.2 5.9 6.6 7.6 8.1 8.7	4.0 4.4 4.3 4.4 4.6 4.6 5.6 6.3 7.0 7.2	45555555678	77.9 95.4 122.6 150.8 164.5 170.0 177.6 190.1 209.0 206.4
1950 1951 1952 1953 1954 1955 1955 1956 1957	237.6 274.1 287.9 302.1 301.1 330.5 349.4 365.2 366.9 400.8	33.9 38.7 36.1 36.3 35.2 45.5 43.7 43.3 38.5	3.0 3.5 4.0 4.4 5.3 5.9 6.6 7.9 9.6 10.3	7.1 8.5 9.0 9.1 10.1 11.5 12.9 14.9 15.2 18.0	.0 0 1 .0 .0 .0	14.4 11.6 12.1 12.9 15.1 16.2 17.3 20.1 24.3 25.2	9.7 10.5 11.2 12.5 13.7 14.9 16.7 18.8 20.3 22.5	8.8 8.5 8.5 8.8 9.1 10.3 11.1 11.5 11.3 12.2	.8 .9 1.0 1.2 1.1 1.2 1.4 1.5 1.6 1.8	227.2 254.9 271.8 287.7 289.6 310.3 332.6 351.0 361.1 384.4
1960	415.7 428.8 462.0 488.5 524.9 572.4 628.1 662.2 722.5 779.3	47.6 48.6 56.6 62.1 69.2 80.0 85.1 82.4 89.1 85.1	11.4 13.0 14.7 16.4 18.3 21.0 24.4 27.6 30.0 34.8	21.1 21.9 24.3 27.3 28.7 30.0 38.8 43.4 47.9 55.0	.0 .0 .0 .0 .0 .0	27.0 30.8 31.6 33.4 34.8 37.6 41.6 49.5 56.4 62.8	25.0 26.4 29.0 32.2 35.6 39.7 44.4 48.3 53.4 61.1	12.9 13.3 14.4 15.5 17.3 19.1 19.4 20.2 21.9 22.4	2.0 2.0 2.1 2.4 2.7 2.8 3.0 3.1 3.4 3.9	402.3 417.8 443.6 466.2 499.2 540.7 588.2 630.0 690.6 754.7
1970 1971 1972 1973 1973 1974 1975 1976 1977 1978	810.7 871.5 963.6 1,086.2 1,160.7 1,239.4 1,379.2 1,550.3 1,760.3 1,966.7	71.4 83.2 96.6 108.3 94.9 110.5 138.1 167.3 192.4 194.8	41.4 46.5 51.2 60.2 76.1 84.5 84.5 102.5 121.7 153.8	58.6 64.6 74.2 92.4 104.3 110.9 126.0 140.6 161.8 186.9	.0 .6 .0 1 5 .0 .0 .0 .2 2	76.1 90.0 99.8 114.0 135.4 170.9 186.4 199.3 214.6 240.0	69.4 74.8 80.9 93.9 1123.2 132.5 152.8 179.4 218.7	22.2 22.6 24.1 26.5 29.1 29.9 36.5 39.6 45.3 50.8	4.1 4.4 4.9 5.5 5.8 7.4 7.9 8.6 9.3 10.3	811.1 868.4 951.4 1,065.2 1,168.6 1,265.0 1,391.2 1,540.4 1,732.7 1,951.2
1980	2,116.6 2,363.8 2,446.8	175.4 189.9 159.1 225.2 284.5	192.6 241.0 260.9 256.6 285.0	203.7 236.8 251.3 272.7 305.9	0 .1 0 4	285.9 324.4 361.9 389.3 399.5	266.0 331.8 366.6 376.3 434.8	56.8 64.3 66.5 70.3 77.7	11.7 12.9 14.1 15.6 17.3	2,165.3 2,429.5 2,584.6 2,744.2 3,013.2
1982: 1 11 IV	2,422.3 2,443.9 2,452.4 2,468.6	159.9 161.7 163.3 151.6	263.6 268.5 257.7 253.8	248.3 250.4 252.3 254.1	1 .0 .0	342.2 352.0 368.4 385.2	363.6 373.2 366.4 363.0	66.5 65.9 66.1 67.4	13.6 13.9 14.3 14.7	2,536.5 2,568.2 2,594.3 2,639.5
1983: 	2 527 0	179.1 216.7 245.0 260.0	254.2 254.2 259.2 258.9	265.3 270.2 274.3 281.0	.0 -1.3 4 .0	384.8 391.9 388.1 392.5	366.0 368.8 382.3 388.2	68.5 69.1 70.7 72.8	15.0 15.4 15.8 16.2	2,662.8 2,714.4 2,763.3 2,836.5
1984: 	2.873.5	277.4 291.1 282.8	266.8 282.8 293.5 297.1	298.9 304.2 308.1 312.6	.2 .2 4 .2	394.7 398.1 401.0 404.3	403.9 425.6 449.3 460.1	75.0 77.2 78.5 80.2	16.7 17.1 17.5 18.0	2,920.5 2,984.6 3,047.3 3,100.4

TABLE B-21.—National income by type of income, 1929-84

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			mpensation employees		Propr	ietors' inc	ome with	inventory v adjustm	aluation : ents	and capita	of consum	nption
				Supple-			Farm			Non	farm	
<b>Year or</b> quarter	National income <sup>1</sup>	Total	Wages and salaries	ments to wages and sal- aries <sup>2</sup>	Total	Total	Propri- etors' in- come <sup>3</sup>	Capital consump- tion adjust- ment	Total	Proprietors' in- come 4	Inven- tory valua- tion adjust- ment	Capital consump- tion adjust- ment
1929 1933 1939	84.8 39.9 71.4	51.1 29.5 48.1	50.5 29.0 46.0	0.6 .5 2.1	15.0 5.9 11.8	6.1 2.5 4.4	6.3 2.6 4.5	-0.2 0 1	8.9 3.3 7.4	8.8 3.9 7.6	0.1 5 2	-0.1 .0 0
1940	102.7 135.9 169.3 182.1 180.7 178.6 194.9	52.1 64.8 85.3 109.5 121.2 123.1 118.1 129.2 141.4 141.3	49.9 62.1 82.1 105.8 116.7 117.5 112.0 123.1 135.5 134.7	2.3 2.7 3.2 3.8 4.5 5.6 6.0 6.1 5.9 6.6	13.0 17.5 24.2 29.1 30.4 31.8 36.7 35.9 40.9	4.4 6.4 10.1 12.0 12.0 12.4 14.9 15.1 17.6 12.8	4.5 6.5 10.3 12.2 12.2 12.7 15.2 15.7 18.2 13.5		8.6 11.1 14.1 17.1 18.4 19.4 21.8 20.8 23.3 23.6	8.6 11.7 14.4 17.1 18.3 19.3 23.3 21.8 23.1 22.2	0 6 4 2 1 1 -1.7 -1.5 4	.0 .0 .1 .2 .2 .2 .2 .2 .5 .6 .9
1950		154.8 181.0 195.7 209.6 208.4 224.9 243.5 256.5 258.2 279.6	147.0 171.3 185.3 198.5 196.8 211.7 228.3 239.3 240.5	7.8 9.7 10.4 11.0 11.6 13.2 15.2 17.2 17.7 20.6	38.7 43.2 43.4 41.8 41.2 42.9 43.9 45.3 47.7	13.7 16.1 15.1 13.1 12.5 11.5 11.2 11.1 13.2 10.9	14.4 16.9 16.0 13.9 13.3 12.2 12.1 12.1 14.1	7 8 8 8 8 9 9 9	25.0 27.2 28.2 28.6 28.7 31.4 32.7 34.2 34.5 36.7	25.1 26.4 26.9 27.6 27.6 30.5 31.8 33.1 33.2 35.3	-1.1 3 .2 2 0 2 5 3 1	1.0 1.0 1.1 1.2 1.2 1.2 1.4 1.4 1.4
1960	415.7 428.8 462.0 488.5 524.9 572.4 628.1	294.9 303.6 325.1 342.9 368.0 396.5 439.3 471.4 519.9 572.9	271.9 279.5 298.0 313.4 336.1 362.0 398.4 427.0 469.6 515.7	23.0 24.1 27.1 29.5 31.8 34.5 40.9 44.4 50.3 57.2	47.2 48.6 49.9 50.5 52.5 56.9 60.5 61.2 67.0	11.7 12.1 12.3 12.0 10.8 13.1 14.1 12.6 12.7	12.6 12.9 13.0 12.8 11.5 13.8 14.9 13.5 13.7	9 8 7 7 7 8 9 -1.0	35.5 36.5 37.6 38.5 41.7 43.8 46.4 48.6 51.3 52.5	34.2 35.3 36.4 37.2 40.2 42.7 45.3 47.5 50.6 51.9	.0 0 0 1 2 2 2 4	1.3 1.2 1.2 1.4 1.5 1.3 1.3 1.3 1.1
1970		612.0 652.2 718.0 801.3 877.5 931.4 1,036.3 1,152.1 1,301.1 1,458.1	548.7 581.5 635.2 702.6 765.2 806.4 889.9 983.2 1,106.5 1,237.4	63.2 70.7 82.8 98.7 112.3 125.0 146.4 168.9 194.6 220.7	66.2 69.4 76.9 93.8 88.7 90.0 94.1 103.9 118.5 132.1	14.3 15.0 18.7 32.8 26.5 24.6 19.1 19.1 26.3 31.9	15.6 16.4 20.4 34.6 29.0 28.0 22.8 23.3 31.3 37.8	-1.3 -1.4 -1.6 -1.8 -2.5 -3.4 -3.7 -4.3 -5.0 -5.9	51.9 54.4 58.1 61.0 62.2 65.4 75.0 84.8 92.2 100.2	51.7 54.5 58.1 62.3 65.8 67.4 77.1 86.8 94.9 103.2	5 6 7 -2.0 -3.7 -1.2 -1.2 -1.2 -2.0 -2.9	.8 .4 .8 .6 .1    
1980	2,116.6 2,363.8 2,446.8 2,646.7 2,959.4	1,599.6 1,765.4 1,864.2 1,984.9 2,172.7	1,356.6 1,493.2 1,568.7 1,658.8 1,803.7	243.0 272.2 295.5 326.2 369.0	117.4 125.1 111.1 121.7 154.7	21.8 31.5 21.8 13.8 28.3	28.9 39.4 30.2 22.1 36.5	-7.1 -7.9 -8.4 -8.4 -8.2	95.6 93.7 89.2 107.9 126.4	100.3 94.0 87.6 100.4 114.6	-3.1 -1.3 5 8 4	-1.5 1.0 2.1 8.3 12.3
1982: 	2,443.9 2,452.4	1,834.2 1,857.7 1,876.3 1,888.7	1,546.2 1,564.2 1,578.0 1,586.5	288.0 293.5 298.3 302.2	116.8 107.7 102.2 117.6	30.0 19.2 12.7 25.4	38.3 27.6 21.0 33.9	-8.3 -8.4 -8.3 -8.5	86.8 88.5 89.5 92.1	<b>84.8</b> 87.4 88.0 90.4	2 6 5 6	2.2 1.7 2.0 2.3
1983: 	2,527.0 2,609.0 2,684.4 2,766.5	1,921.3 1,962.4 2,000.7 2,055.4	1,608.1 1,640.8 1,670.8 1,715.4	313.2 321.6 329.9 340.0	114.7 116.9 123.3 131.9	16.4 10.1 11.2 17.3	24.8 18.4 19.6 25.7	8.4 8.4 8.4 8.3	98.3 106.8 112.1 114.6	93.0 99.4 103.8 105.5	2 1.0 1.3 7	5.6 8.3 9.5 9.7
1984: 	2 984 9	2,113.4 2,159.2 2,191.9 2,226.2	1,755.9 1,793.3 1,819.1 1,846.3	357.4 365.9 372.8 379.9	154.9 149.8 153.7 160.4	32.5 23.4 27.3 29.9	40.7 31.7 35.5 38.1	-8.3 -8.3 -8.2 -8.2	122.5 126.3 126.4 130.6	112.4 115.0 113.8 117.1	-1.2 4 .1 2	11.2 11.8 12.5 13.6

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 8-19.

2 Employer contributions for social insurance and to private pension, health, and welfare funds; workers' compensation; directors' fees; and a few other minor items.

See next page for continuation of table.

TABLE B-21.—National income by type of income, 1929-84—Continued [Billions of dollars; quarterly data at seasonally adjusted annual rates]

		income of		Corpora	te profits	with inv	entory va	luation a	nd capi	tal consu	mption ad	justments	
	WILLI Ca	ipital con adjustme	nt		Profit	s with in	ventory v	aluation sumption	adjustm adjustr	ent and v	vithout		
Year or quarter		Rental	Capital					Profits			Inven-	Capital con-	Net interest
	Total	income of	con- sumption adjust-	Total	Total	Profits	Profits	Prof	its afte		tory valu- ation	sumption adjust- ment	
		persons	ment			before tax	tax liability	Total	Divi- dends	Undis- tributed profits	adjust- ment	IIICIIL	
1929 1933 1939	2.2	5.7 2.3 3.1	-0.8 1 6	9.0 -1.7 5.3	10.5 -1.2 6.5	10.0 1.0 7.2	1.4 .5 1.4	8.6 .4 5.7	5.8 2.0 3.8	2.8 -1.6 2.0	0.5 -2.1 7	-1.4 6 -1.1	4.7 4.1 3.6
1940 1941 1942 1943 1944 1945 1946 1947 1948	5.3 5.7 6.1	3.3 3.9 5.0 5.6 5.9 6.2 7.3 7.7 8.5 8.9	6 8 -1.0 -1.2 -1.4 -1.6 -1.8 -2.5 -2.8	8.6 14.1 19.3 23.5 23.6 19.0 16.6 22.3 29.4 27.1	9.8 15.4 20.5 24.5 24.0 19.3 19.6 25.9 33.4 31.1	10.0 17.9 21.7 25.3 24.2 19.8 24.8 31.8 35.6 29.2	2.8 7.6 11.4 14.1 12.9 10.7 9.1 11.3 12.4 10.2	7.2 10.3 10.3 11.2 11.3 9.1 15.7 20.5 23.2 19.0	4.0 4.4 4.3 4.4 4.6 4.6 5.6 6.3 7.0 7.2	3.2 5.8 6.0 6.7 6.7 4.5 10.2 14.2 16.2 11.8	-2 -2.5 -1.2 8 3 6 -5.3 -5.9 -2.2	-1.2 -1.3 -1.2 -1.0 -3 -2 -3.0 -3.6 -4.0 -3.9	3.3 3.1 2.7 2.4 2.2 1.8 2.3 2.4 2.7
1950 1951 1952 1953 1954 1955 1956 1957 1958	7.1 7.7 8.8 10.0 11.0 11.3 11.6 12.2 12.9 13.6	10.0 11.0 12.2 13.4 14.4 14.8 15.2 15.9 16.7	-29 -33 -34 -334 -335 -36 -38 -38	33.9 38.7 36.1 36.3 35.2 45.5 43.7 43.3 38.5 49.6	37.9 43.3 40.6 40.2 38.4 47.5 46.9 41.6 52.3	42.9 44.5 39.6 41.2 38.7 49.2 49.6 48.1 41.9 52.6	17.9 22.6 19.4 20.3 17.6 22.0 21.4 19.0 23.6	25.0 21.9 20.2 20.9 21.1 27.2 27.6 26.7 22.9 28.9	8.8 8.5 8.8 9.1 10.3 11.1 11.5 11.3 12.2	16.2 13.4 11.8 12.1 11.9 16.9 16.6 15.2 11.6	-5.0 -1.2 1.0 -1.0 -3 -1.7 -2.7 -1.5 -3 -3	-4.0 -4.6 -4.5 -3.9 -3.2 -2.0 -3.2 -3.4 -3.2 -2.7	3.0 3.5 4.0 4.4 5.3 5.9 6.6 7.9 9.6 10.3
1960	15.0 15.8 16.5 17.1 18.0 18.7 19.7 19.5 19.6	18.0 18.4 19.1 19.7 20.2 21.2 22.3 23.6 24.0 25.2	-3.5 -3.4 -3.2 -3.2 -3.3 -3.6 -3.9 -4.5 -5.6	47.6 48.6 56.6 62.1 69.2 80.0 85.1 82.4 89.1 85.1	49.7 50.0 55.1 59.7 66.0 76.0 80.9 78.1 84.9 80.8	49.8 49.7 55.0 59.6 66.5 77.2 83.0 79.7 88.5 86.7	22.7 22.8 24.0 26.2 28.0 30.9 33.7 32.5 39.2 39.5	27.1 26.9 31.1 33.4 38.5 46.3 49.4 47.2 49.4	12.9 13.3 14.4 15.5 17.3 19.1 19.4 20.2 22.0 22.5	14.3 13.6 16.6 17.9 21.2 27.2 29.9 27.0 27.3 24.7	-2 3 0 1 -5 -1.2 -2.1 -1.6 -3.7 -5.9	-2.0 -1.4 1.5 2.5 3.1 4.0 4.2 4.3 4.3	11.4 13.0 14.7 16.4 18.3 21.0 24.4 27.6 30.0 34.8
1970 1971 1972 1973 1974 1975 1976 1977 1978	19.7 20.2 21.0 22.6 23.5 23.0 23.5 24.8 26.6 27.9	25.8 27.1 29.0 32.1 35.3 36.8 39.2 44.0 50.0 56.2	-6.1 -6.9 -8.0 -9.5 -11.8 -13.8 -15.6 -19.1 -23.4 -28.3	71.4 83.2 96.6 108.3 94.9 110.5 138.1 167.3 192.4 194.8	68.9 82.0 94.0 105.6 96.7 120.6 151.6 178.5 205.1 209.6	75.4 86.6 100.6 125.6 136.7 132.1 166.3 194.7 229.1 252.7	34.2 37.5 41.6 49.0 51.6 50.6 63.8 72.7 83.2 87.6	41.3 49.0 58.9 76.6 85.1 81.5 102.5 122.0 145.9 165.1	22.5 22.9 24.4 27.0 29.9 30.8 37.4 40.8 47.0 52.7	18.8 26.1 34.5 49.6 55.2 50.7 65.1 81.2 98.9 112.4	-6.6 -4.6 -20.0 -40.0 -11.6 -14.7 -16.2 -24.0 -43.1	2.5 1.3 2.7 2.7 -1.8 -10.1 -13.5 -11.3 -12.7 -14.8	41.4 46.5 51.2 60.2 76.1 84.5 87.2 102.5 121.7 153.8
1980 1981 1982 1983 1984 P	21.5	63.9 77.9 88.4 96.6 103.0	-32.4 -35.6 -36.9 -38.3 -40.5	175.4 189.9 159.1 225.2 284.5	191.7 197.6 156.0 192.0 228.6	234.6 221.2 165.5 203.2 234.3	84.8 81.1 60.7 75.8 88.4	149.8 140.0 104.8 127.4 145.8	58.6 66.5 69.2 72.9 80.5	91.2 73.5 35.6 54.5 65.3	-42.9 -23.6 -9.5 -11.2 -5.7	-16.3 -7.6 3.1 33.2 55.9	192.6 241.0 260.9 256.6 285.0
1982: 	48.3	85.3 85.3 89.8 93.1	-37.6 -37.0 -36.9 -36.1	159.9 161.7 163.3 151.6	161.3 160.9 158.8 143.2	167.6 169.8 168.9 155.8	62.9 62.9 61.9 55.0	104.7 106.9 107.0 100.8	69.2 68.6 69.0 70.2	35.5 38.2 38.1 30.6	-6.3 -8.9 -10.1 -12.6	-1.4 .8 4.5 8.4	263.6 268.5 257.7 253.8
1983:     II   III   IV	57.7 59.0 56.2 60.4	94.9 96.0 96.6 99.1	-37.2 -37.0 -40.3 -38.7	179.1 216.7 245.0 260.0	157.3 186.1 208.1 216.3	161.7 198.2 227.4 225.5	59.1 74.8 84.7 84.5	102.6 123.4 142.6 141.1	71.1 71.7 73.3 75.4	31.4 51.7 69.3 65.6	-4.3 -12.1 -19.3 -9.2	21.7 30.6 36.9 43.6	254.2 254.2 259.2 258.9
1984: 1IIIV PIV P	61.0 62.0 63.0 63.8	99.9 102.5 104.2 105.3	-38.8 -40.6 -41.2 -41.5	277.4 291.1 282.8	229.8 238.7 224.5	243.3 246.0 224.8	92.7 95.8 83.1	150.6 150.2 141.7	77.7 79.9 81.3 83.0	72.9 70.2 60.3	-13.5 -7.3 2 -1.7	47.6 52.3 58.3 65.5	266.8 282.8 293.5 297.1

With inventory valuation adjustment and without capital consumption adjustment.
 Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-22.—Sources of personal income, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Wage ar	nd salary di	sbursemer	its 1			Proprietor with in	s' income
Year or quarter	Personal income		prod	nodity- ucing stries	Distrib- utive	Service	Govern- ment and	Other labor	valuati cap consui adjust	on and ital nption
		Total	Total	Manu- facturing	indus- tries	indus- tries	govern- ment enter- prises	income 1	Farm	Nonfarm
929 933 939	85.0 47.0 72.4	50.5 29.0 46.0	21.5 9.8 17.4	16.1 7.8 13.6	15.6 8.8 13.3	8.4 5.2 7.1	5.0 5.2 8.2	0.5 .4 .6	6.1 2.5 4.4	8.9 3.3 7.4
940 941 941 942 943 944 945 945 947	150.8 164.5 170.0 177.6 190.1	49.9 62.1 82.1 105.6 116.9 117.5 112.0 123.1 135.5 134.8	19.7 27.5 39.1 49.0 50.4 45.9 46.0 54.2 61.1	15.6 21.7 30.9 40.9 42.9 38.2 36.5 42.5 47.1 44.6	14.2 16.3 18.0 20.1 22.7 24.8 31.0 35.2 37.5 37.7	7.5 8.1 9.0 9.9 10.9 11.9 14.3 16.1 17.9 18.5	8.5 10.2 16.0 26.6 33.0 34.9 20.7 17.5 19.0 20.8	.6 .7 .9 1.1 1.5 1.8 2.0 2.4 2.7 2.9	4.4 6.4 10.1 12.0 12.0 12.4 14.9 15.1 17.6	8.6 11.1 14.1 17.1 18.4 19.4 21.8 20.8 23.3 23.6
950 951 952 953 954 955 956 957 957	227.2 254.9 271.8 287.7 289.6 310.3 332.6 351.0 361.1 384.4	147.0 171.3 185.4 198.6 196.8 211.7 228.3 239.3 240.5 258.9	64.8 76.3 82.0 89.6 85.7 93.1 100.6 104.2 100.0	50.3 59.3 64.1 71.2 67.5 73.8 79.4 82.4 78.6 86.8	39.8 44.3 46.9 49.7 50.1 53.4 57.7 60.5 60.8 64.8	19.8 21.5 23.1 24.9 26.1 28.6 31.3 33.6 35.6 38.5	22.6 29.2 33.3 34.4 34.9 36.6 38.8 41.0 44.1 46.0	3.7 4.6 5.2 5.9 6.1 7.0 8.0 9.0 9.4	13.7 16.1 15.1 12.5 11.5 11.2 11.1 13.2 10.9	25.0 27.2 28.2 28.6 28.7 31.4 32.7 34.2 34.5
960 961 962 963 963 964 965 965 966 967	402.3 417.8 443.6 466.2 499.2 540.7 588.2 630.0 690.6 754.7	271.9 279.5 298.0 313.4 336.1 362.0 398.4 427.0 469.6 515.7	113.1 113.7 121.8 126.9 135.4 146.0 161.0 168.3 183.4 199.6	89.7 89.8 96.7 100.6 107.1 115.5 128.0 134.1 145.8 157.5	68.2 69.3 72.8 76.3 81.4 87.2 94.4 100.9 110.0	41.4 44.1 47.2 50.2 54.4 58.9 64.7 71.3 79.6 89.7	49.2 52.4 56.3 60.0 64.9 78.3 86.4 96.6 105.5	11.2 11.8 13.0 14.0 15.7 17.8 19.9 21.7 25.2 28.5	11.7 12.1 12.3 12.0 10.8 13.1 14.1 12.6 12.7	35.5 36.5 37.6 38.5 41.7 43.8 46.4 48.6 51.3 52.5
970 971 972 973 974 975 976 977 978	1,168.6 1,265.0 1,391.2	548.7 580.9 635.2 702.7 765.7 806.4 889.9 983.2 1,106.3 1,237.6	203.0 208.3 227.3 254.3 274.7 275.0 307.3 343.6 389.4 438.4	158.2 160.3 175.4 196.2 211.4 211.0 237.4 266.0 299.2 333.9	130.3 139.4 152.1 168.3 184.6 195.6 216.6 239.5 270.7 303.4	98.3 106.7 118.2 131.3 145.6 159.7 177.4 197.7 226.6 259.7	117.1 126.5 137.5 148.7 160.9 176.1 188.7 202.4 219.5 236.2	32.5 36.7 43.0 48.8 55.8 64.5 75.9 89.4 102.5 114.9	14.3 15.0 18.7 32.8 26.5 24.6 19.1 19.1 26.3 31.9	51.5 54.6 58.1 61.0 62.7 65.6 75.0 84.1 92.1
980 981 982 983 984 P.	2 165.3	1,356.7 1,493.1 1,568.7 1,659.2 1,803.6	468.1 509.3 509.3 519.3 569.0	354.6 385.5 382.9 395.2 433.8	330.7 361.6 378.6 398.6 432.0	297.6 337.7 374.3 413.1 452.8	260.3 284.6 306.6 328.2 349.8	128.0 140.0 155.5 173.1 195.5	21.8 31.5 21.8 13.8 28.3	95.6 93.7 89.2 107.9 126.4
1982: 	2,536.5 2,568.2 2,594.3 2,639.5	1,546.3 1,564.2 1,578.0 1,586.4	515.3 514.9 508.1 498.9	386.1 386.7 382.7 376.0	372.5 377.0 381.2 383.8	359.6 368.9 380.3 388.3	299.0 303.5 308.4 315.4	149.7 154.0 157.9 160.6	30.0 19.2 12.7 25.4	86.8 88.5 89.5 92.1
983:        	2,662.8 2,714.4 2,763.3 2,836.5	1,608.1 1,642.1 1,671.3 1,715.4	503.5 511.4 523.5 539.0	380.5 389.3 399.1 411.9	386.0 395.4 399.7 413.2	398.3 409.1 417.0 428.2	320.4 326.2 331.0 335.0	164.4 169.9 175.9 182.1	16.4 10.1 11.2 17.3	98.3 106.8 112.1 114.6
1984: 	2,920.5 2,984.6 3,047.3 3,100.4	1,755.7 1,793.1 1,819.5 1,846.1	555.9 567.0 573.3 579.9	424.6 432.2 436.4 441.9	419.2 429.5 436.4 442.9	437.9 449.3 457.3 466.7	342.8 347.3 352.4 356.7	188.1 193.5 198.1 202.5	32.5 23.4 27.3 29.9	122.5 126.3 126.4 130.6

The total of wage and salary disbursements and other labor income differs from compensation of employees in Table B-21 in that it excludes employer contributions for social insurance and the excess of wage accruals over wage disbursements.

See next page for continuation of table.

TABLE B-22.—Sources of personal income, 1929-84—Continued [Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Rental income					Trans	fer payme	nts				
Year or quarter	of persons with capital consumption adjustment	Personal dividend income	Personal interest income	Total	Old-age, survivors, disability, and health insur- ance benefits	Govern- ment unem- ployment insur- ance benefits	Veterans benefits	Govern- ment employ- ees retire- ment benefits	Aid to families with depend- ent children (AFDC)	Other	Less: Personal contribu- tions for social insurance	Nonfarm personal income <sup>2</sup>
1929 1933 1939	2.2	5.8 2.0 3.8	6.9 5.5 5.4	1.5 2.1 3.0	0.0	0.4	0.6 .6 .5	0.1 .2 .3	0 1 1	.4	0.1 .2 .6	
1940	3.1 4.0 4.4 4.5 4.6 5.5	4.0 4.4 4.3 4.4 4.6 4.6 5.6 6.3 7.0 7.2	5.3 5.2 5.1 5.9 6.6 7.6 8.1 8.7	3.1 3.1 3.0 3.6 6.2 11.3 11.7 11.3 12.5	.0 .1 .1 .2 .2 .3 .4 .5 .6	55 44 .1 .1 .4 1.1 .8 .9	.5 .5 .5 1.0 3.0 7.0 5.9 5.3	3 3 3 4 4 5 7 7	1 1 1 2 2 2 2 2 3 .4	.8 R	1.2	159.9 171.9 188.2 190.4
1950	8.8 10.0 11.0	8.8 8.5 8.8 9.1 10.3 11.1 11.5 11.3	9.7 10.5 11.2 12.5 13.7 14.9 16.7 18.8 20.3 22.5	15.2 12.6 13.1 14.1 16.2 17.5 18.7 21.6 25.9 27.0	1.0 1.9 2.2 3.0 3.6 4.9 5.7 7.3 8.5	1.5 .9 1.1 1.0 2.2 1.5 1.5 1.9 4.1 2.8	7.7 4.6 4.3 4.1 4.2 4.4 4.4 4.5 4.7	1.0 1.1 1.2 1.4 1.5 1.7 1.9 2.2 2.5 2.8	.6 .6 .5 .5 .6 .6 .7 .8	3.5 3.6 3.8 4.1 4.1 4.3 4.5 4.9 5.3 5.8	2.9 3.8 4.0 4.6 5.2 6.7 6.9 7.9	210.2 235.4 253.1 271.3 273.9 295.5 318.0 336.6 344.4 369.8
1960. 1961 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969.	15.0 15.8 16.5 17.1 18.0 18.7 19.7 19.5	12.9 13.3 14.4 15.5 17.3 19.1 19.4 20.2 21.9 22.4	25.0 26.4 29.0 32.2 35.6 39.7 44.4 48.3 53.4 61.1	28.9 32.8 33.8 35.8 37.4 40.4 44.7 52.6 59.8 66.7	11.1 12.6 14.3 15.2 16.0 18.1 20.8 25.5 30.2 32.9	3.0 4.3 3.1 3.0 2.7 2.3 1.9 2.2 2.1	4.6 5.0 4.7 4.8 4.7 4.9 5.6 5.9	3.1 3.4 3.7 4.2 4.7 5.2 6.1 6.9 7.6 8.7	1.0 1.1 1.3 1.4 1.5 1.7 1.9 2.3 2.8 3.5	6.2 6.4 6.7 7.3 7.8 8.3 9.2 10.2 11.1 12.5	9.3 9.7 10.3 11.8 12.6 13.3 17.8 20.6 22.9 26.2	386.7 401.6 427.1 449.7 522.6 568.9 672.1 733.9
1970	19.7 20.2 21.0 22.6 23.5 23.0 23.5	22.2 22.6 24.1 26.5 29.1 29.9 36.5 39.6 45.3 50.8	69.4 74.8 80.9 93.9 112.4 123.2 132.5 152.8 179.4 218.7	80.1 94.4 104.7 119.5 141.2 178.3 194.3 207.9 223.8 250.3	38.5 44.5 49.6 60.4 70.1 81.4 92.9 104.9 116.2 131.8	4.0 5.8 5.7 4.4 6.8 17.6 15.8 12.7 9.7	7.7 8.8 9.7 10.4 11.8 14.5 14.4 13.8 13.9	10.2 11.8 13.8 16.0 19.0 22.7 26.1 29.0 32.7 36.9	4.8 6.2 6.9 7.2 7.9 9.2 10.1 10.6 10.7	15.0 17.4 19.0 21.1 25.6 32.8 35.1 36.9 40.7 46.3	27.9 30.7 34.5 42.6 47.9 50.4 55.5 61.1 69.8	790.0 846.5 925.3 1,023.7 1,131.8 1,229.1 1,359.3 1,506.5 1,689.7 1,899.3
1980 1981 1982 1983 1984 P	31.5 42.3 51.5	56.8 64.3 66.5 70.3 77.7	266.0 331.8 366.6 376.3 434.8	297.6 337.3 376.1 405.0 416.9	154.2 182.0 204.5 221.6 237.5	16.1 15.9 25.2 26.1 15.9	15.0 16.1 16.4 16.6 16.5	43.0 49.6 54.9 59.5 62.1	12.4 13.0 13.3 14.2 14.7	56.9 60.7 61.7 66.8 70.1	88.7 104.5 111.4 119.6 132.5	2,119.5 2,371.2 2,532.1 2,701.1 2,955.2
1982: 	52.9	66.5 65.9 66.1 67.4	363.6 373.2 366.4 363.0	355.8 365.9 382.6 399.9	194.9 197.2 209.3 216.7	19.3 23.9 25.8 31.7	16.3 16.2 16.3 16.6	52.2 55.2 55.9 56.5	13.3 13.3 13.3 13.5	59.7 60.0 62.1 64.8	110.0 110.9 111.9 112.5	2,476.8 2,518.2 2.550.4 2,583.1
1983: 	. 59.0 56.2	68.5 69.1 70.7 72.8	366.0 368.8 382.3 388.2	399.8 407.3 403.9 408.8	216.6 219.8 222.4 227.7	29.9 31.7 22.8 20.2	16.8 16.6 16.6 16.5	57.3 59.1 60.4 61.3	14.1 14.3 14.3 14.3	65.1 65.9 67.4 68.8	116.4 118.5 120.4 123.2	2,616.2 2,675.0 2,722.9 2,790.2
1984: 	.  62.0	75.0 77.2 78.5 80.2	403.9 425.6 449.3 460.1	411.3 415.2 418.6 422.4	232.1 235.2 238.2 244.5	16.7 15.8 15.2 15.8	16.4 16.6 16.7 16.4	62.4 63.1 63.9 59.2	14.9 14.9 14.6 14.6	68.9 69.6 70.0 72.0	129.6 131.8 133.4 135.1	2,858.9 2,931.8 2,990.1 3,040.1

<sup>&</sup>lt;sup>2</sup> Personal income exclusive of farm proprietors' income, farm wages, farm other labor income, and farm 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.

TABLE B-23.—Disposition of personal income, 1929-84
[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

				Le	ss: Person	al outlays				nt of dispo	
		Less:	Equals:			Interest	Per- sonal		<u>-</u> -	l outlays	
Year or quarter	Personal income	Personal tax and nontax payments	Dispos- able personal income	Total	Personal con- sumption expendi- tures	paid by consum- ers to busi- ness	transfer pay- ments to for- eigners (net)	Equals: Personal saving	Total	Personal consump- tion expend- itures	Personal saving
1929 1933 1939	85.0 47.0 72.4	2.6 1.4 2.4	82.4 45.6 70.0	79.1 46.5 67.8	77.3 45.8 67.0	1.5 .5 .7	0.3 .2 .2	3.3 9 2.2	96.0 102.0 96.9	93.8 100.5 95.6	4.0 -2.0 3.1
1940	77.9 95.4 122.6 150.8 164.5 170.0 177.6 190.1 209.0 206.4	2.6 3.3 5.9 17.8 18.9 20.8 18.7 21.4 21.0	75.3 92.2 116.6 133.0 145.6 149.1 158.9 168.7 188.0 187.9	72.0 81.8 89.4 100.1 109.0 120.4 145.2 163.5 176.9 180.4	71.0 80.8 88.6 99.4 108.2 119.5 143.8 161.7 174.7 178.1	.8 .9 .7 .5 .5 .5 .7 1.0 1.4 1.7	.2 .2 .1 .2 .4 .5 .7 .7	3.4 10.3 27.2 32.9 36.6 28.7 13.7 5.2 11.1 7.5	95.5 88.8 76.7 75.3 74.8 80.8 91.4 96.9 94.1	94.2 87.6 76.0 74.7 74.3 80.1 90.5 95.9 93.0 94.8	4.5 11.2 23.3 24.7 25.2 19.2 8.6 3.1 5.9 4.0
1950 1951 1952 1953 1954 1955 1956 1957 1958	227.2 254.9 271.8 287.7 289.6 310.3 332.6 351.0 361.1 384.4	20.6 28.9 34.0 35.5 32.5 35.4 39.7 42.4 46.0	206.6 226.0 237.7 257.2 257.1 275.0 292.9 308.6 319.0 338.4	194.7 210.0 220.4 233.7 240.1 258.5 271.6 286.4 295.4 317.3	192.0 207.1 217.1 229.7 235.8 253.7 266.0 280.4 289.5 310.8	2.3 2.5 2.9 3.6 3.8 4.4 5.5 6.1	.4 .4 .5 .5 .4 .5 .5 .4 .4	11.9 16.1 17.4 18.5 17.0 16.4 21.3 22.3 23.6 21.1	94.2 92.9 92.7 92.7 93.4 94.0 92.7 92.8 92.6 93.8	92.9 91.6 91.3 91.1 91.7 92.3 90.8 90.9 90.7 91.8	5.8 7.1 7.3 7.3 6.6 6.0 7.3 7.2 7.4 6.2
1960 1961 1962 1963 1964 1965 1966 1967 1968	402.3 417.8 443.6 466.2 499.2 540.7 588.2 630.0 690.6 754.7	50.4 52.1 56.8 60.3 58.6 64.9 74.5 82.1 97.2 115.7	352.0 365.8 386.8 405.9 475.8 513.7 547.9 593.4 638.9	332.3 342.7 363.5 384.0 411.0 442.1 477.7 503.6 551.5 598.3	324.9 335.0 355.2 374.6 400.5 430.4 465.1 490.3 536.9 581.8	7.0 7.3 7.8 8.8 9.9 11.1 12.0 12.5 13.8 15.6	.4 .4 .5 .6 .7 .7 .9 .8	19.7 23.0 23.3 21.9 29.6 33.7 36.0 44.3 41.9 40.6	94.4 93.7 94.0 94.6 93.9 92.9 93.0 92.9 93.6	92.3 91.6 91.8 92.3 90.5 90.5 90.5 90.5	5.6 6.3 6.0 5.4 6.7 7.1 7.0 8.1 7.1 6.4
1970 1971 1972 1973 1974 1975 1976 1977 1978	811.1 868.4 951.4 1,065.2 1,168.6 1,265.0 1,391.2 1,540.4 1,732.7 1,951.2	115.8 116.7 141.0 150.7 170.2 168.9 196.8 226.4 258.7 301.0	695.3 751.8 810.3 914.5 998.3 1,096.1 1,194.4 1,314.0 1,474.0	639.5 691.1 757.7 835.5 1,001.8 1,111.9 1,236.0 1,384.6 1,553.5	621.7 672.2 737.1 812.0 888.1 976.4 1,084.3 1,204.4 1,346.5 1,507.2	16.7 17.7 19.5 22.3 24.1 24.4 26.7 30.7 37.4 45.5	1.1 1.1 1.3 1.0 .9 .9	55.8 60.7 52.6 79.0 85.1 94.3 82.5 78.0 89.4 96.7	92.0 91.9 93.5 91.4 91.5 91.4 93.1 93.1 93.9 94.1	89.4 89.4 91.0 88.8 89.0 89.1 90.8 91.7 91.3 91.3	8.0 8.1 6.5 8.6 8.5 8.6 9.5 9.6.1
1980	2 165 2	336.5 387.7 404.1 404.2 435.1	1,828.9 2,041.7 2,180.5 2,340.1 2,578.1	1,718.7 1,904.3 2,044.5 2,222.0 2,421.2	1,668.1 1,849.1 1,984.9 2,155.9 2,342.3	49.6 54.4 58.5 65.1 77.7	1.0 .9 1.2 1.0 1.1	110.2 137.4 136.0 118.1 156.9	94.0 93.3 93.8 95.0 93.9	91.2 90.6 91.0 92.1 90.9	6.0 6.7 6.2 5.0 6.1
1982: 	2,536.5 2,568.2 2,594.3 2,639.5	404.4 411.4 398.5 402.0	2,132.0 2,156.8 2,195.8 2,237.5	1,989.5 2,020.1 2,061.3 2,107.3	1,931.3 1,960.9 2,001.3 2,046.1	57.0 57.9 58.8 60.2	1.2 1.3 1.1 1.0	142.6 136.7 134.5 130.2	93.3 93.7 93.9 94.2	90.6 90.9 91.1 91.4	6.7 6.3 6.1 5.8
1983: 	2,662.8 2,714.4 2,763.3 2,836.5	401.4 411.6 395.8 407.9	2,261.4 2,302.9 2,367.4 2,428.6	2,133.4 2,206.1 2,248.4 2,300.0	2,070.4 2,141.6 2,181.4 2,230.2	62.1 63.6 65.9 68.7	.9 1.0 1.1 1.2	128.0 96.7 119.0 128.7	94.3 95.8 95.0 94.7	91.6 93.0 92.1 91.8	5.7 4.2 5.0 5.3
1984: 	2,920.5 2,984.6 3,047.3 3,100.4	418.3 430.3 440.9 451.0	2,502.2 2,554.3 2,606.4 2,649.4	2,349.6 2,409.5 2,442.3 2,483.2	2,276.5 2,332.7 2,361.4 2,398.6	71.9 75.7 79.8 83.4	1.2 1.0 1.1 1.2	152.5 144.8 164.1 166.2	93.9 94.3 93.7 93.7	91.0 91.3 90.6 90.5	6.1 5.7 6.3 6.3

TABLE B-24.—Total and per capita disposable personal income and personal consumption expenditures in current and 1972 dollars, 1929-84

[Quarterly data at seasonally adjusted annual rates, except as noted]

	Dis	posable pe	rsonal incom	e	Person	al consump	tion expendi	tures	_
Year or quarter	Total (bil dolla	llions of rs)	Per ca (dolla	ipita irs)	Total (bil dolla	lions of rs)	Per ca (dolla	pita irs)	Popula- tion (thou-
	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	sands) 1
929	82.4	229.5	676	1,883	77.3	215.1	634	1,765	121,878
933 939	45.6 70.0	169.6 229.8	363 534	1,883 1,349 1,754	45.8 67.0	215.1 170.5 219.8	364 511	1,765 1,356 1,678	121,878 125,690 131,028
940		244.0	570	1,734	71.0	229.9	537	1,740	132,122
941	92.2	277.9	691	2.083	80.8	243.6	605	1.826	133,402
942		317.5	865	2,354	88.6	241.1	657	1,826 1,788	134,860
943944		332.1 343.6	973 1.052	2,429 2,483	99.4 108.2	248.2 255.2	727 781	1,815 1.844	136,739 138,397
945	149.1	338.1	1.066	2.416	119.5	270.9	854	1,036	139,928
946	158.9 168.7	332.7	1,124	2,353 2,212	143.8	301.0 305.8	1,017 1,122	2,129 2,122 2,129	141,389
947 948	188.0	318.8 335.8	1,170	2,212	161.7 174.7	312.2	1,192	2,122	144,126 146,631
949		336.8	1,170 1,282 1,259	2,290 2,257	178.1	319.3	1,194	2,140	149,188
950		362.8	1,362	2,392	192.0	. 337.3	1,266	2,224	151,684
951	226.0 237.7	372.6 383.2	1,465 1,515	2,415 2,441	207.1 217.1	341.6 350.1	1,342 1,383	2,214 2,230 2,277	154,287
952 953		399.1	1,515	2,441	229.7	363.4	1,303	2,230	156,954 159,56
954	257.1	403.2	1,583	2,483	235.8	370.0	1,452	2.278	162,39
955		426.8	1,664	2,582	253.7	394.1	1,535	2,384	165,27
956957		446.2 455.5	1,741 1,802	2,653 2,660	266.0 280.4	405.4 413.8	1,581 1,637	2,410 2,416	168,22
958	319.0	460.7	1,832	2,645	289.5	418.0	1,662	2,400	174 143
959	338.4	479.7	1,911	2,709	310.8	440.4	1,755	2,487	177,07
960	352.0	489.7	1,947	2,709	324.9	452.0	1,797	2,501	180,760
961 962	365.8 386.8	503.8 524.9	1,991	2,742 2,813	335.0 355.2	461.4 482.0	1,823 1,904	2,511 2,583	183,742 186,590
963	405.9	542.3	2,073 2,144 2,296	2,865	374.6	500.5	1,979	2,644	189,300
964	440.6	580.8	2,296	3,026	400.5	528.0	2,087	2.751	191.927
965	475.8	616.3	2,448 2,613 2,757	3,171	430.4	557.5	2,214 2,366	2,868 2,97 <b>9</b>	194,347 196,599
966 967	513.7 547.9	646.8 673.5	2,757	3,290 3,389	465.1 490.3	585.7 602.7	2,366	3.032	198.75
.968	593.4	701.3	2.956	3,493	536.9	634.4	2.674	3,032 3,160	200,74
.969		722.5	3,152	3,564	581.8	657.9	2,870	3,245	202,736
970	695.3	751.6	3,390	3,665	621.7	672.1	3,031	3,277 3,355 3,511 3,623	205,089
971 972	751.8 810.3	779.2 810.3	3,620	3,752 3,860	672.2 737.1	696.8 737.1	3,237 3,511 3,831	3,333	207,692 209,924
973	9145	864.7	3,860 4,315	4,080	812.0	767.9	3,831	3,623	211.93
974	998.3	857.5	4,667	4,009	888.1	762.8	4.152	3,566	213,89
975 976	1,096.1 1,194.4	874.9 906.8	5,075 5,477	4,051 4,158	976.4 1,084.3	779.4 823.1	4,521 4,972	3,609 3,774	215,98 218,08
977 978	1,314.0	942.9	5.965	4,280	1 204 4	864.3 903.2	5.468	3 924	220,28
978 979	1,474.0 1,650.2	988.8 1,015.7	6,621 7,331	4,441 4,512	1,346.5 1,507.2	903.2 927.6	6,048 6,695	4,057 4,121	220,28 222,62 225,10
	1,050.2	1,013.7	7,331	4,312	1,307.2	327.0	0,033	4,121	223,100
980	1,828.9	1,021.6	8,032	4,487	1,668.1	931.8	7,326	4,093	227,69
981	2,041.7	1.049.3	8.874	4,561 4,555	1,849.1 1,984.9	950.5	8.037	4,131	230.06
982983	2,180.5	1,058.3 1,095.4	9,385 9,977	4,555 4,670	1,984.9 2,155.9	963.3 1,009.2	8,543 9,192	4,146 4,303	232,35 234,54
984 /	2,578.1	1,169.5	10,893	4,941	2,342.3	1,062.6	9,897	4,490	236,68
1982:	1	l	1		'	•			
<u></u>		1,052.8	9,209 9,295	4,548 4,546 4,548	1,931.3	953.7	8,342	4,119	231,513 232,02
II III	2,156.8 2,195.8	1,054.8 1,057.9	9,295 9,439	4,546 4,548	1,960.9 2,001.3	958.9 964.2	8,451 8,603	4,133 4,145	232,02
iv	2,237.5	1,067.6	9,593	4,578	2,046.1	976.3	8.773	4,186	233.230
1983:		'	,	,		1			l
	2,261.4 2,302.9	1,073.1 1,082.0	9,675 9,832 10,082	4,591	2,070.4	982.5	8,858	4,203 4,296 4,325	233,742
11 11	2,302.9	1,082.0	10.082	4,619 4,694	2,141.6 2,181.4	1,006.2 1,015.6	9,143 9,290	4,296	234,231
IV		1,102.2	10,318	4,694 4,776	2,230.2	1,032.4	9,475	4,386	233,742 234,230 234,81 235,38
1984:		1			,		' '		
Ĭ	2,502.2	1,147.6	10,608	4,865	2,276.5	1,044.1	9,651	4,427	235,87
<u> </u>	2,554.3 2,606.4 2,649.4	1,165.3 1,176.5	10,806 11,000	4,930 4,965	2,332.7 2,361.4 2,398.6	1,064.2 1,065.9	9,869 9,966	4,502 4,499 4,531	236,369 236,950 237,53
111									

¹ Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1960. Annual data are for July 1 through 1958 and are averages of quarterly data beginning 1960. Quarterly data are averages for the period. Data beginning 1970 reflect results of the 1980 census of population.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

TABLE B-25.—Gross saving and investment, 1929-84 [Billions of dollars; quarterly data at seasonally adjusted annual rates]

				Gross s	aving				Gros	s investme	лt	
Year or quarter	Total	Gross	private s	<u> </u>	deficit ( -	ment surpli ), national oduct acco	income	Capital grants received	Total	Gross private	Net foreign	Statis- tical discrep
1	Total	Total	Personal saving	Gross business saving 1	Total	Federal	State and local	by the United States (net) <sup>2</sup>	Total	domestic invest- ment	invest- ment s	ancy
1929 1933 1939	15.9 .9 8.8	14.9 2.2 11.0	3.3 9 2.2	11.6 3.1 8.8	1.0 -1.4 -2.2	1.2 -1.3 -2.2	0.2 1 .0		17.0 1.6 10.3	16.2 1.4 9.3	0.8 .2 1.0	1.1
1940	13.5 18.6 10.7 5.4 2.4 5.2 35.1 41.7 49.8 35.6	14.2 22.4 42.0 49.6 54.3 44.7 29.6 27.3 41.4 39.0	3.4 10.3 27.2 32.9 36.6 28.7 13.7 5.2 11.1	10.8 12.1 14.8 16.7 17.6 16.0 15.9 22.1 30.2 31.5	7 -3.8 -31.4 -44.1 -51.8 -39.5 5.4 14.4 8.4 -3.4	-1.3 -5.1 -33.1 -46.6 -54.5 -42.1 3.5 13.4 8.3 -2.6	.6 1.3 1.8 2.5 2.7 2.6 1.9 1.0		14.7 19.2 9.8 3.7 5.2 9.3 35.6 43.2 48.3 36.2	13.1 17.9 9.9 5.8 7.2 10.6 30.7 34.0 45.9 35.3	1.5 1.3 1 -2.1 -2.0 -1.3 4.9 9.3 2.4	1.1 8 -1.8 2.7 4.1 1.5 -1.6
1950 1951 1952 1953 1954 1955 1956 1956 1957	50.7 56.9 51.0 49.8 50.9 67.5 75.9 75.2 62.6 78.3	42.7 50.8 54.8 56.7 58.1 64.4 70.7 74.3 75.3	11.9 16.1 17.4 18.5 17.0 16.4 21.3 22.3 23.6 21.1	30.7 34.8 37.4 38.2 41.1 47.9 49.4 52.0 51.7 58.7	8.0 6.1 -3.8 -6.9 -7.1 3.1 5.2 9 -12.6 -1.6	9.2 6.5 -3.7 -7.1 -6.0 4.4 6.1 2.3 -10.3 -1.1	-1.2 4 0 .1 -1.1 -1.3 9 -1.4 -2.4 4		52.0 60.1 52.7 52.1 52.9 68.8 73.8 74.0 62.8 77.0	53.8 59.2 52.1 53.3 52.7 68.4 71.0 69.2 61.9 78.1	-1.8 .6 -1.3 .2 .4 2.8 4.8 .9	1.3 3.2 1.7 2.3 2.0 1.3 -2.1 -1.2
1960	81.1 78.7 86.7 93.6 104.0 120.2 127.3 125.7 136.0 153.6	78.0 83.0 90.5 92.9 106.3 119.7 128.6 139.9 142.0 143.6	19.7 23.0 23.3 21.9 29.6 33.7 36.0 44.3 41.9	58.3 60.0 67.2 71.0 76.7 86.0 92.7 95.6 100.0 103.0	3.1 -4.3 -3.8 -7 -2.3 -1.3 -14.2 -6.0 9.9	3.0 -3.9 -4.2 .3 -3.3 -1.8 -1.8 -13.2 -6.0 8.4	- 1.4 - 5.5 - 1.0 - 1.1 - 1.5		78.7 78.6 88.8 95.3 104.2 119.0 128.7 125.4 133.9 149.7	75.9 74.8 85.4 90.9 97.4 113.5 125.7 122.8 133.3 149.3	2.8 3.8 3.4 4.4 6.8 5.4 3.0 2.6 .6	-2.4 1 2.1 1.7 .1 -1.2 1.4 3 -2.1 -3.9
1970 1971 1972 1973 1974 1975 1976 1977 1977	148.9 161.6 186.6 235.5 227.8 218.9 257.9 309.1 374.8 422.7	158.6 189.3 189.2 227.7 234.5 282.7 294.4 326.9 374.0 407.3	55.8 60.7 52.6 79.0 85.1 94.3 82.5 78.0 89.4	102.8 119.7 136.6 148.7 149.4 188.4 211.9 248.9 284.6 310.6	10.6 19.4 3.3 4.7 63.8 36.5 17.8 8 14.3	-12.4 -22.0 -16.8 -5.6 -11.5 -69.3 -53.1 -45.9 -29.5 -16.1	1.9 2.6 13.5 13.4 6.8 5.5 16.6 28.0 30.3 30.4	0.9 .7 .7 .0 4 – 2.0 .0 .0 .0	147.4 165.7 189.9 236.3 231.5 224.4 263.0 310.4 372.3 421.2	144.2 166.4 195.0 229.8 228.7 206.1 257.9 324.1 386.6 423.0	3.2 7 -5.1 6.5 2.9 18.3 5.1 -13.6 -14.3 -1.8	-1.5 4.1 3.3 5.5 5.1 -2.6 -1.5
1980 1981 1982 1983 1984 <i>P</i>	405.9 484.3 408.8 437.2 551.0	435.4 509.9 524.0 571.7 675.3	110.2 137.4 136.0 118.1 156.9	325.2 372.6 388.0 453.6 518.4	-30.7 -26.7 -115.3 -134.5 -124.4	-61.2 -64.3 -148.2 -178.6 -176.4	30.6 37.6 32.9 44.1 52.0	1.2 1.1 .0 .0	408.2 490.0 408.3 437.7 542.8	401.9 484.2 414.9 471.6 637.3	6.3 5.8 -6.6 -33.9 -94.5	2.3 5.6 5
1982: 	447.0 445.4 397.9 344.8	520.8 523.0 528.3 524.0	142.6 136.7 134.5 130.2	378.2 386.3 393.8 393.9	73.8 77.6 130.4 179.2	-106.3 -112.0 -163.7 -210.6	32.5 34.4 33.3 31.5	.0 .0 .0	438.7 442.2 397.0 355.3	436.2 431.2 415.9 376.2	2.5 11.1 18.9 20.9	-8.3 -3.1 9 10.5
1983: 	393.4 414.7 455.2 485.7	545.1 538.1 588.6 615.0	128.0 96.7 119.0 128.7	417.1 441.4 469.7 486.4	151.7 123.4 133.5 129.3	- 185.7 - 167.3 - 180.9 - 180.5	34.1 43.9 47.4 51.2	.0 .0 .0 .0	400.9 418.7 450.3 480.9	405.0 449.6 491.9 540.0	-4.1 -30.9 -41.5 -59.1	7.5 4.1 4.8 4.8
1984: 	543.9 551.0 556.4	651.3 660.2 689.4	152.5 144.8 164.1 166.2	498.8 515.3 525.3	107.4 109.2 133.0	-161.3 -163.7 -180.6	53.9 54.5 47.6	.0 .0 .0	546.1 542.0 543.4 539.6	623.8 627.0 662.8 635.5	77.7 85.0 119.4 95.8	2.2 9.0 13.0

¹ Undistributed corporate profits with inventory valuation and capital consumption adjustments, corporate and noncorporate capital consumption allowances with capital consumption adjustment, and private wage accruals less disbursements.

² Allocations of special drawing rights (SDRs), except as noted in footnote 4.

³ 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.

⁴ 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-26.—Saving by individuals, 1946-841 [Billions of dollars; quarterly data at seasonally adjusted annual rates]

					Increase	in finan	cial asset	s			Net in	vestme	nt in 7	Less: 1	Net inc	rease in
Year or quarter	Total	Total	Check- able depos- its and cur- rency	Time and sav- ings de- posits	Money market fund shares	Govern- ment securi- ties <sup>2</sup>	Corpo- rate equi- ties <sup>3</sup>	Other securi- ties 4	Insur- ance and pension re- serves s	Other finan- cial as- sets 6	Owner- occu- pied homes	Con- sumer dura- bles	Non- cor- porate busi- ness as- sets 8	Mort- gage debt on non- farm homes	Con-	Other debt * 9
1946 1947 1948 1949	24.6 20.1 24.3 20.9	18.8 13.2 9.1 9.9	5.6 .1 -2.9 -2.0	34		1.6	1.1 1.1 1.0 .7	0.9 8 .0 4	5.3 5.4 5.3 5.6	2.8 2.4 2.2 1.6	3.6 6.7 9.1 8.4	6.1 9.0 9.8 10.6	6.9	3.6 4.7 4.6 4.4	3.1 3.7 3.2 3.2	-0.4 2.2 2.8 2.2
1950	34.7 31.3 32.5 28.2 34.1 37.2 36.5 34.1	13.7 19.1 23.2 22.8 22.2 28.0 30.2 28.6 31.6 37.4	2.6 4.6 1.6 1.0 2.2 1.2 1.8 4 3.8	7.8 8.1 9.1 8.6 9.4 11.9 13.9		6 2.5 2.5 1.0 5.8 3.9 2.3 -2.5	.7 1.8 1.6 1.0 8 1.0 2.0 1.5 1.5	9 .8	95	2.1 2.1 2.1 2.5 2.8 3.5	11.8 11.7 11.3 12.3 12.7 16.7 15.6 13.2 12.3 16.3	14.8 11.3 8.6 10.1 7.1 12.2 8.5 7.7 3.6 7.3	2.7	6.7 6.6 6.2 7.6 8.7 12.2 11.2 8.9 9.5 12.8	1.5 7.2	5.0 3.7 2.7 1.9 5.5 6.4 3.2 3.8 6.0 7.2
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	35.9 42.0 46.7 56.8 65.0 72.4 76.9	32.1 35.4 40.1 46.6 55.7 58.8 57.5 69.7 75.0 65.0	1.0 9 -1.2 4.2 5.3 7.6 2.4 9.9 11.1 -2.5	18.3 26.1 26.2 26.1 27.8 19.0 35.3 31.1		1.4 1.3 .6 4.8 3.7 11.3 1.2 5.2	6 .3 -2.1 -2.6 2 -2.1 7 -4.7 -7.5 -2.8	2.4 .1 .1 1.4 .4 1.3 2.4 5.2 7.9	11.5 12.1 12.7 13.9 16.1 16.9 19.2 18.6 19.8 21.5	7.6	14.8 12.7 13.5 14.3 15.0 14.5 13.5 11.7 15.7 16.3	7.0 4.3 8.5 11.8 15.0 20.2 23.1 21.1 27.0 26.3	9.8	11.7 12.2 14.1 16.2 17.5 17.0 13.8 12.5 16.9 18.6	4.4 2.5 6.3 8.9 9.8 10.6 6.5 5.7 11.5 10.8	6.5 7.2 10.7 10.8 14.3 12.2 17.6
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979	86.2 95.4 108.8 133.4 127.2 151.7 163.0 166.5 187.8 200.3	81.3 101.9 131.1 150.3 147.2 174.4 210.3 235.7 269.7 293.9	8.9 12.3 13.7 14.1 7.3 6.9 15.7 19.9 22.5 21.5	67.7 74.2 62.6 51.1 84.2 106.2	2.4 1.3 0 2. 6.9 34.4	-5.4 -12.2 .7 22.1 25.6 17.7 8.3 17.0 24.8 45.8	-1.7 -5.5 -5.4 -6.2 -9 -4.7 -5.0 -5.2 -18.3	6.9 6.5 2.4 8.6 3.6 6.0 3.7 1.8 5.2	23.9 27.4 34.3 38.8 47.0 54.9 60.1 71.8 86.7 95.0	5.2 5.6 11.2 10.3 11.1 13.8 19.2 18.9 30.2 36.0	13.6 20.7 28.0 31.0 25.2 24.2 39.2 54.4 67.0 68.2	20/1	11.5 17.5 20.6 26.6 10.6 5.0 .2 13.1 22.0 26.0	14.1 26.2 41.4 46.5 38.0 40.6 61.4 90.8 111.5 121.2	5.4 14.7 19.8 24.3 9.9 9.6 25.4 40.2 48.8 45.4	20.7 30.3 44.2 44.2 36.3 28.3 39.9 55.3 67.3 73.7
1980 1981 1982 1983	234.7 273.9 296.3 300.3	326.3 350.0 369.8 450.1	10.2 35.5 16.5 39.9	126.5 66.7 119.2 198.5	29.2 107.5 24.7 —44.1	20.4 34.7 44.3 91.7	-8.0 -30.0 -7.8 4.8	-6.5 -15.4 -13.2 -4.7	116.2 117.1 150.1 154.0	38.3 33.9 36.0 10.1	56.2 47.6 24.1 54.9	32.8 39.1 35.5 61.5	3 24.1 11.9 .3	98.3 78.7 51.6 103.2	6.3 26.7 21.0 51.3	75.7 81.5 72.5 112.1
1982:          V	291.9 263.9 309.8 319.5	329.0 351.9 381.7 416.4	7.2 .8 20.7 37.2	99.6 92.3 101.6 183.2	38.2 40.5 88.1 -68.1	55.9 42.1 8.2 71.0	.4 18.9 -23.3 -27.3	-24.2 -16.2 -15.0 2.5	128.5 135.0 159.8 177.2	23.2 38.6 41.5 40.7	23.7 24.1 21.6 27.0	34.5 32.8 32.9 41.8	15.0 18.6 10.8 3.4	63.7 45.2 40.9 56.7	4.3 36.9 14.1 28.6	42.4 81.3 82.3 83.8
1983:      	338.9 295.0 250.9 316.5	427.8 450.5 410.5 511.7	9.8	251.9 158.4 199.4 184.1	-105.2 -62.7 -6.5 -1.8	84.2 145.8 66.7 69.9	-1.6 3.5 -13.2 30.5	-9.4 -29.9 -8.9 29.2	147.5 157.7 151.2 159.6	-7.4 12.3 11.9 23.6	36.5 49.9 63.7 69.7	44.8 60.2 65.1 75.9	1.7 -1.9 -6.9 8.5	58.9 91.2 126.6 136.0	26.5 45.3 48.7 84.6	86.5 127.2 106.1 128.8
1984: ! !!	318.3 383.3 326.6	412.9 571.9 460.2	38.5 38.6 4.3	166.5 248.5 257.4	44.9 15.4 20.5	97.2 152.5 135.3	-36.8 -44.4 -42.1	-17.4 10.3 -5.7	104.6 121.2 78.1	15.4 29.8 20.9	71.1 75.8 76.3	83.0 89.4 82.7	29.4 17.1 23.9	119.2 139.1 132.6	78.5 124.2 87.5	80.4 107.5 96.3

Source: Board of Governors of the Federal Reserve System.

<sup>Saving by households, personal trust funds, nonprofit institutions, farms, and other noncorporate business.

Consists of U.S. savings bonds, other U.S. Treasury securities, U.S. Government agency securities and sponsored agency securities, mortgage pool securities, and State and local obligations.

Includes mutual fund shares.

Corporate and foreign bonds and open market paper.

Private life insurance reserves, private insured and noninsured pension reserves, and government insurance and pension reserves.

Consists of security credit, mortgages, accident and health insurance reserves, and nonlife insurance claims for households and of consumer credit, equity in sponsored agencies, and nonlife insurance claims for noncorporate business.

Purchases of physical assets less depreciation.

Includes data for corporate farms.

Other debt consists of security credit, policy loans, and noncorporate business debt.</sup> 

Table B-27.—Number and median income (in 1983 dollars) of families and persons, and poverty status, by race, selected years, 1947-83

			Famili	es 1			Pers		Median in	come of pe	rsons 14	years old
				Below (	overty lev	el	bel povert			iles		nales
Year	Num- ber	Median	To	tal	Fen house	nale holder	Num-		me	]	ren	Year-
qi sana a sana a sana	(mil- lions)	income	Num- ber (mil- lions)	Rate	Num- ber (mil- lions)	Rate	ber (mil- lions)	Rate	All persons	Year- round full-time workers	All per- sons	round full- time work- ers
ALL RACES 19471950	37.2 39.9	\$13,519 13,736							\$9,945 10,636		\$4,535 3,944	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1955	42.9 45.5 46.4 47.1 47.5 48.0	16,438 18,907 19,100 19,617 20,335 21,100	8.2 8.4 8.1 7.6 7.2	18.1 18.1 17.2 15.9 15.0	2.0 2.0 2.0 2.0 2.0 1.8	42.4 42.1 42.9 40.4 36.4	39.9 39.6 38.6 36.4 36.1	22.2 21.9 21.0 19.5 19.0	12,493 13,727 13,952 14,400 14,678 14,926	\$15,781 18,282 18,860 19,190 19,752 20,184	4,167 4,243 4,261 4,420 4,465 4,654	\$10,177 11,087 11,128 11,387 11,571 11,918
1965	49.2 50.1 50.8 51.6	21,968 23,123 23,672 24,720 25,636	6.7 5.8 5.7 5.0 5.0	13.9 11.8 11.4 10.0 9.7	1.9 1.7 1.8 1.8 1.8	38.4 33.1 33.3 32.3 32.7	33.2 28.5 27.8 25.4 24.1	17.3 14.7 14.2 12.8 12.1	15,861 16,289 16,570 17,125 17,472	20,834 21,352 21,750 22,377 23,557	4,802 5,030 5,374 5,782 5,794	12,051 12,360 12,527 13,082 13,798
1970	53.3 54.4 55.1 55.7	25,317 25,301 26,473 27,017 26,066 25,396	5.3 5.3 5.1 4.8 4.9	10.1 10.0 9.3 8.8 8.8	2.0 2.1 2.2 2.2 2.3	32.5 33.9 32.7 32.2 32.1	25.4 25.6 24.5 23.0 23.4	12.6 12.5 11.9 11.1 11.2 12.3	17,114 16,981 17,742 18,061 17,076	23,564 23,692 25,096 25,710 24,571	5,740 5,924 6,190 6,268 6,227	13,958 14,025 14,415 14,546 14,494
1975	56.7 57.2 57.8 59.6	26,179 26,320 26,939 26,885	5.5 5.3 5.3 5.5	9.4 9.3 9.1 9.2	2.4 2.5 2.6 2.7 2.6	32.5 33.0 31.7 31.4 30.4	25.9 25.0 24.7 24.5 26.1	11.8 11.6 11.4 11.7	16,388 16,497 16,643 16,699 16,168	23,942 24,255 24,776 24,529 23,991	6,266 6,259 6,479 6,212 5,974	14,289 14,547 14,491 14,723 14,455
1980	60.3 61.0 61.4 62.0	25,418 24,525 24,187 24,580	6.2 6.9 7.5 7.6	10.3 11.2 12.2 12.3	3.0 3.3 3.4 3.6	32.7 34.6 36.3 36.0	29.3 31.8 34.4 35.3	13.0 14.0 15.0 15.2	15,150 14,759 14,399 14,631	23,182 22,667 22,352 22,508	5,949 5,979 6,076 6,319	14,014 13,646 14,103 14,479
WHITE 1970. 1971. 1972. 1973. 1974 3.	46.5 47.6 48.5 48.9 49.4	26,263 26,253 27,504 28,237 27,088	3.7 3.8 3.4 3.2 3.4	8.0 7.9 7.1 6.6 6.8	1.1 1.2 1.1 1.2 1.3	25.0 26.5 24.3 24.5 24.8	17.5 17.8 16.2 15.1 15.7	9.9 9.9 9.0 8.4 8.6	17,989 17,803 18,609 18,951 17,888	24,239 24,359 26,001 26,455 25,050	5,814 6,022 6,230 6,329 6,297	14,204 14,187 14,699 14,792 14,617
1975	<b>49.9</b> <b>50.1</b> 50.5 50.9 52.2	26,412 27,192 27,522 28,050 28,054	3.8 3.6 3.5 3.5 3.6	7.7 7.1 7.0 6.9 6.9	1.4 1.4 1.4 1.4	25.9 25.2 24.0 23.5 22.3	17.8 16.7 16.4 16.3 17.2	9.7 9.1 8.9 8.7 9.0	17,215 17,391 17,432 17,490 16,890	24,496 24,978 25,283 24,984 24,685	6,331 6,311 6,578 6,287 6,030	14,322 14,659 14,583 14,862 14,581
1980	52.7 53.3 53.4 53.9	26,484 25,762 25,394 25,757	4.2 4.7 5.1 5.2	8.0 8.8 9.6 9.7	1.6 1.8 1.8 1.9	25.7 27.4 27.9 28.3	19.7 21.6 23.5 24.0	10.2 11.1 12.0 12.1	16,115 15,661 15,222 15,401	23,843 23,199 22,947 23,114	5,981 6,046 6,159 6,421	14,150 13,874 14,292 14,677
BLACK 1970	4.9 5.2 5.3 5.4 5.5	16,111 15,843 16,347 16,297 16,175	1.5 1.5 1.5 1.5 1.5	29.5 28.8 29.0 28.1 26.9	.8 .9 1.0 1.0	54.3 53.5 53.3 52.7 52.2	7.5 7.4 7.7 7.4 7.2	33.5 32.5 33.3 31.4 30.3	10,625 10,514 11,207 11,463 11,083	16,511 16,657 17,559 17,830 17,946	5,293 5,277 5,820 5,712 5,685	11,638 12,526 12,574 12,544 13,490
1975	5.6 5.8 5.8 5.9 6.2	16,251 16,175 15,722 16,614 15,886	1.5 1.6 1.6 1.6 1.7	27.1 27.9 28.2 27.5 27.8	1.0 1.1 1.2 1.2 1.2	50.1 52.2 51.0 50.6 49.4	7.5 7.6 7.7 7.6 8.1	31.3 31.1 31.3 30.6 31.0	10,292 10,471 10,345 10,478 10,631	18,230 17,890 17,431 19,135 17,790	5,751 5,947 5,680 5,661 5,488	13,683 13,705 13,629 13,775 13,361
1980	6.3 6.4 6.5 6.7	15,324 14,532 14,035 14,506	1.8 2.0 2.2 2.2	28.9 30.8 33.0 32.4	1.3 1.4 1.5 1.5	49.4 52.9 56.2 53.8	8.6 9.2 9.7 9.9	32.5 34.2 35.6 35.7	9,684 9,312 9,122 8,967	16,776 16,414 16,298 16,410	5,538 5,371 5,432 5,543	13,197 12,530 12,774 13,000

<sup>The term "family" refers to a group of two or more persons related by blood, marriage, or adoption and residing together, all such persons are considered members of the same family. Beginning 1979, based on householder concept and restricted to primary families.

Based on revised methodology; comparable with succeeding years.

Based on 1980 census population controls; comparable with succeeding years.</sup> 

Source: Department of Commerce, Bureau of the Census.

Note.—The poverty level is based on the poverty index adopted by a Federal interagency committee in 1969. That index reflected different consumption requirements for families based on size and composition, sex and age of family householder, and farm-nonfarm residence. Minor revisions implemented in 1981 eliminated variations in the poverty thresholds based on two of these variables, farm-nonfarm residence and sex of householder. 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. 147.

## POPULATION, EMPLOYMENT, WAGES, AND PRODUCTIVITY

TABLE B-28.—Population by age groups, 1929-84
[Thousands of persons]

					Age (years)			
July 1	Total	Under 5	5–15	16-19	20-24 ,	25–44	45-64	65 and over
929	121,767	11,734	26,800	9,127	10,694	35,862	21,076	6,47
933	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,36
939	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,76
940	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,0:
941	133,402	10,850	24,516	9,840	11,807	40,383	26,718	9,2:
942	134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,5:
943	136,739	12,016	24,093	9,607	12,064	41,420	27,671	9,8:
944	138,397	12,524	23,949	9,561	12,062	42,016	28,138	10,1:
945	139,928	12,979	23,907	9,361	12,036	42,521	28,630	10,49
946	141,389	13,244	24,103	9,119	12,004	43,027	29,064	10,83
947	144,126	14,406	24,468	9,097	11,814	43,657	29,498	11,13
948	146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,5
949	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,93
950	152,271	16,410	26,721	8,542	11,680	45,672	30,849	12,3
951	154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,8
952	157,553	17,312	28,894	8,414	11,350	46,495	31,884	13,2
953	160,184	17,638	30,227	8,460	11,062	46,786	32,394	13,6
954	163,026	18,057	31,480	8,637	10,832	47,001	32,942	14,0
955	165,931	18,566	32,682	8,744	10,714	47,194	33,506	14,5
956	168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,9
957	171,984	19,494	35,272	9,195	10,603	47,440	34,591	15,3
958	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,8
959	177,830	20,175	37,368	10,215	10,969	47,192	35,663	16,2
960	180,671	20,341	38,494	10,683	11,134	47,140	36,203	16,6
	183,691	20,522	39,765	11,025	11,483	47,084	36,722	17,0
	186,538	<b>20,469</b>	41,205	11,180	11,959	47,013	37,255	17,4
	189,242	<b>20,342</b>	41,626	12,007	12,714	46,994	37,782	17,7
	191,889	<b>20,165</b>	42,297	12,736	13,269	46,958	38,338	18,1
965	194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,4
966	196,560	19,208	43,702	14,311	14,050	47,001	39,534	18,7
967	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,0
968	200,706	17,913	44,622	14,452	15,786	47,721	40,846	19,3
969	202,677	17,376	44,840	14,800	16,480	48,064	41,437	19,6
970	205,052	17,166	44,816	15,289	17,202	48,473	41,999	20,1
971	207,661	17,244	44,591	15,688	18,159	48,936	42,482	20,5
972	209,896	17,101	44,203	16,039	18,153	50,482	42,898	21,0
973	211,909	16,851	43,582	16,446	18,521	51,749	43,235	21,5
974	213,854	16,487	42,989	16,769	18,975	53,051	43,522	22,0
975 976 977 978	215,973 218,035 220,239 222,585 225,055	16,121 15,617 15,564 15,735 16,063	42,508 42,099 41,298 40,428 39,552	17,017 17,194 17,276 17,288 17,242	19,527 19,986 20,499 20,946 21,297	54,302 55,852 57,561 59,400 61,379	43,801 44,008 44,150 44,286 44,390	22,6 23,2 23,8 24,5 25,1
980	227,738 230,019 232,309 234,496 236,634	16,459 16,949 17,377 17,826	38,823 38,072 37,653 37,323	17,139 16,696 16,223 15,649	21,620 21,977 21,980 21,925	63,486 65,569 67,737 69,826	44,499 44,498 44,511 44,561	25,7 26,2 26,8 27,3

Note.—Includes Armed Forces overseas beginning 1940. Includes Alaska and Hawaii beginning 1950.

Source: Department of Commerce, Bureau of the Census.

TABLE B-29.—Population and the labor force, 1929-84
[Monthly data seasonally adjusted, except as noted]

			Labor	Employ-		C	ivilian lat	or force		Unen	pioy-	Labor partici	force
	Civilian noninsti-	Resi- dent	includ-	ment			Employm	ent		- mean		ra	
Period	tutional popula- tion <sup>1</sup>	Armed Forces	resi- dent Armed Forces	including resident Armed Forces	Total	Total	Agri- cultu <b>ral</b>	Nonagri- cultural	Unemploy- ment	All work- ers *	Civil- ian work- ers	Total s	Civil- ian 4
			Thousa	nds of pers	ons 14 y	ears of a	ge and o	ver			Per	cent	
1929	•	1	ı	ľ	49,180	47,630	10,450	37,180	1,550		3.2		
1933	••••••	<b></b>	ļ		51,590	38,760	10,090	28,670	12,830		24.9	***********	<b></b>
1939						45,750	9,610	36,140	9,480		17.2		····
1940 1941 1942 1943	99,840 99,900 98,640 94,640				55,640 55,910 56,410 55,540	47,520 50,350 53,750 54,470 53,960	9,540 9,100 9,250 9,080	37,980 41,250 44,500 45,390 45,010	8,120 5,560 2,660 1,070		14.6 9.9 4.7 1.9		56.0 57.2 58.7
1944 1945 1946 1947	94.090					52,820 55,250 57,812	8,950 8,580 8,320 8,256	45,010 44,240 46,930 49,557	1,040 2,270 2,356		1.2 1.9 3.9 3.9		58.6 57.2 55.8 56.8
		·		ands of pe		years of	age and	over		1			
1947 1948 1949	101,827 103,068 103,994				59,350 60,621 61,286	57,038 58,343 57,651	7,890 7,629 7,658	49,148 50,714 49,993	2,311 2,276 3,637	*************	3.9 3.8 5.9		
1950 1951 1952 1953 * 1954	104,621 105,231 107,056	1,169 2,143 2,386 2,231 2,142	63,377 64,160 64,524 65,246 65,785	60,087 62,104 62,636 63,410 62,251	62,208 62,017 62,138 63,015 63,643	58,918 59,961 60,250 61,179 60,109	7,160 6,726 6,500 6,260 6,205	51,758 53,235 53,749 54,919 53,904	3,288 2,055 1,883 1,834 3,532	5.2 3.2 2.9 2.8 5.4	5.3 3.3 3.0 2.9 5.5	59.7 60.1 60.0 59.7 59.6	59.2 59.2 59.0 58.9 58.8
1955 1956 1957 1958 1959	109,683 110,954 112,265 113,727 115,329	2,064 1,965 1,948 1,847 1,788	67,087 68,517 68,877 69,486 70,157	64,234 65,764 66,019 64,883 66,418	65,023 66,552 66,929 67,639 68,369	62,170 63,799 64,071 63,036 64,630	6,450 6,283 5,947 5,586 5,565	55,722 57,514 58,123 57,450 59,065	2,852 2,750 2,859 4,602 3,740	4.3 4.0 4.2 6.6 5.3	4.4 4.1 4.3 6.8 5.5	60.0 60.7 60.3 60.1 59.9	59.3 60.0 59.6 59.5 59.3
1960 5 1961 1962 5 1963 1964	117,245 118,771 120,153 122,416 124,485	1,861 1,900 2,061 2,006 2,018	71,489 72,359 72,675 73,839 75,109	67,639 67,646 68,763 69,768 71,323	69,628 70,459 70,614 71,833 73,091	65,778 65,746 66,702 67,762 69,305	5,458 5,200 4,944 4,687 4,523	60,318 60,546 61,759 63,076 64,782	3,852 4,714 3,911 4,070 3,786	5.4 6.5 5.4 5.5 5.0	5.5 6.7 5.5 5.7 5.2	60.0 60.0 59.5 59.3 59.4	59.4 59.3 58.8 58.7 58.7
1965 1966 1967 1968 1968		1,946 2,122 2,218 2,253 2,238	76,401 77,892 79,565 80,990 82,972	73,034 75,017 76,590 78,173 80,140	74,455 75,770 77,347 78,737 80,734	71,088 72,895 74,372 75,920 77,902	4,361 3,979 3,844 3,817 3,606	66,726 68,915 70,527 72,103 74,296	3,366 2,875 2,975 2,817 2,832	4.4 3.7 3.7 3.5 3.4	4.5 3.8 3.8 3.6 3.5	59.5 59.8 60.2 60.3 60.8	58.9 59.2 59.6 59.6 60.1
1970 1971 1972 1973 * 1974	127.005	2,118 1,973 1,813 1,774 1,721	84,889 86,355 88,847 91,203 93,670	80,796 81,340 83,966 86,838 88,515	82,771 84,382 87,034 89,429 91,949	78,678 79,367 82,153 85,064 86,794	3,463 3,394 3,484 3,470 3,515	75,215 75,972 78,669 81,594 83,279	4,093 5,016 4,882 4,365 5,156	4.8 5.8 5.5 4.8 5.5	4.9 5.9 5.6 4.9 5.6	61.0 60.7 60.9 61.3 61.7	60.4 60.2 60.4 60.8 61.3
1975 1976 1977 1978.5 1979		1,678 1,668 1,656 1,631 1,597	95,453 97,826 100,665 103,882 106,559	87,524 90,420 93,673 97,679 100,421	93,775 96,158 99,009 102,251 104,962	85,846 88,752 92,017 96,048 98,824	3,408 3,331 3,283 3,387 3,347	82,438 85,421 88,734 92,661 95,477	<b>7,929</b> 7,406 6,991 6,202 6,137	8.3 7.6 6.9 6.0 5.8	8.5 7.7 7.1 6.1 5.8	61.6 62.0 62.6 63.5 64.0	61.2 61.6 62.3 63.2 63.7
1980 1981 1982 1983 1984		1,604 1,645 1,668 1,676 1,697	108,544 110,315 111,872 113,226 115,241	100,907 102,042 101,194 102,510 106,702		99,303 100,397 99,526 100,834 105,005	3,364 3,368 3,401 3,383 3,321	95,938 97,030 96,125 97,450 101,685	7,637 8,273 10,678 10,717 8,539	7.0 7.5 9.5 9.5 7.4	7.1 7.6 9.7 9.6 7.5	64.1 64.2 64.3 64.4 64.7	63.8 63.9 64.0 64.0 64.4

See next page for continuation of table.

TABLE B-29.—Population and the labor force, 1929-84—Continued [Monthly data seasonally adjusted, except as noted]

			Labor	Employ-		(	ivilian lat	or force		Unen	iploy- rate	Labor	
Period	Civilian noninsti- tutional popula- tion <sup>1</sup>	Resi- dent Armed Forces 1	includ- ing resi- dent Armed Forces	ment including resident Armed Forces	Total	Total	Agri- cultural	Nonagri- cultural	Unemploy- ment	All work- ers 2	Civil- ian work- ers	Total 3	
			Thousa	nds of per	ons 16 y	ears of a	ge and o	/er			Perc	ent	
1982: Jan Feb Mar Apr May June	171,489 171,667 171,844 172,026	1,664 1,671 1,668 1,665	110,777 111,165 111,320 111,519 112,179 111,654	101,393 101,449 101,409 101,252 101,753 101,099	109,501 109,649 109,851 110,514	99,737 99,785 99,738 99,584 100,088 99,435	3,393 3,371 3,392 3,367 3,436 3,327	96,344 96,414 96,346 96,217 96,652 96,108	9,384 9,716 9,911 10,267 10,426 10,555	8.5 8.7 8.9 9.2 9.3 9.5	8.6 8.9 9.0 9.3 9.4 9.6	64.0 64.2 64.2 64.3 64.6 64.2	63.7 63.9 63.9 63.9 64.2 63.9
July	172,511 172,690	1,689 1,670 1,668 1,660	111,996 112,211 112,373 112,395 112,657 112,618	101,145 101,325 101,157 100,870 100,758 100,727	110,727 110.997	99,471 99,636 99,487 99,202 99,098 99,062	3,405 3,408 3,365 3,477 3,483 3,412	96,066 96,228 96,122 95,725 95,615 95,650	10,851 10,886 11,216 11,525 11,899 11,891	9.7 9.7 10.0 10.3 10.6 10.6	9.8 9.8 10.1 10,4 10.7 10.7	64.4 64.4 64.4 64.4 64.5 64.4	64.0 64.1 64.1 64.0 64.1 64.1
1983: Jan Feb Mar Apr May June	173,505 173,656 173,794	1,664 1,671 1,669	112,413 112,364 112,397 112,577 112,561 113,385	100,900 100,808 100,967 101,261 101,303 102,112	110,746 110,700 110,733 110,906 110,892 111,717	99,233 99,144 99,303 99,590 99,634 100,444	3,441 3,388 3,406 3,381 3,352 3,457	95,792 95,756 95,897 96,209 96,282 96,987	11,513 11,556 11,430 11,316 11,258 11,273	10.2 10.3 10.2 10.1 10.0 9.9	10.4 10.4 10.3 10.2 10.2 10.1	64.2 64.1 64.1 64.2 64.1 64.5	63.9 63.8 63.8 63.8 63.7 64.2
July	174,306 174,440 174,602 174,779 174,951 175,121	1,695	113,371 113,866 113,959 113,609 113,835 113,925	102,837 103,271 103,678 103,737 104,387 104,717	111,707 112,184 112,264 111,914 112,150 112,237	101,173 101,589 101,983 102,042 102,702 103,029	3,482 3,488 3,308 3,284 3,249 3,329	97,691 98,101 98,675 98,758 99,453 99,700	10,534 10,595 10,281 9,872 9,448 9,208	9.3 9.3 9.0 8.7 8.3 8.1	9.4 9.4 9.2 8.8 8.4 8.2	64.4 64.7 64.6 64.4 64.4 64.4	64.1 64.3 64.3 64.0 64.1 64.1
1984: Jan Feb Mar Apr May June	175,679 175,824 175.969	1,684 1,686 1,693 1,690	114,006 114,408 114,592 114,895 115,412 115,309	104,980 105,572 105,809 106,095 106,852 107,081	112,320 112,724 112,906 113,202 113,722 113,619	103,294 103,888 104,123 104,402 105,162 105,391	3,294 3,364 3,305 3,379 3,367 3,368	100,000 100,524 100,818 101,023 101,795 102,023	9,026 8,836 8,783 8,800 8,560 8,228	7.9 7.7 7.7 7.7 7.4 7.1	8.0 7.8 7.8 7.8 7.5 7.2	64.3 64.5 64.6 64.7 64.9 <b>64.8</b>	64.0 64.2 64.2 64.3 64.6 64.5
July	176,583	1,720	115,566 115,341 115,484 115,721 115,773 116,162	107,075 106,860 107,114 107,354 107,631 107,971	113 764	105 304	3,333 3,264 3,319 3,169 3,334 3,385	102,044 101,884 102,075 102,480 102,598 102,888	8,491 8,481 8,370 8,367 8,142 8,191	7.3 7.4 7.2 7.2 7.0 7.1	7.5 7.5 7.4 7.3 7.1 7.2	64.9 64.7 64.7 64.8 64.7 64.9	64.5 64.3 64.4 64.4 64.6

Not seasonally adjusted.

<sup>1</sup> Not seasonally adjusted.
2 Unemployed as percent of labor force including resident Armed Forces.
3 Labor force including resident Armed Forces as percent of noninstitutional population including resident Armed Forces.
4 Civilian labor force as percent of civilian noninstitutional population.
5 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. affected

Note.—Labor force data in Tables B-29 through B-35 are based on household interviews and relate to the calendar week including the 12th of the month. For definitions of terms, area samples used, historical comparability of the data, comparability with other series, etc., see "Employment and Earnings."

TABLE B-30.—Civilian employment and unemployment by sex and age, 1947-84
[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

			Civilia	an employ	yment					Une	mployme	nt		
			Males			Females				Males			Females	
Year or month	Total	Total	16-19 years	20 years and over	Total	16-19 years	20 years and <b>ove</b> r	Total	Total	16-19 years	20 years and over	Total	16–19 years	20 years and over
1947	1 30 343	40,995	2,218	38,776	16,045	1,691	14,354	2,311	1,692	270	1,422	619	144	475
1948		41,725	2,344	39,382	16,617	1,682	14,936	2,276	1,559	256	1,305	717	153	564
1949		40,925	2,124	38,803	16,723	1,588	15,137	3,637	2,572	353	2,219	1,065	223	841
1950		41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049	195	854
1951		41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834	145	689
1952		41,682	2,107	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698	140	559
1953 <sup>1</sup>		42,430	2,136	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632	123	510
1954		41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188	191	997
1955		42,621	2,095	40,526	19,551	1,547	18,002	2,852	1,854	274	1,580	998	176	823
1956		43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	269	1,442	1,039	209	832
1957		43,357	2,115	41,239	20,714	1,663	19,052	2,859	1,841	300	1,541	1,018	197	821
1958		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		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 <sup>1</sup>	65,746	43,904	2,361	41,543	21,874	1,768	20,105	3,852	2,486	426	2,060	1,366	286	1,080
1961		43,656	2,315	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717	349	1,368
1962 <sup>1</sup>		44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	408	2,016	1,488	313	1,175
1963		44,657	2,406	42,251	23,105	1,849	21,257	4,070	2,472	501	1,971	1,598	383	1,216
1964		45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581	385	1,195
1965	74,372	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		46,919	3,253	43,668	25,976	2,468	23,510	2,875	1,551	432	1,120	1,324	405	921
1967		47,479	3,186	44,294	26,893	2,496	24,397	2,975	1,508	448	1,060	1,468	391	1,078
1968		48,114	3,255	44,859	27,807	2,526	25,281	2,817	1,419	426	993	1,397	412	985
1969		48,818	3,430	45,388	29,084	2,687	26,397	2,832	1,403	440	963	1,429	413	1,015
1970	05.004	48,990	3,409	45,581	29,688	2,735	26,952	4,093	2,238	599	1,638	1,855	506	1,349
1971		49,390	3,478	45,912	29,976	2,730	27,246	5,016	2,789	693	2,097	2,227	568	1,658
1972 <sup>1</sup>		50,896	3,765	47,130	31,257	2,980	28,276	4,882	2,659	711	1,948	2,222	598	1,625
1973 <sup>1</sup>		52,349	4,039	48,310	32,715	3,231	29,484	4,365	2,275	653	1,624	2,089	583	1,507
1974		53,024	4,103	48,922	33,769	3,345	30,424	5,156	2,714	757	1,957	2,441	665	1,777
1975	85,846	51,857	3,839	48,018	33,989	3,263	30,726	7,929	4,442	966	3,476	3,486	802	2,684
1976	88,752	53,138	3,947	49,190	35,615	3,389	32,226	7,406	4,036	939	3,098	3,369	780	2,588
1977	92,017	54,728	4,174	50,555	37,289	3,514	33,775	6,991	3,667	874	2,794	3,324	789	2,535
1978 <sup>1</sup>	96,048	56,479	4,336	52,143	39,569	3,734	35,836	6,202	3,142	813	2,328	3,061	769	2,292
1979	98,824	57,607	4,300	53,308	41,217	3,783	37,434	6,137	3,120	811	2,308	3,018	743	2,276
1980	99,303	57,186	4,085	53,101	42,117	3,625	38,492	7,637	4,267	913	3,353	3,370	755	2,615
1981	100,397	57,397	3,815	53,582	43,000	3,411	39,590	8,273	4,577	962	3,615	3,696	800	2,895
1982	99,526	56,271	3,379	52,891	43,256	3,170	40,086	10,678	6,179	1,090	5,089	4,499	886	3,613
1983	100,834	56,787	3,300	53,487	44,047	3,043	41,004	10,717	6,260	1,003	5,257	4,457	825	3,632
1984	105,005	59,091	3,322	55,769	45,915	3,122	42,793	8,539	4,744	812	3,932	3,794	687	3,107
1983: Jan	99,233 99,144 99,303 99,590 99,634 100,444	55,846 55,754 55,876 56,033 56,159 56,710	3,334 3,282 3,210 3,222 3,231 3,306	52,512 52,472 52,666 52,811 52,928 53,404	43,387 43,390 43,427 43,557 43,475 43,734	3,103 3,058 3,046 3,013 2,977 3,025	40,284 40,332 40,381 40,544 40,498 40,709	11,513 11,556 11,430 11,316 11,258 11,273	6,647 6,783 6,693 6,707 6,677 6,476	1,060 1,046 1,073 1,038 1,020 1,068	5,587 5,737 5,620 5,669 5,657 5,408	4,866 4,773 4,737 4,609 4,581 4,797	876 823 842 858 831 936	3,990 3,950 3,895 3,751 3,750 3,861
July	101,173	57,105	3,317	53,788	44,068	3,016	41,052	10,534	6,210	1,024	5,186	4,324	843	3,481
	101,589	57,156	3,321	53,835	44,433	3,129	41,304	10,595	6,197	1,068	5,129	4,398	831	3,567
	101,983	57,299	3,322	53,977	44,684	3,052	41,632	10,281	5,986	970	5,016	4,295	782	3,513
	102,042	57,434	3,280	54,154	44,608	2,986	41,622	9,872	5,739	938	4,801	4,133	774	3,359
	102,702	57,880	3,379	54,501	44,822	3,025	41,797	9,448	5,464	872	4,592	3,984	759	3,225
	103,029	58,071	3,356	54,715	44,958	3,086	41,872	9,208	5,238	856	4,382	3,970	743	3,227
1984:     Jan Feb Mar Apr May	103,294 103,888 104,123 104,402 105,162	58,301 58,573 58,720 58,741 59,033 59,213	3,289 3,340 3,368 3,354 3,370 3,352	55,012 55,233 55,352 55,387 55,663 55,861	44,993 45,315 45,403 45,661 46,129 46,178	3,153 3,137 3,069 3,137 3,126 3,192	41,840 42,178 42,334 42,524 43,003 42,986	9,026 8,836 8,783 8,800 8,560 8,228	5,123 4,968 4,889 4,911 4,726 4,590	850 829 841 824 817 783	4,273 4,139 4,048 4,087 3,909 3,807	3,903 3,868 3,894 3,889 3,834 3,638	712 733 746 728 707 666	3,191 3,135 3,148 3,161 3,127 2,972
July	105,377	59,136	3,290	55,846	46,241	3,240	43,001	8,491	4,725	841	3,884	3,766	636	3,130
	105,148	59,203	3,268	55,935	45,945	3,067	42,878	8,481	4,591	755	3,836	3,890	676	3,214
	105,394	59,388	3,313	56,075	46,006	3,100	42,906	8,370	4,630	813	3,817	3,740	696	3,044
	105,649	59,461	3,279	56,182	46,188	3,097	43,091	8,367	4,540	809	3,731	3,827	654	3,173
	105,932	59,603	3,334	56,269	46,329	3,077	43,252	8,142	4,502	777	3,725	3,640	613	3,027
	106,273	59,702	3,330	56,372	46,571	3,060	43,511	8,191	4,562	803	3,759	3,629	677	2,952

<sup>&</sup>lt;sup>1</sup> See footnote 5, Table B-29. Note.—See Note, Table B-29.

TABLE B-31.—Unemployment by duration and reason, 1947-84
[Monthly data seasonally adjusted 1]

		L	Du	ration of u	nemploym	ent		Rea	ason for u	nemploym	ent
Year or month	Total unem- ploy- ment	Less than 5 weeks	5–14 weeks	15-26 weeks	27 weeks and over	Average (mean) duration in weeks	Median dura- tion in weeks	Job losers	Job leavers	Reen- trants	New en- trants
		Thousa years	nds of per of age ar	sons 16 id over				Tho ye:	usands of ars of age	persons 1 and over	.6
947 1948	2,311 2,276	1,210 1,300	704 669	234 193	164 116	8.6					
949	3,637	1,756	1,194	428	116 256	10.0					l
950 951	2.055	1,450 1,177	1,055 574 516	425 166	357 137	12.1 9.7 8.4	1	l		1	ı
52 53 54	1,883 1,834 3,532	1,135 1,142 1,605	482 1,116	148 132 495	84 78 317	8.0 11.8		***************************************			
ee .	2 852	1.335	815 805	366 301	336 232 239	13.0		•••••			
5657 5758	.1 4.602	1,412 1,408 1,753	891 1,396	321 785	667	11.3 10.5 13.9					
59 60	. 3,740	1,585	1,114	469 503	571 454	14.4 12.8					
£1	1 A 71A	1,806 1,663	1,176 1,376 1,134 1,231 1,117	728 534	804 585	15.6 14.7					
52 53 54	4,070 3,786	1,751 1,697	1,231 1,117	535 491	553 482	14.0 13.3		)		.	
65 66	2.875	1,628 1,573	983 779	404 287	351 239 177	11.8 10.4 8.7					
67 68 69	2,975	1,634 1,594 1,629	893 810 827	271 256 242	177 156 133	8.7 8.4 7.8	4.5 4.4	1,229 1,070 1,017	438 431 436	945 909 965	390 40 41
70 71	.) 5.016	2,139 2,245	1,290 1,585	428 668	235 519	8.6 11.3 12.0	4.9 6.3	1,811 2,323	550 <b>590</b>	1,228 1,472	504 <b>63</b> 0
72 73 74	4,882 4,365	2,245 2,242 2,242 2,224 2,604	1,585 1,472 1,314 1,597	601 483 574	566 343 381	12.0 10.0 9.8	6.2 5.2 5.2	2,323 2,108 1,694 2,242	641 683 768	1,472 1,456 1,340 1,463	630 677 649 681
75	7.929	2.940	2.484	1,303 1,018	1,203 1,348 1,028	14.2 15.8	8.4 8.2 7.0	4,386 3,679	827 903	1.892	823
76 77 78	.  6,202	2,844 2,919 2,865	2,196 2,132 1,923	913 <b>766</b>	648	14.3 11.9	5.9	3,166 2,585	909 874	1,928 1,963 1,857	895 953 885
9	. 6,137	2,950 3,295	1,946 2,470	706 1,052	535 820	10.8 11.9	5.4 6.5	2,635 3,947	880 891	1,806 1,927	817 872
81 82	8,273 10,678	3,449 3,883	2,539 3,311	1,122	1,162 1,776 2,559 1,634	13.7 15.6	6.9 8.7	4,267 6,268	923 840	2,102 2,384 2,412 2,184	981
83 84	10,717 8,539	3,570 3,350	2,937 2,451	1,652 1,104	2,559 1,634	20.0 18.2	10.1 7.9	6,258 4,421	830 823	2,412 2,184	1,216 1,110
83: Jan	11,513 11,556	3,654	3,307 3,167	1,982 1,935	2,635	19.0	11.0	6,821	826	2,562 2,522 2,460	1,20 <del>0</del> 1,194
Feb Mar Anr	111420	3,737 3,525 3,566	3,149 3,129	1 1 879	2,743 2,702	19.2 19.3 19.3 20.3	9.9 10.5 10.8	6,864 6,858 6,772	843 909 826	2,460 2,488	1.171
Apr May June	11,316 11,258 11,273	3,601 3,681	3,016 2,952	1,676 1,754 1,590	2,635 2,711 2,743 2,702 2,730 2,910	20.3 20.8	11.5 11.3	6,772 6,809 6,581	814 806	2,488 2,406 2,457	1,236 1,234 1,412
July Aug	10,534 10,595 10,281	3,475 3,588	<b>2,803</b> 3,021	1,776 1,569	2 502	21.3 20.2	10.2 9.6 9.4	6,186 6,143 5,919	740 794	2,442 2,458	1,232 1,205
AugSept	10,281 9,872	3,588 3,751 3,465	3,021 2,783 2,743	1,569 1,415 1,370	2,532 2,520 2,480 2,287 2,184 2,075	20.4 20.3 20.1	9.5	5,919 5,491 5,232	851 869 848	2,458 2,330 2,330 2,330	1,205 1,238 1,116 1,175 1,170
Nov Dec	9,448 9,208	3,315 3,393	2,632 2,499	1,339 1,276	2,075	19.6	9.4 8.9	5,039	836	2,258 2,205	1,170
84: Jan Fah	9,026 8,836	3,298 3,359 3,378	2,529 2,482 2,514	1,194 1,172 1,122	2,007 1,830 1,772	19. <b>9</b> 19.0	8.9 8.4	4,829 4,739	810 786	2,199 2,171 2,208	1,185 1,102 1,200
Feb Mar Apr	8.800	3,378 3,407	2.485	1,122 1,102	1./40	18.9 18.7	8.4 8.4 8.1 8.3 7.5	4,829 4,739 4,622 4,531 4,373 4,271	786 777 792	Z.3U1	1.197
May June	8,560 8,228	3,407 3,275 3,229	2,440 2,303	1,102 1,173 1,012	1,660 1,618	18.5 18.1		4,373 4,271	812 809	2,184 1,989	1,170 1,134
July Aug	8,491 8,481	3,409 3,513	2,449 2,406	1,088 1,116	1,584 1,505	18.0 17.6 17.3	7.6 7.6	4,475 4,227 4,188 4,261	850 833 841	2,111 2,294	1,092 1,088 1,057
AugSeptOct	8,370 8,367 8,142	3,513 3,313 3,395 3,352	2,406 2,533 2,406 2,324	1,116 1,106 1,092 990	1,499 1,435 1,438	16.7 17.4	7.6 7.6 7.3 7.3	4,141	829 869	2,294 2,254 2,150 2,161	1,057 1,060 1,024
Dec		3,282	2,516	972	1,402	17.3	7.4	4,176	858	2,218	1,011

<sup>1</sup> Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—See footnote 5 and Note, Table B-29.

TABLE B-32.—Civilian labor force participation rate and civilian employment/population ratio, 1948-84
[Percent; monthly data seasonally adjusted]

	·	Civilian	labor fo	rce parti	icipation	rate 1			Civiliar	employ	ment/po	pulation	ratio 2	
Year or month	Total	Both sexes 16–19	Males 20 years and over	Fe- males 20 years and over	White	Błack and other	Black	Total	Both sexes 16–19 years	Males 20 years and over	Fe- males 20 years and over	White	Black and other	Black
1948 1949	58.8 58.9	52.5 52.2	88.6 88.5	31.8 32.3				56.6 55.4	47.7 45.2	85.8 83.7	30.7 30.6			
1950 1951 1952 1953 1954 1955	59.2 59.0 58.9 58.8 59.3	51.8 52.2 51.3 50.2 48.3 48.9 50.9	88.4 88.3 88.0 87.8 87.6 87.6	33.3 34.0 34.1 33.9 34.2 35.4 36.4	58.2 58.7 59.4	64.3 64.2 64.9		56.1 57.3 57.3 57.1 55.5 56.7 57.5	45.5 47.9 46.9 46.4 42.3 43.5 45.3	84.2 86.1 86.2 85.9 83.5 84.3 84.6	31.6 32.6 33.0 32.9 32.3 33.8 34.9 35.0	55.2 56.5 57.3		
1958 1959	59.5 59.3	49.6 47.4 46.7	86.9 86.6 86.3	36.5 36.9 37.0	59.1 58.9 58.7	64.4 64.8 64.3		57.1 55.4 56.0	43.9 39.9 39.9	83.8 81.2 82.3	35.0 34.6 35.1	56.8 55.3 55.9	59.3 56.7 57.5	**********
1960	58.8 58.7 58.7 58.7 58.9	47.5 47.0 46.2 45.2 44.5 45.7 48.2 48.4 48.3 49.5	86.0 85.7 84.8 84.4 84.2 83.9 83.6 83.4 83.1 82.8	37.6 38.0 37.8 38.3 38.9 39.4 40.1 41.1 41.6 42.7	58.8 58.3 58.2 58.2 58.4 58.7 59.2 59.3 59.9	64.5 64.1 63.2 63.0 63.1 62.9 63.0 62.8 62.2 62.1		56.1 55.4 55.5 55.4 55.7 56.2 56.9 57.3 57.5 58.0	40.5 39.1 39.4 37.4 37.3 38.9 42.1 42.2 42.2 43.4	81.9 80.8 80.9 80.6 80.9 81.2 81.5 81.5 81.3	35.7 35.8 36.3 36.9 37.6 38.6 39.3 40.0 41.1	55.9 55.3 55.4 55.5 56.0 56.8 57.2 57.4 58.0	57.9 56.2 56.3 56.2 57.0 57.8 58.4 58.2 58.0 58.1	
1970 1971 1972 1973 1974 1975 1976 1977 1977 1977	60.4 60.2 60.4 60.8 61.3	49.9 49.7 51.9 53.7 54.8 54.0 54.5 56.0 57.8 57.9	82.6 82.1 81.6 81.3 81.0 80.3 79.8 79.7 79.8 79.8	43.3 43.7 44.4 45.3 46.0 47.0 48.1 49.6 50.6	60.2 60.1 60.4 60.8 61.4 61.5 61.8 62.5 63.3 63.9	61.8 60.9 60.2 60.5 60.3 59.6 59.8 60.4 62.2 62.2	59.9 60.2 59.8 58.8 59.0 59.8 61.5 61.4	57.4 56.6 57.0 57.8 57.8 56.1 56.8 57.9 59.3	42.3 41.3 43.5 45.9 46.0 43.3 44.2 46.1 48.3 48.5	79.7 78.5 78.4 78.6 77.9 74.8 75.1 75.6 76.4 76.5	41.2 40.9 41.3 42.2 42.8 42.3 43.5 44.8 46.6 47.7	57.5 56.8 57.4 58.2 58.3 56.7 57.5 58.6 60.0 60.6	56.8 54.9 54.1 55.0 54.3 51.4 52.0 52.5 54.7 55.2	53.7 54.5 53.5 50.1 50.8 51.4 53.6 53.8
1980 1981 1982 1983 1984	63.8 63.9 64.0 64.0	56.7 55.4 54.1 53.5 53.9	79.4 79.0 78.7 78.5 78.3	51.3 52.1 52.7 53.1 53.7	64.1 64.3 64.3 64.3 64.6	61.7 61.3 61.6 62.1 62.6	61.0 60.8 61.0 61.5 62.2	59.2 59.0 57.8 57.9 59.5	46.6 44.6 41.5 41.5 43.7	74.6 74.0 71.8 71.4 73.2	48.1 48.6 48.4 48.8 50.1	60.0 60.0 58.8 58.9 60.5	53.6 52.6 50.9 51.0 53.6	52.3 51.3 49.4 49.5 52.3
1983: JanFebAprAprAprApr	63.8 63.8 63.8 63.7	53.9 53.0 53.0 52.8 52.5 54.5	78.2 78.2 78.2 78.4 78.4 78.6	53.0 53.0 52.9 52.9 52.7 53.1	64.1 64.1 64.0 64.0 64.0 64.5	62.2 62.1 62.3 62.3 62.0 62.7	61.8 61.6 61.4 61.6 61.5 61.5	57.2 57.1 57.2 57.3 57.3 57.3	41.5 41.0 40.5 40.5 40.5 41.4	70.6 70.5 70.7 70.8 70.8 71.4	48.3 48.2 48.2 48.4 48.3 48.5	58.3 58.1 58.2 58.3 58.3 58.8	50.4 50.7 50.7 50.6 50.4 50.8	48.8 49.2 49.1 49.0 48.9 49.2
July	64.3 64.0 64.1	53.7 54.9 53.6 52.8 53.3 53.5	78.7 78.6 78.5 78.4 78.4 78.3	52.9 53.3 53.5 53.3 53.2 53.3	64.4 64.6 64.6 64.5 64.5 64.5	62.2 62.1 62.3 61.4 61.4 61.6	61.9 61.6 61.7 60.9 61.0 61.2	58.0 58.2 58.4 58.4 58.7 58.8	41.5 42.4 42.1 41.4 42.5 42.9	71.8 71.8 71.9 72.0 72.4 72.5	48.8 49.0 49.4 49.3 49.4 49.5	59.1 59.3 59.4 59.5 59.8 60.0	51.2 51.6 51.6 51.2 51.5 51.6	50.0 49.6 50.1 49.8 50.3 50.4
1984: Jan	64.5	53.4 53.8 53.9 54.2 54.3 54.3	78.3 78.3 78.3 78.3 78.3 78.3 78.3	53.1 53.3 53.5 53.6 54.1 53.8	64.4 64.5 64.6 64.7 64.9 64.8	61.5 61.9 61.9 62.1 62.6 62.6	61.0 61.9 61.5 61.7 62.0 61.9	58.8 59.1 59.2 59.3 59.7 59.8	43.0 43.4 43.3 43.8 44.0 44.4	72.7 72.9 72.9 72.9 73.2 73.2 73.3	49.3 49.6 49.8 49.9 50.4 50.3	59.9 60.2 <b>60.2</b> <b>60.4</b> <b>60.7</b> <b>60.7</b>	51.9 52.6 52.6 52.8 53.6 54.0	50.6 51.6 51.3 51.4 52.1 52.4
July	64.5 64.3 64.4 64.4 64.6	54.5 53.0 54.2 53.7 53.5 54.1	78.3 78.3 78.3 78.3 78.3 78.3 78.3	54.0 53.9 53.6 53.9 53.9 54.0	64.8 64.4 64.6 64.6 64.6 64.8	62.8 63.1 62.8 63.3 63.2 63.2	62.4 62.6 62.2 62.8 63.0 63.1	59.7 59.5 59.6 59.7 59.8 59.9	44.5 43.2 43.9 43.7 44.0 43.9	73.2 73.3 73.3 73.4 73.4 73.4	50.3 50.1 50.1 50.2 50.4 50.6	60.7 60.3 60.5 60.6 60.6 60.8	53.5 54.1 54.2 54.6 54.6 54.6	52.1 52.7 52.8 53.2 53.5 53.6

Civilian labor force as percent of civilian noninstitutional population in group specified.
 Civilian employment as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-29.

## TABLE B-33.—Unemployment rate, 1948-84

[Percent; monthly data seasonally adjusted]

	Unem-				1		Uner	nployme	nt rate,	civilian v	vorkers	2			
Year or month	ploy- ment rate, ali	All civil- ian		Males 16-	20		Females	20	Both sexes 16-	White	Black and	Black	Experi- enced wage	Married men,	Women who main-
	work- ers 1	work- ers	Total	19 years	years and over	Total	19 years	years and over	19 years	Wille	other	Diaux	and salary workers	spouse present s	tain fami- lies
1948 1 <b>949</b>		3.8 <b>5.9</b>	3.6 5.9	9.8 14.3	3.2 5.4	4.1 6.0	8.3 12.3	3.6 5.3	9.2 13.4	3.5 5.6	5.9 8.9		4.3 6.8	3.5	
1950 1951 1952 1953 1954 1955 1956	5.2 3.2 2.9 2.8 5.4 4.3	5.3 3.3 3.0	5.1 2.8 2.8 2.8 5.3 4.2 3.8	12.7 8.1 8.9 7.9	4.7 2.5 2.4 2.5 4.9	5.7 4.4 3.6 3.3	11.4 8.3 8.0 7.2 11.4 10.2 11.2 10.6	5.1 4.0 3.2 2.9 5.5	12.2 8.2 8.5 7.6	4.9 3.1 2.8	9.0 5.3 5.4 4.5 9.9 8.7		6.0 3.7 3.4	4.6 1.5 1.4	
1953 1954	2.8 5.4	3.0 2.9 5.5 4.4	2.8 5.3	1 13.5	2.5 4.9		7.2 11.4	2.9 5.5	7.6 12.6 11.0	2.8 2.7 5.0	4.5 9.9		3.4 3.2 6.2 4.8	1.7 4.0	
1955 1956	4.3 4.0	4.1	4.2 3.8	11.6 11.1	3.8 3.4	4.9 4.8 4.7	10.2	4.4 4.2 4.1	11.0 11.1	3.9 3.6 3.8	8.7 8.3		4.4	2.6 2.3	·······
1957 1958 1959	4.2 6.6 5.3	4.3 6.8 5.5	4.1 6.8 5.2	11.1 12.4 17.1 15.3	3.8 3.4 3.6 6.2 4.7	6.8 5.9	14.3 13.5	6.1 5.2	11.1 11.6 15.9 14.6	6.1 4.8	8.3 7.9 12.6 10.7		4.6 7.3 5.7	2.8 5.1 3.6	
1960 1961		5.5 6.7 5.5	5.4 6.4 5.2	15.3 17.1 14.7 17.2	4.7 5.7 4.6	5.9 7.2 6.2 6.5 6.2 5.5	13.9 16.3 14.6 17.2	5.1 6.3 5.4 5.2 4.5 4.2 3.8 3.7	14.7 16.8 14.7 17.2 16.2	5.0 6.0 4.9	10.2 12.4 10.9		5.7 6.8 5.6		
1962 1963 1964 1965	5.5 5.0	5.5 5.7 5.2	6.4 5.2 5.2 4.6		4.5 3.9	6.5	16.6	5.4 5.2	17.2 16.2	4.9 5.0 4.6	10.8 9.6 8.1 7.3 7.4 6.7		1 5.0	3.4 2.8	
1965 1966	4.4 3.7	4.5	l An	14.1 11.7	3.2 2.5	5.5 4.8	157	4.5 3.8	14.8 12.8 12.9 12.7	4.1	8.1 7.3		4.3 3.5	2.4 1.9	
1967 1968 1969	3.7 3.5 3.4	3.8 3.6 3.5	3.2 3.1 2.9 2.8	14.1 11.7 12.3 11.6 11.4	4.6 4.5 3.9 3.2 2.5 2.3 2.2 2.1	4.8 5.2 4.8 4.7	14.1 13.5 14.0 13.3	4.2 3.8 3.7	12.9 12.7 12.2	3.4 3.4 3.2 3.1	7.4 6.7 6.4		4.3 3.5 3.6 3.4 3.3	1.8 1.6 1.5	4.9 4.4 4.4
1970 1971 1972 1973 1974 1975 1976 1977 1978	4.8 5.8 5.5	4.9 5.9 5.6	4.4 5.3 5.0	15.0 16.6	3.5 4.4	5.9 6.9 6.6 6.0 6.7	15.6 17.2 16.7 15.3	4.8 5.7	15.3 16.9 16.2 14.5 16.0	4.5 5.4 5.1 4.3 5.0	8.2 9.9		4.8 5.7	2.6 3.2 2.8 2.3 2.7	54
1973	2.5 4.8	4.9 5.6	4.2	16.6 15.9 13.9 15.6	4.0 3.3 3.8	6.0		4.9	14.5	4.3	10.0 9.0 9.9	10.4 9.4 10.5	4.5 5.3	2.8 2.3	7.3 7.2 7.1 7.0
1975	5.5 8.3 7.6	l 8.5	4.2 4.9 7.9 7.1 6.3 5.3 5.1	20.1	6.8 5.0	9.3	19.7 18.7 18.3 17.1	5.4 4.9 5.5 8.0 7.4 7.0	19.9 19.0 17.8	7.8 7.0	13.8 13.1 13.1	14.8 14.0	5.3 4.5 5.3 8.2 7.3 6.6	5.1 4.2	10.0 10.1
1977	6.9 6.0	7.7 7.1 6.1	6.3	19.2 17.3 15.8	6.8 5.9 5.2 4.3 4.2	9.3 8.6 8.2 7.2 6.8	18.3	7.0	17.8 16.4	7.8 7.0 6.2 5.2 5.1	13.1	14.0 12.8 12.3	6.6 5.6	5.1 4.2 3.6 2.8 2.8	9.4 8.5 8.3
1979	5.8 7.0	5.8	i	15.8 15.9	1		16.4	6.0 5.7 6.4	16.1	il .	11.9		5.6 5.5	l	
19X1	7.5 9.5	7.1 7.6 9.7	7.4 9.9	20.1	6.3 8.8	7.9 9.4	17.2 19.0 21.9 21.3	6.8 8.3	19.6 23.2	6.3 6.7 8.6	13.1 14.2 17.3 17.8	15.6 18.9	6.9 7.3 9.3	4.3 6.5	10.4 11.7
1982 1983 1984	.9.5	9.6 7.5	6.9 7.4 9.9 9.9 7.4	18.3 20.1 24.4 23.3 19.6	5.9 6.3 8.8 8.9 6.6	7.4 7.9 9.4 9.2 7.6	21.3 18.0	6.4 6.8 8.3 8.1 6.8	19.6 23.2 22.4 18.9	8.6 8.4 6.5	17.8 14.4	14.3 15.6 18.9 19.5 15.9	9.3 9.2 7.1	4.2 4.3 6.5 6.5 4.6	9.2 10.4 11.7 12.2 10.3
1983: Jan Feb	103	10.4	10.6	24.1	9.6	10.1	22.0	9.0	23.1	9.1 9.2	19.0	21.0	10.1 10.1	7.2 7.2	13.2
Mar Apr May	10.3 10.2 10.1	10.4 10.3 10.2	10.7	25.1	9.9 9.6 9.7 9.7	9.9 9.8 9.6 9.5 9.9	22.0 21.2 21.7 22.2 21.8 23.6	8.8 8.5	23.4	9.1 8.9	18.6 18.7	20.1 20.0 20.5 20.5	10.0	7.2 7.1	13.2
May June	9.9	10.2 10.2 10.1	10.8 10.7 10.7 10.6 10.2	24.1 24.2 25.1 24.4 24.0 24.4	9.2			9.0 8.9 8.5 8.5 8.7	23.1 22.8 23.4 23.3 23.0 24.0	9.1 9.2 9.1 8.9 8.9 8.8	18.3 18.6 18.7 18.7 18.7	20.5	9.9 9.9 9.5	7.2 7.2 7.2 7.1 7.0 6.7	13.2 13.0 13.2 13.0 12.9 12.7
July Aug	9.3 9.3 9.0	9.4 9.4	9.8 9.8	23.6 24.3	8.8 8.7 8.5 8.1 7.8 7.4	8.9 9.0 8.8 8.5 8.2 8.1	21.8 21.0	7.8 7.9 7.8 7.5 7.2 7.2	22.8 22.7 21.6 21.5 20.3	8.2 7.9 7.6 7.3 7.1	17.7 17.8 17.2 16.7	19.3 19.6	9.1 9.1 8.7	6.2 6.3 6.0 5.7 5.5 5.2	12.0 11.8
Aug Sept Oct	9.0 8.7	9.4 9.2 8.8	9.8 9.5 9.1	22.6 22.2	8.5 8.1	8.8 8.5	21.0 20.4 20.6 20.1	7.8 7.5	21.6 21.5	7.9 7.6	17.2 16.7	18.9 18.2	8.4	6.0 5.7	11.8 12.1 11.3
Nov Dec	8.3 8.1	8.4 8.2	8.6 8.3	24.3 22.6 22.2 20.5 20.3	7.8 7.4	8.2 8.1	20.1 19.4	7.2 7.2	20.3 19.9	7.3 7.1	16.1 16.2	19.6 18.9 18.2 17.6 17.7	8.1 7.9	5.5 5.2	10.4 10.9
1984:	70	8.0	8.1	20.5	7.2	8.0	18.4	71	19.5	60	15.6	17.0	7.6	5.0	10.7
Feb Mar	7.9 7.7 7.7	7.8 7.8	7 R	100	70	7.9 7.9	18.4 18.9 19.6	7.1 6.9 6.9 6.9	19.4	6.9 6.8 6.7 6.7	15.0	16.5	7.4 7.3 7.3	4.9 4.7 4.7	10.8 10.8
Jan Feb Mar Apr May June	7.7 7.4 7.1	7.8 7.5 7.2	7.7 7.7 7.4 7.2	20.0 19.7 19.5 18.9	6.8 6.9 6.6 6.4	7.9 7.9 7.8 7.7 7.3	19.6 18.8 18.4 17.3	6.9 6.8 6.5	19.5 19.4 19.8 19.3 19.0 18.1	6.7 6.5 6.3	15.1 14.3 13.7	16.7 16.0 15.2	7.0	4.7 4.6 4.6	10.5 10.0
										1			6.7		9.8
July Aug	7.3 7.4 7.2 7.2 7.0	7.5 7.5	7.4 7.2 7.2 7.1 7.0	20.4 18.8	6.4 6.4 6.2 6.3	7.5 7.8 7.5 7.7 7.3 7.2	16.4 18.1 18.3	6.8 7.0 6.6 6.9 6.5 6.4	18.4 18.4 19.0 18.7 17.8	6.3 6.4 6.3 6.1 6.2	14.8 14.3 13.8 13.8 13.7 13.7	16.6 15.8 15.1 15.3 15.1 15.0	7.1 7.0 7.0 6.9	4.5 4.5 4.6 4.5 4.4	9.8 10.3 10.1
Sept Oct Nov	7.2 7.0	7.5 7.4 7.3 7.1	7.1	19.7 19.8 18.9	6.2	7.7 7.3	17.4 16.6 18.1	6.9 6.5	18.7	6.3	13.8	15.3	6.9 6.8	4.5 4.4	10.4 10.8
Dec	7.1	7.2	7.1	19.4	6.3	7.2	18.1	6.4	18.8	6.2	13.6	15.0	6.8 6.8	4.4	9.6

Unemployed as percent of labor force including resident Armed Forces.
 Unemployed as percent of civilian labor force in group specified.
 Data for 1949 and 1951-54 are for April; 1950, for March.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-29

TABLE B-34.—Civilian labor force participation rate by demographic characteristic, 1954-84

[Percent;¹ monthly data seasonally adjusted]

		Γ			White							Black	-		
	All			Males		I	Females			<u> </u>	Males	-		Females	
Year or month	civil- ian work- ers	Total	Total	16–19 years	20 years and over	Total	16-19 years	20 years and over	Total	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1954	58.8	58.2	85.6	57.6	87.8	33.3	40.6	32.7							
1955 1956 1957	U.U0 I	58.7 59.4 59.1 58.9	85.4 85.6 84.8 84.3	58.6 60.4 59.2 56.5	87.5 87.6 86.9 86.6	34.5 35.7 35.7 35.8	40.7 43.1 42.2 40.1	34.0 35.1 35.2 35.5	***********						
1959	59.3	58.7	83.8	55.9	86.3	36.0	39.6	35.6					***************************************		
1960 1961 1962	59.3 58.8 58.7	58.8 58.8 58.3 58.2 58.2 58.2	83.4 83.0 82.1 81.5	55.9 54.5 53.8 53.1	86.0 85.7 84.9 84.4	36.5 36.9 36.7 37.2 37.5	40.3 40.6 39.8 38.7	36.2 36.6 36.5 37.0							
1964 1965	E0 0	58.4	81.1 80.8 80.6	52.7 54.1 55.9	84.2 83.9 83.6	38.1 39.2	37.8 39.2	37.5 38.0							
1966 1967 1968	59.2 59.6 59.6 60.1	58.7 59.2 59.3 59.9	80.7 80.4 80.2	56.3 55.9 56.8	83.5 83.2 83.0	40.1 40.7 41.8	42.6 42.5 43.0 44.6	38.8 39.8 40.4 41.5							
1970 1971	60.4 60.2 60.4	60.2 60.1 60.4	80.0 79.6 79.6	57.5 57.9 60.1	82.8 82.3 82.0	42.6 42.6 43.2	45.6 45.4 48.1	42.2 42.3 42.7	59.9	73.6	46.3	78.5	48.7		<b> </b>
1971 1972 1973 1974		60.8 61.4	79.4 79.4	62.0 62.9	81.6 81.4	44.1 45.2	50.1 51.7	44.4	60.2 59.8	73.4 72.9	45.7 46.7	78.4 77.6	49.3 49.0	32.2 34.2 33.4	51.2 51.6 51.4
1975 1976 1977 1978 1979	63.2	61.5 61.8 62.5 63.3 63.9	78.7 78.4 78.5 78.6 78.6	61.9 62.3 64.0 65.0 64.8	80.7 80.3 80.2 80.1 80.1	45.9 46.9 48.0 49.4 50.5	51.5 52.8 54.5 56.7 57.4	45.3 46.2 47.3 48.7 49.8	58.8 59.0 59.8 61.5 61.4	70.9 70.0 70.6 71.5 71.3	42.6 41.3 43.2 44.9 43.6	76.0 75.4 75.6 76.2 76.3	48.8 49.8 50.8 53.1 53.1	34.2 32.9 32.9 37.3 36.8	51.1 52.5 53.6 55.5 55.4
1980 1981 1982 1983 1984	63.9 64.0 64.0	64.1 64.3 64.3 64.3 64.6	78.2 77.9 77.4 77.1 77.1	63.7 62.4 60.0 59.4 59.0	79.8 79.5 79.2 78.9 78.7	51.2 51.9 52.4 52.7 53.3	56.2 55.4 55.0 54.5 55.4	50.6 51.5 52.2 52.5 53.1	61.0 60.8 61.0 61.5 62.2	70.3 70.0 70.1 70.6 70.8	43.2 41.6 39.8 39.9 41.7	75.1 74.5 74.7 75.2 74.8	53.1 53.5 53.7 54.2 55.2	34.9 34.0 33.5 33.0 35.0	55.6 56.0 56.2 56.8 57.6
1983: Jan Feb Mar Apr June	63.8 63.8	64.1 64.1 64.0 64.0 64.0 64.5	76.8 76.9 76.8 76.9 77.0 77.3	59.3 59.2 58.8 58.5 58.5 59.9	78.5 78.6 78.6 78.7 78.8 79.0	52.6 52.4 52.3 52.3 52.1 52.7	55.1 53.9 54.7 53.8 53.0 55.4	52.4 52.2 52.1 52.2 52.1 52.5	61.8 61.6 61.4 61.6 61.5 61.5	70.8 70.1 69.9 70.6 70.4 71.5	40.1 38.3 38.9 39.0 40.0 43.4	75.4 74.9 74.6 75.4 74.9 75.7	54.6 54.8 54.5 54.4 54.4 54.2	32.6 31.8 31.3 34.3 32.9 35.8	57.3 57.7 57.4 56.9 57.0 56.5
July	64.1 64.3 64.3 64.0 64.1 64.1	64.4 64.6 64.5 64.5 64.5	77.3 77.4 77.3 77.2 77.3 77.2	59.7 60.4 59.9 59.1 59.6 59.6	79.0 79.0 78.9 78.9 79.0 78.9	52.6 53.0 53.0 52.9 52.9 53.0	54.6 56.0 54.5 53.9 54.2 54.8	52.4 52.7 52.9 52.8 52.8 52.8	61.9 61.6 61.7 60.9 61.0 61.2	71.6 71.1 70.7 69.7 70.4 70.1	41.5 41.3 39.0 38.2 39.6 38.5	76.0 75.4 75.3 74.3 74.9 74.7	54.2 54.0 54.5 53.7 53.5 54.0	32.0 33.4 33.1 32.5 32.3 33.5	56.8 56.5 57.1 56.3 56.0 56.4
984: Jan Feb Mar Apr May June	64.0 64.2 64.2 64.3 64.6 64.5	64.4 64.5 64.6 64.7 64.9 64.8	77.0 77.1 77.1 77.1 77.1 77.1 77.2	58.5 59.0 59.8 59.1 59.8 59.3	78.8 78.8 78.7 <b>78.8</b> <b>78.7</b> <b>78.8</b>	52.8 53.1 53.1 53.3 53.7 53.5	55.6 55.9 56.0 56.2 55.7 56.0	52.6 52.8 52.9 53.1 53.5 53.3	61.0 61.9 61.5 61.7 62.0 61.9	70.3 71.1 70.6 70.2 70.7 70.4	38.4 39.7 40.7 42.4 41.7 41.1	74.8 75.5 74.8 74.1 74.7	53.5 54.4 54.2 54.9 55.0 54.9	32.7 34.3 31.7 35.0 31.3 35.9	56.0 56.8 56.9 57.2 57.7 57.1
July	64.5 64.3 64.4 64.4 64.4 64.6	64.8 64.4 64.6 64.6 64.6 64.8	77.0 76.8 77.1 77.0 77.1 77.2	59.1 56.7 59.3 58.8 59.2 59.6	78.6 78.6 78.7 78.6 78.7 78.8	53.6 53.2 53.1 53.3 53.2 53.5	55.9 54.3 55.4 54.9 54.0 55.0	53.4 53.1 52.9 53.2 53.2 53.4	62.4 62.6 62.2 62.8 63.0 63.1	71.0 71.0 70.8 71.2 70.9 71.2	41.5 41.4 42.8 43.4 43.1 43.5	75.1 75.0 74.6 75.0 74.7 74.7	55.5 55.9 55.3 56.0 56.6 56.5	37.4 36.3 36.2 37.8 36.0 35.5	57.6 58.1 57.5 58.0 59.0 58.9

<sup>&</sup>lt;sup>1</sup> Civilian labor force as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over.

See footnote 5 and Note, Table B-29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-35.—Civilian unemployment rate by demographic characteristic, 1948-84 [Percent; 1 monthly data seasonally adjusted]

		Γ			White			,				Black			
	All			Males		T	Females				Males		Ι	Females	
Year or month	civil- ian work- ers	Total	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over	Total	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1948 1949	3.8 5.9	3.5 5.6	3.4 5.6			3.8 5.7	ļ							***************************************	ļ
		4.9 3.1	47			5.3 4.2 3.3 3.1									
1950 1951 1952 1953 1954	3.0 2.9 5.5	2.8 2.7 5.0	2.6 2.5 2.5 4.8	13.4	4.4	3.3 3.1 5.5	10.4	5.1	************		***************************************				
1055	4.4	3.9 3.6 3.8 6.1	3.7 3.4 3.6	11.3 10.5 11.5 15.7	3.3 3.0 3.2 5.5 4.1	4.3 4.2	9.1 9.7	3.9 3.7 3.8 5.6 4.7							
1956 1957 1958		6.1 4.8	6.1 4.6	14.0	5.5 4.1	4.2 4.3 6.2 5.3	9.5 12.7 12.0	5.6 4.7			***************************************			***************************************	
1960 1961 1962	5.5 6.7 5.5 5.7 5.2	5.0 6.0 4.9	4.8 5.7 4.6	14.0 15.7 13.7 15.9 14.7	4.2 5.1 4.0 3.9 3.4	5.3 6.5 5.5 5.8 5.5	12.7 14.8 12.8 15.1 14.9	4.6 5.7 4.7			••••••				
1964	5.2	5.0 4.6	4.7 4.1	1	ŀ	l	1	4.8 4.6			•••••				
1965 1966 1967	4.5 3.8 3.8 3.6 3.5	4.1 3.4 3.4 3.2 3.1	3.6 2.8 2.7 2.6	12.9 10.5 10.7 10.1	2.9 2.2 2.1 2.0 1.9	5.0 4.3 4.6	14.0 12.1 11.5 12.1	4.0 3.3 3.8 3.4 3.4							
1909	3.5	45	2.5 2.5	10.0		4.3 4.2	11.5	ı			***************************************			***************************************	
1970 1971 1972 1973 1974	5.9 5.6 4.9 5.6	5.4 5.1 4.3 5.0	4.9 4.5 3.8 4.4	13.7 15.1 14.2 12.3 13.5	3.2 4.0 3.6 3.0 3.5	5.4 6.3 5.9 5.3 6.1	15.1 14.2 13.0 14.5	4.4 5.3 4.9 4.3 5.1	10.4 9.4 10.5	9.3 8.0 9.8	31.7 27.8 33.1	7.0 6.0 7.4	11.8 11.1 11.3	40.5 36.1 37.4	9.0 8.6 8.8
1975 1976 1977 1978	8.5 7.7 7.1 6.1	7.8 7.0 6.2 5.2 5.1	7.2 6.4 5.5 4.6 4.5	18.3 17.3 15.0 13.5 13.9	6.2 5.4 4.7 3.7 3.6	8.6 7.9 7.3 6.2 5.9	17.4 16.4 15.9 14.4 14.0	7.5 6.8 6.2 5.2 5.0	14.8 14.0 14.0 12.8 12.3	14.8 13.7 13.3 11.8 11.4	38.1 37.5 39.2 36.7 34.2	12.5 11.4 10.7 9.3 9.3	14.8 14.3 14.9 13.8 13.3	41.0 41.6 43.4 40.8 39.1	12.2 11.7 12.3 11.2 10.9
1980 1981 1982 1983		6.3 6.7 8.6 8.4 6.5	6.1 6.5 8.8 8.8 6.4	16.2 17.9 21.7 20.2 16.8	5.3 5.6 7.8 7.9 5.7	6.5 6.9 8.3 7.9 6.5	14.8 16.6 19.0 18.3 15.2	5.6 5.9 7.3 6.9 5.8	14.3 15.6 18.9 19.5 15.9	14.5 15.7 20.1 20.3 16.4	37.5 40.7 48.9 48.8 42.7	12.4 13.5 17.8 18.1 14.3	14.0 15.6 17.6 18.6 15.4	39.8 42.2 47.1 48.2 42.6	11.9 13.4 15.4 16.5 13.5
1983: Jan Feb Mar Apr May June	10.3 10.2 10.2	9.1 9.2 9.1 8.9 8.8	9.3 9.7 9.6 9.5 <b>9.4</b> <b>8.9</b>	21.4 21.6 22.6 21.5 20.4 20.6	8.4 8.8 8.6 8.6 8.6 8.1	8.8 8.6 8.5 8.2 8.2 8.5	19.3 18.2 19.3 19.0 19.4 20.3	7.8 7.7 7.5 7.2 7.2 7.5	21.0 20.1 20.0 20.5 20.5 20.5	22.3 21.3 20.8 21.7 22.1 21.4	47.7 46.7 46.0 48.8 52.5 52.9	20.2 19.4 18.9 19.6 19.7 18.7	19.6 18.9 19.2 19.3 18.9 19.6	45.2 47.0 43.5 48.9 44.1 50.7	17.7 17.0 17.6 17.1 17.1 17.2
July	9.4 9.4 9.2 8.8 8.4 8.2	8.2 8.2 7.9 7.6 7.3 7.1	8.6 8.3 8.0 7.6 7.2	20.0 21.0 18.7 19.5 17.7 17.4	7.7 7.7 7.6 7.2 6.8 6.5	7.7 7.6 7.4 7.1 6.9 6.8	18.7 18.1 17.2 16.9 16.7 16.1	6.7 6.7 6.6 6.3 6.1 6.0	19.3 19.6 18.9 18.2 17.6 17.7	20.5 20.7 19.6 18.2 17.8 17.2	48.2 53.8 53.7 44.1 44.7 45.0	18.2 18.1 17.0 16.3 15.7 15.1	18.1 18.3 18.1 18.1 17.4 18.2	48.6 48.0 48.1 53.1 49.6 50.8	16.0 16.2 16.0 15.6 15.2 15.9
1984: Jan Feb Mar Apr May June	8.0 7.8 7.8 7.8 7.5 7.5	6.9 6.8 6.7 6.7 6.5	7.0 6.8 6.7 6.6 6.4 6.2	17.7 16.8 17.3 16.8 16.9 16.6	6.3 6.1 5.9 5.9 5.7 5.4	6.7 6.8 6.7 6.6 6.4	14.9 16.1 16.4 15.7 15.5 15.1	6.0 5.9 5.0 5.6 5.6	17.0 16.5 16.6 16.7 16.0 15.2	17.2 16.8 17.2 17.6 16.3 16.3	46.6 46.0 44.3 42.9 41.4 38.2	15.1 14.6 15.1 15.6 14.3 14.6	16.8 16.2 16.0 15.7 15.7 14.1	48.2 41.4 49.4 45.9 48.1 35.8	14.6 14.4 13.8 13.6 13.7 12.6
July	7.5 7.5 7.4 7.3 7.1 7.2	6.3 6.4 6.3 6.1 6.2	6.3 6.2 6.2 6.1 6.1 6.1	17.4 16.7 17.0 16.6 16.2 16.2	5.5 5.5 5.4 5.4 5.4	6.4 6.6 6.5 6.6 6.2 6.3	12.9 15.4 15.5 15.2 13.9 15.5	5.8 5.9 5.7 5.8 5.5 5.5	16.6 15.8 15.1 15.3 15.1 15.0	17.4 15.9 15.5 15.6 14.9 15.5	42.3 40.5 41.0 43.8 42.0 43.8	15.5 14.1 13.5 13.4 12.8 13.3	15.8 15.7 14.6 15.0 15.3 14.5	42.2 42.2 43.0 36.2 40.2 40.1	13.8 13.8 12.6 13.4 13.5 12.7

Unemployment as percent of civilian labor force in group specified.
 Note.—See footnote 5 and Note, Table B-29.
 Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-36.—Unemployment insurance programs, selected data, 1955-84

		All program	s			State pi	ograms		
		Insured unemploy-	Total benefits				Insured unemploy- ment as	Benef	its paid
Year or month	Covered employ- ment <sup>1</sup>	ment (weekly aver- age) 2 3	paid (millions of dollars) * 4	Insured unem- ployment	Initial claims	Exhaus- tions <sup>6</sup>	percent of covered employ- ment	Total (millions of dollars) 4	Average weekly check (dollars) <sup>4</sup>
	Thou	sands		Weeki	y average; ti	nousands			
1955	40,018 42,751 43,436 44,411 45,728	1,399 1,323 1,571 2,773 1,860	1,560.2 1,540.6 1,913.0 4,290.6 2,854.3	1,265 1,215 1,446 2,510 1,684	226 227 270 369 277	25 20 23 50 33	3.5 3.2 3.6 6.4 4.4	1,350.3 1,380.7 1,733.9 3,512.7 2,279.0	25.04 27.02 28.17 30.58 30.41
1960 1961 1962 1963 1963 1964 1965 1966 1966 1967	46,334 46,266 47,776 48,434 49,637 51,580 54,739 56,342 57,977	2,071 2,994 1,946 71,973 1,753 1,450 1,129 1,270 1,187 1,177	3,022.8 4,358.1 3,145.1 3,025.9 2,749.2 2,360.4 1,890.9 2,221.5 2,191.0 2,298.6	1,908 2,290 1,783 71,806 1,605 1,328 1,061 1,205 1,111 1,101	331 350 302 7298 268 232 203 226 201 200	31 46 32 30 26 21 15 17 16	4.8 5.6 4.4 4.3 3.8 3.0 2.3 2.5 2.2 2.1	2,726.7 3,422.7 2,675.4 2,774.7 2,522.1 2,166.0 1,771.3 2,092.3 2,031.6 2,127.9	32.87 33.80 34.56 35.27 35.92 37.19 39.75 41.25 43.43
1970 1971 1972 1973 1974 1975 1976 1976 1977	59,375 66,458 69,897 72,451 71,037 73,459	2,070 2,608 2,192 1,793 2,558 4,937 3,846 3,308 2,645 2,592	4,209.3 6,154.0 5,491.1 4,517.3 6,933.9 16,802.4 12,344.8 10,998.9 9,006.9 9,401.3	1,805 2,150 1,848 1,632 2,262 3,986 2,991 2,655 2,359 2,434	296 295 261 247 363 478 386 375 346 388	25 39 35 29 37 81 63 55 39	3.4 4.1 3.5 2.7 3.5 6.0 4.6 3.9 3.3 2.9	3,848.5 4,957.0 4,471.0 4,007.6 5,974.9 11,754.7 8,974.5 8,357.2 7,717.2 8,612.9	50.34 54.02 56.76 59.06 64.25 70.23 75.16 78.79 83.67 89.67
1980	92,659 93,300 91,628 91,898	3,837 3,410 4,594 3,775	16,175.4 15,287.1 23,774.8 20,206.2	3,350 3,047 4,061 3,396	488 460 583 438	59 57 80 80	3.9 3.5 4.6 3.9	13,761.1 13,262.1 20,650.0 17,762.8	98.95 106.70 119.37 123.55
1983: Jan Feb Mar Apr May June		5,459 5,437 5,134 4,642 3,947 3,481	2,463.3 2,350.2 2,780.2 2,184.0 1,910.3 1,798.5	3,979 3,952 3,885 3,826 3,615 3,389	513 498 491 488 460 424	100 99 102 103 91 87	4.6 4.5 4.5 4.4 4.2 3.9	2,205.6 2,052.9 2,370.7 1,817.6 1,589.7 1,537.9	124.29 124.51 125.56 124.95 124.57 123.51
July Aug Sept Oct Nov		3,275 2,917 2,580 2,478 2,620 2,915	1,411.3 1,455.7 1,167.5 1,058.1 1,153.4 1,255.2	3,190 3,025 2,983 2,797 2,734 2,636	408 410 386 389 388 389	80 74 60 58 57 56	3.7 3.5 3.5 3.3 3.2 3.1	1,297.2 1,367.2 1,104.4 1,002.0 1,099.8 1,203.6	121.53 121.17 121.36 122.99 122.18 122.61
1984: Jan		3,374 3,174 2,958 2,613 2,290 2,166	1,515.5 1,455.5 1,426.7 1,220.3 1,149.8 980.4	2,615 2,528 2,498 2,449 2,369 2,335	368 349 354 361 350 354	61 58 57 58 54 48	3.1 3.0 2.9 2.8 2.8 2.7	1,458.0 1,400.5 1,369.5 1,173.6 1,109.3 948.4	123.60 124.30 124.67 125.26 123.69 121.96
July Aug Sept Oct Nov		2,327 2,184 2,083 2,149 2,441	1,005.1 1,045.3 877.9 969.9	2,361 2,326 2,370 2,442 2,516 2,504	373 365 374 405 402 393	49 45 43 42 42	2.7 2.7 2.7 2.8 2.9 2.9	974.1 1,017.8 853.4 939.7 1,011.1	119.83 120.24 122.48 123.85 124.26

Source: Department of Labor, Employment and Training Administration.

<sup>\*\*</sup>Monthly data are seasonally adjusted.

¹ 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).

² Includes State, UCFF, 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), SUA (special unemployment assistance), and Federal Supplemental Compensation programs.

² Covered workers who have completed at least 1 week of unemployment.

² Annual data are net amounts and monthly data are gross amounts.

³ Included data are net amounts and monthly data are gross amounts.

³ Include Junemployment only.

² Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning July 1963.

° Latest data available for all programs combined. Workers covered by State programs account for about 97 percent of wage and salary earners.

salary earners.

TABLE B-37.—Wage and salary workers in nonagricultural establishments, 1929-84
[Thousands of persons; monthly data seasonally adjusted]

	Total	M	anufacturii	no	Γ		Transpor-	Г		Finance,	<u> </u>	Gover	nment
Year or month	wage and salary workers	Total	Durable goods	Non- durable goods	Mining	Construc- tion	tation and public utilities	Whole- sale trade	Retail trade	insur- ance, and real estate	Services	Federal	State and local
1929 1933	31,324 23,699	10,702 7,397			1,087 744	1,512 824	3,916 2,672			1,494 1,280	3,425 2,861	533 565	2,532 2,601
1939 1940	30,603 32,361	10,278 10,985	<b>4,715</b> 5,363	5,564 5,622	854 925	1,165 1,311	2,936 3,038	1,762 1,835	4,664	1,447 1,485	3,502 3,665	905 996	3,090
1941 1942 1943 1944 1945	36,539 40,106	13,192 15,280 17,602 17,328 15,524 14,703 15,545	6,968 8,823	5,622 6,225 6,458 6,518	925 957	1,814 2,198	3,274 3,460	1.960	4,914 5,251 5,212 5,160	1,525 1,509	3.905	1,340 2,213 2,905	3,206 3,320 3,270
1943	42,434	17,602	11,084	6,518	992 925 892	1,587	3,460 3,647	1,906 1,822	5,160	1,481	4,066 4,130	2,213	3,175
1944 1945	41,864 40,374	17,328 15.524	10,856 9,074	64//	892 836	1,108 1,147	3,647 3,829 3,906	1,845	5,214 5,365	1,461	4,145 4,222	2,928 2,808 2,254	3,116 3,137
1946	41,652	14,703	9,074 7,742	6,450 6,962 7,159	862	1,683 2,009	4,061	1,949 2,291	6.084	1,481 1,675 1,728	4.697	2,254 1,892	3,341 3,582
1946 1947 1948	<b>43,857</b> 44,866	13,302	8,385 8,326	7.256	955 994	2,198	4,166 4,189	2,471 2,605	6,485 6,667	1,800	5,025 5,181	1.863	3,787
1343	43,754 45,197	14,441	7,489 8.094	6,953 7,147	930 901	2,194 2,364	4,001 4,034	2,602 2,635	6,662 6,751	1,828 1,888	5,240 5,357	1,908 1,928	3,948 4.098
1950 1951	47 R1Q	15,241 16,393	9,080	7,304	929	2 637	4 226	2,727	7 015	1.956	5 547	2 302	4.087
1952	48,793 50,202 48,990	16,632 17,549 16,314	9,349 10,110 9,129	7,304 7,284 7,438 7,185	898 866	2,668 2,659	4,248 4,290	2,812 2,854	7,192 7,393 <b>7,368</b>	2,035 2,111	5,699 5,835	2,420 2,305 2,188	4,188 4,340
1952 1953 1954 1955	48,990 50,641	16,314 16,882	9,129 9,541		791 792	2,668 2,659 2,646 2,839	4,084 4,141	2,867 2,926	7,368 7,610	2,111 2,200 2,298 2,389	5,969 6,240	2,188 2,187	4,563 4,727
1330	52,369	16,882 17,243 17,174 15,945	9,833	7,411 7,321 7,116 7,303	792 822	3,039	4,244 4,241 3,976	3 018	7.840	2,389	6,497 6,708	1 2 200	5 069
1957 1958	52,853 51,324	15,945	9,855 8,829 9,373	7,321	828 751 732	2,962 2,817	3,976	3,028 2,980 3,082	7,858 7,770	2,438 2,481 2,549	l 6.765	2,217 2,191 2,233	5,399 5,648
1959 1960	53,268	16,675 16,796	9,373 9,459	7,303	732 712	3,004 2,926	4,011 4,004	3,082 3,143	8,045	2,549 2,629	7,087 7,378	2,233	5,850 6,083
1961	54,189 53,999	16,326 16,853	9.070	7,337 7,256 7,373 7,380	672	2.859	3,903 3,906	3.133 °	8,248 8,204 8,368	2,688	7,620	2,270 2,279 2,340 2,358	6.315
1961 1962 1963	55,549 56,653	16.995	9,480 9,616	7,373 7,380	650 635	2,948 3,010	3.903	3,198 3,248	8.530	2,688 2,754 2,830	7,620 7,982 8,277	2,340	6,550 6,868
1964 1965 1966 1967 1968	58,283 60,765 63,901	17,274	9,816 10,405	7,458 7,656 7,930	634 632	3,097 <b>3,232</b>	3,951 4,036	3,337	8,823 9,250	2,911 2,977	8.660	2,348 2,378 2,564 2,719	7,248 7,696
1966	63,901	18,062 19,214	10,405 11,282 11,439 11,626	7,930	632 627	3.317	4,036 4,158	3,466 3,597	9,250 9,648 9,917	3.058	9,036 9,498	2,564	8,220
1968	65,803 67,897 70,384	19,447 19,781	11,439	8,007 8,155	613 606	3,248 3,350	4,268 4,318	3,689 3,779	10.320	3,185 3,337	10,045 10,567	2,/3/	8,672 9,102
1070	70,384 70,880	20,167	11,895 11,208	8,272 8,158	619	3,575 3,588	4,442 4,515	3,907 3,993	10,798 11,047	3,512	11,169 11,548	2,758 2,731	9,437 9,823
1970 1971 1972 1973 1974 1975	71,214	19,367 18,623 19,151 20,154 20,077	10,636	7 987	623 609	3,704	4,476	4 001	11 351	3,645 3,772	11 797	2,696	10.185
1973	71,214 73,675 76,790	20,154	10,636 11,049 11,891 11,925	8,102 8,262 8,152	628 642 697	3,889 4,097	4,541 4,656 4,725	4,113 4,277 4,433	12,329	3,908 4,046	12,276	2,684 2,663 2,724	10,649 11,068
1974 1975	78,265 76,945			8,152 7.635	697 752	4,020 3,525	4 542	4,433 4,415	11,836 12,329 12,554 12,645	4,148 4,165	12,276 12,857 13,441 13,892	2,724 2,748	11,446 11,937
1976 1977 1978	79,382 82,471	18,997 19,682 20,505	11,077	7 920	779	3,576 3,851	4,582 4,713 4,923	4.546	13.209	4.271	14,551	2 733	12,138 12,399 12,919
1978	86,697	20,505	11,077 11,597 12,274 12,760	8,086 8,231 8,280	813 851	4,229	4,923	4,708 4,969	13,808 14,573	4,467 4,724	14,551 15,303 16,252 17,112	2,727 2,753 2,773	12,919
1979 1980	89,823 90,406	21,040 20,285	12,760	8,280	958 1.027	4,463 4,346	5,136 5.146	5,204 5,275	14,989 15,035	4,975 5,160	17,112	2 866	13,174 13,375
1981	91,156 <b>89,566</b>	20,170 18,781	12,187 12,109	8,061	1,139 1,128	4,188 3,905	5,146 5,165 5,082	5,358	15 189	5,298 5,341	18,619 19,036	2,772 2,739	13,259 13,098
1983 1984 <i>P</i>	90,138 94,155	18,497 19,591	11,039 10,774 11,636	7,741 7,724 7,954	957 999	3,940 4,316	4,958 5,170	5,275 5,358 5,278 5,259 5,526	15,179 15,545 16,262	5,467 5,665	19,665 20,661	2,752 2,782	13,099 13,185
1983: Jan	RR R27	18.073	10 454	7,619 7,606	993	3.893	4.984	5.193	15,264	5,363	19,214	2,747	13,103
Feb Mar	88,728 88,945 89,259	18,056 18,085	10,450 10,465 10,536	7,606 7,620	967 955	3,804 3,792	4,969 4,975	5,190 5,190	15,264 15,284 15,348 15,386	5,363 5,389 5,408	19,214 19,230 19,356	2,747 2,744 2,743 2,741	13,095 13,093
Apr May	89,259 89,578	18.189	10,536 10,623	7,620 7,653 7,675	943 940	3,817 3,849	4,993 5,001	5,204 5,220 5,241	15,386 15,433	5,445 5,460	19,456 19,529	2,741 2,753	13,085 13,095
June	89,927	18,298 18,391	10,686	7,675 7,705	939	3,911	5,005	5,241	15,514	5,464	19,626	2,744	13,092
July Aug	90,274 89,918 <b>91,018</b>	18,521 18,597	10,781 10.846	7,740 7,751	946 950	3,947 3,985	5,001 4,369	5,256 5,277	15,580 15,626	5,478 5,498	19,723 19,808	2,744 2,747	13,078 13,061
Sept Oct	01 3/5	18,698 18,886	10,846 10,923 11,071	7,751 7,775 7,815	952 965	4,019 4,044	4,369 5,046 5,053 5,043	5,301	1 15.671	5,498 5,503 5,512 5,530	19,808 19,893 19,962 20,034	2,747 2,774 2,760 2,759	13,161 13,104
Nov	91,688 92,026	19,018	11.170	7.848	967 969	4,073 4,086	5,043 5,055	5,256 5,277 5,301 5,322 5,344 5,371	15,737 15,805 15,857	5,530 5,546	20,034 20,130	2,759 2,762	13,115 13,107
Dec 1984: Jan	92.391	19,143 19,254	11,266 11,343	7,877 7,911	975	4,154	5.095	5,406	15.914	5.573	20.162	2 760	13,098
Feb Mar	92,846 93,058	19,373 19,466 19,530	11,440 11,513 11,551	7,933 7,953	978 978	4,226 4 151	5,105 5,112 5,129	5.438	15.980	5,593 5,613	20,278 20,378	2,763 2,770 2,771	13,112 13,103
Apr May	93,449 93,786	19,530 19,570	11,551	7,933 7,953 7,979 7,972	984 995	4,246 4,286	5,129	5,457 5,473 5,492	16,030 16,095 16,166	5,640 5,662	20,449 20,549	2,771	13,132 13,137
June	94,135	19,629	11,652	7,977	1,002	4,343	5,144 5,163	5,502	16,245	5,676	20,681	2,78 <b>5</b> 2,77 <b>7</b>	13,117
July Aug	94,350 <b>94,523</b>	19,696 19,725	11,702 11, <b>758</b>	7,994 7,967	1,007 1,017	4,356 4,356	5,175 5,202	5,528 <b>5,544</b>	16,283 16,295	5,676 5,679	20,701 <b>20,748</b>	2,779 2.785	13,149 13,172
Sept Oct	94 807	19,616 19,686 19,718	11,696 11,752 11,776	7,967 7,920 7,934 7,942	1,020 1,012	4,356 4,374 4,382 4,396	5,202 5,213 5,225 5,226 5,238	5,588 5,612 5,623	16,295 16,342 16,468 16,644	5,684 5,705 5,725	20.861	2,785 2,804 2,793	13,305 13,310 13,322
Nov P	95,157 95,494	19,718	11,776	7,942	1.009	4,396	5,226 5,226	5,623	16,644	5,725	20,964 21,030	2,793 2,801	13,322
Dec P	95,661	19,810	11,843	7,967	1,003	4,452	5,238	5,645	16,635	5,748	21,085	2,794	13,251

Note.—Data in Tables B-37 through B-39 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-29 through B-35), which include proprietors, self-employed persons, domestic servants, and unpaid family workers; which count persons as employed when they are not at work because 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. For description and details of the various establishment data, see "Employment and Earnings."

TABLE B-38.—Average weekly hours and hourly earnings in selected private nonagricultural industries, 1947-84

[For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

		Average we	ekly hours		Ave	age gross l current	hourly earni dollars	ngs,	Adjus pr	ted hourly ivate nona	earnings, gricultural	total 2
Year or month	Total private non-	Manufac-	Con-	Retail	Total private non-	Manufac-	Con-	Retail	Inc 1977	dex, = 100	Percent from a	vear
	agricul- tural <sup>1</sup>	turing	struction	trade	agricul- tural 1	turing	struction	trade	Current dollars	1977 dollars 3	Current dollars	1977 dollars
1947 1948	40.3 40.0	40.4 40.0	38.2 38.1	40.3 40.2	\$1.131 1.225 1.275	\$1.216 1.327 1.376	\$1.540 1.712	\$0.838 .901	21.6 23.4 24.5	58.5 58.9 62.3	8.3 4.7	0.7
1949 1950	39.4 39.8	39.1 40.5	37.7 37.4	40.4 40.4	1.275	1.376	1.792 1.863	.951 .983	24.5	62.3	3.7	5.8 2.7
1951 1952 1953	39.9	40.6	38.1 38.9 37.9	40.4	1.45 1.52	1.56	2.02	1.06	25.4 27.3	63.6 65.5	7.5	6
1952 1953	39.9 39.6	40.7 40.5	38.9 37.9	39.8 39.1	1.52 1.61	1.64 1.74	2.13	1.09 1.16	28.7 30.3	65.5 68.7	5.1 5.6	3.0 4.9
1934	39.1	39.6	37.2	39.1 39.2	1.65	1.78	2.28 2.38	1.20	31.3	70.5	5.6 3.3	2.6
1955 1956	39.6	40.7	37.1	39.0 38.6	1.71	1.85	2.45	1.25 1.30 1.37 1.42	32.4	73.3 75.9 76.9	3.5 4.9 5.0 4.2 3.5	4.0 3.5 1.3
1956	39.3 38.8	40.4 39.8	37.5 37.0	38.5	1.80 1.89	1.95 2.04	2.57 2.71	1.30	34.0 35.7 37.2	76.9	5.0	1.3
1957 1958 1959	38.5 39.0	39.2	36.8 37.0	38.1 38.1 38.2	1.89 1.95 2.02	2.10	2.82 2.93	1.42	37.2 38.5	78.0	4.2	1.4 2.6
1960	3 8 6	40.3 39.7	36.7	38.0		2.19	3.07	1.47	39.8	80.0 81.4		1.8
1961 1962 1963 1964	38.6 38.7	39.8	36.9 37.0	37.6 37.4 37.3 37.0	2.09 2.14 2.22	2.26 2.32 2.39	3.07 3.20 3.31 3.41 3.55	1.52 1.56	41.0	83.0	3.4 3.0	2.0
1962 1963	38.7 38.8	40.4 40.5	37.0 37.3	37.4 37.3	2.22	2.39 2.45	3.31	1.63 1.68	42.4 43.6	85.0 86.3	1 34	2.4 1.5
1964	38.8 38.7	40.7	37.3 37.2	37.0	2.28 2.36	2.45 2.53	3.55	1.75	44.8	87.5	2.8 2.8	1.4
1965 1966 1967 1968 1969	38.8 38.6	41.2	37.4	36.6	2.46	2.61	3.70	1.82	46.4	89.0 90.3	3.6	1.7
1967	38.0	41.4 40.6	37.6 37.7	35.9 35.3 34.7 34.2	2.56 2.68	2.71 2.82	3.89 4.11	1.91 2.01	48.4 50.8	92.2	4.3 5.0	1.5 2.1
1968	37.8 37.7	40.7 40.6	37.3 37.9	34.7	2.85 3.04	3.01 3.19	4.41 4.79	2.16 2.30	53.9 57.5	94.0 95.0	6.1 6.7	2.0 1.1
1970	37.1	39.8	37.3	33.8	3.23	3.19	5.24	2.30	61.3	95.7	6.6	
1971	36.9	39.9	37.2	33.8 33.7	3.45 3.70	3.35 3.57	5.69	2.44 2.60 2.75	65.7 69.8	98.3	7.2	.7 2.7
1972	37.0 36.9	40.5 40.7	36.5 36.8	33.4 33.1 32.7	3.70 3.94	3.82 4.09	6.06 6.41	2.75 2.91	69.8 74.1	101.2 101.1	6.2 6.2	3.0
1970 1971 1972 1973 1974	36.5	40.0	36.6	32.7	4.24	4.42	6.81	3.14	80.0	98.3	8.0	1 2.8
1975 1976 1977 1978 1979	36.1 36.1	39.5 40.1	36.4 36.8	32.4 32.1	4.53 4.86	4.83 5.22	7.31 7.71	3.36	86.7	97.6 99.0	8.4 7.2	7 1.4
1977	36.0	40.3	36.5	31.6 31.0	5.25 5.69	5.68	8.10	3.57 3.85	92.9 100.0	100.0	7.6	1.0
1978	35.8 35.7	40.4 40.2	36.5 36.8 37.0	31.0 30.6	5.69 6.16	6.17 6.70	8.66 9.27	4.20 4.53	108.2 116.8	100.5 97.4	8.2 7.9	_3.1
1980	35.3	39.7	37 N	30.2	6.66	7.27	9.27	4.55		93.5	9.0	4.0
1981 1982	35.2 34.8	39.8	36.9	30.1	7.25 7.68	7 99	10.82	5.25	127.3 138.9	92.6	9.0 9.1	-10
1983 1984 P	35.0 35.3	38.9 40.1	36.9 36.7 37.2	30.1 29.9 29.8 30.0	8.02	8.49 8.83 9.17	11.63 11.92	5.48 5.74	148.5 155.3 160.5	93.4 94.8	6.9 4.6	1.5 —.1
1984 P 1983:	35.3	40.7	37.8	30.0	8.02 8.33	9.17	11.92 12.03	5.89	160.5	94.8 94.7	4.6 3.3	1
Jan	35.0	39.5	38.3	30.0	7.87	8.66	11.84	5.61	152.9	94.8	5.4	1.8
Feb Mar	34.5 34.8	39.1	36.6 36.7	30.0 29.3 29.7	7.87 7.92 7.92	8.73	11.98	5.66 5.67	153.6	95.3 95.1	5.4 5.7 5.4	2.4
Apr	34 9	39.7 40.1	36.9	29.7 29.7	7.96	8.66 8.73 8.73 8.75	11.94 11.97	5.69	154.2	94.8	5.3	1.8 2.4 1.6 1.2
May June	34.9 35.0	39.9 40.1	36.9 37.1 37.2	29.7 29.8 29.9	7.98 8.01	8.78 8.80	11.89 11.90	5.71 5.74	152.9 153.6 153.6 154.2 154.7 155.1	94.8	5.3 4.9 4.7	1.4 2.2
July	35.0	40.2	371	29.8	8.04	8.83	11.87	5.75	155.6	94.9	4.4	2.2 1.2
Aug	35.0	40.3 40.7	37.3 37.4	29.8 29.8 29.8 30.0	8.00	. ΩΩΛ ∣	11.89	5.77	155.4 156.2	94.4	3.7	1.2
Sept Oct	35.2 35.2	40.6	36.8	30.0	8.09 8.13 8.14	8.88 8.93 8.97	11.95 11.94 11.93	5.79 5.80	157.1	94.5 94.7	4.0 4.1	1.2
Nov Dec	35.2 35.2	40.6 40.6	36.8 37.0 36.9	30.0 30.3	8.14 8.17	8.97 8.99	11.93 11.96	5.80 5.82 5.83	157.1 157.2 157.8	94.6 94.9	3.9 3.7	1.0 .4
1984-										34.3	3.7	"
Jan Feb	35.4 35.3	40.9 40.9	37.7 38.2	30.1 30.0	8.21 8.23 8.25 8.31 8.29 8.33	9.03 9.06	11.97 11.95 11.97 12.03 12.07	5.84 5.84	158.4 158.5 159.1 159.9 159.6 160.3	94.8	3.6	0 6
mar	35.3	40.7	37.0	30.1	8.25	9.09	11.97	5.87	159.1	94.8 95.1	3.6 3.2 3.5 3.7 3.2 3.3	0 0.
Apr May	35.4 35.3	41.1 40.6	37.7 37.7	30.0 30.1	8.31 8.29	9.11	12.03	5.89 5.87	159.9 159.6	95.4 94.9	3.7	.0 .6 .1
June	35.3	40.6	37.9	30.1 30.2	8.33	9.12 9.15	12.0/	5.89	160.3	95.2		
July Aug	35.2 35.2	40.5 40.5	37.5 37.7	29.9 29.9	8.35 8.34	017	12.04	5.89 5.88	160.8 160.6	95.2 94.1	3.3 3.3 3.4 2.7 3.1	3 3 9 3
Aug Sept	35.4	40.5 40.6 40.4	38.0 37.6	30.0	8.40	9.22	12.05 12.05	5.90	161.6	94.1 94.2 93.9	3.4	3 3
Oct Nov 2	35.1 35.2	40.4 40.5	37.6 38.1	30.0 29.8 29.9	8.40 8.38 8.42 8.47	9.20 9.22 9.25 9.30 9.33	12.05 12.02 12.03 12.12	5.90 5.89 5.94 5.94	161.6 161.3 162.0 163.0	93.9 94.3	2.7	9
	35.3	40.7	37.7	30.0	V.76	7.50	1 45.00	2.54	1 *25.7	94.7	3.4	

Also includes other private industry groups shown in Table B-37.
 Adjusted for overtime (in manufacturing only) and for interindustry employment shifts.
 Current-dollar earnings index divided by the consumer price index for urban wage earners and clerical workers on a 1977=100 base.

Monthly percent changes are computed from indexes to two decimal places and are based on data not seasonally adjusted.

Note.—See Note, Table B-37.

TABLE B-39.—Average weekly earnings in selected private nonagricultural industries, 1947-84 [For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

		Average	gross weekly	earnings		Percent ch a year ea	ange from
Year or month	Total p nonagric	rivate ultural 1	Manufac- turing	Construc- tion	Retail trade	a year ea priv nonagric	ate
	Current dollars	1977 dollars ²	(current dollars)	(current dollars)	(current dollars)	Current dollars	1977 dollars
947948949	\$45.58 49.00 50.24	\$123.52 123.43 127.84	\$49.13 53.08 53.80	\$58.83 65.23 67.56	\$33.77 36.22 38.42	7.5 2.5	-0.1 3.0
950 951 952 953 954	53.13 57.86 60.65 63.76 64.52	133.83 134.87 138.47 144.58 145.32	58.28 63.34 66.75 70.47 70.49	69.68 76.96 82.86 86.41 88.54	39.71 42.82 43.38 45.36 47.04	5.8 8.9 4.8 5.1 1.2	4. 2. 4.
955 956 957 958 959	67.72 70.74 73.33 75.08 78.78	153.21 157.90 158.04 157.40 163.78	75.30 78.78 81.19 82.32 88.26	90.90 96.38 100.27 103.78 108.41	48.75 50.18 52.20 54.10 56.15	5.0 4.5 3.7 2.4 4.9	5. 3. 
960	80.67 82.60 85.91 88.46 91.33	164.97 167.21 172.16 175.17 178.38	89.72 92.34 96.56 99.23 102.97	112.67 118.08 122.47 127.19 132.06	57.76 58.66 60.96 62.66 64.75	2.4 2.4 4.0 3.0 3.2	1. 3. 1. 1.
965 966 967 968	95.45 98.82 101.84 107.73 114.61	183.21 184.37 184.83 187.68 189.44	107.53 112.19 114.49 122.51 129.51	138.38 146.26 154.95 164.49 181.54	66.61 68.57 70.95 74.95 78.66	4.5 3.5 3.1 5.8 6.4	2. 1.
970 971 972 973 974	119.83 127.31 136.90 145.39 154.76	186.94 190.58 198.41 198.35 190.12	133.33 142.44 154.71 166.46 176.80	195.45 211.67 221.19 235.89 249.25	82.47 87.62 91.85 96.32 102.68	4.6 6.2 7.5 6.2 6.4	-1. 1. 4. 
975	163.53 175.45 189.00 203.70 219.91	184.16 186.85 189.00 189.31 183.41	190.79 209.32 228.90 249.27 269.34	266.08 283.73 295.65 318.69 342.99	108.86 114.60 121.66 130.20 138.62	5.7 7.3 7.7 7.8 8.0	-3. 1. 1.
980 981 982 983 983	235.10 255.20 267.26 280.70 294.05	172.74 170.13 168.09 171.26 173.48	288.62 318.00 330.26 354.08 373.22	367.78 399.26 426.82 443.42 454.73	147.38 158.03 163.85 171.05 176.70	6.9 8.5 4.7 5.0 4.8	-5. -1. -1. 1.
983: Jan	275.45 273.24 275.62 277.80 278.50 280.35	170.87 169.50 170.56 170.85 170.65 171.57	342.07 341.34 346.58 350.88 350.32 352.88	453.47 438.47 438.20 441.69 441.12 442.68	168.30 165.84 168.40 168.99 170.16	6.9 3.1 4.0 5.1 4.8 4.9	3.  1. 1. 2.
July	281.40 280.00 284.77 286.18 286.53 287.58	171.69 170.01 172.27 172.61 172.40 172.93	354.97 356.25 361.42 362.56 364.18 364.99	440.38 443.50 446.93 439.39 441.41 441.32	171.35 171.95 172.54 174.00 174.60 176.65	4.6 3.5 6.0 6.4 5.6 5.7	2. 1. 3. 3. 2.
984: Jan Feb	290.63 290.52 291.23 294.17 292.64 294.05	173.93 173.65 174.08 175.52 173.98 174.61	369.33 370.55 369.96 374.42 370.27 371.49	451.27 456.49 442.89 453.53 455.04 457.45	175.78 175.20 176.69 176.70 176.69 177.88	5.53 5.53 5.62 4.8	1. 2. 1. 3. 1.
July	293.92 293.57 297.36 294.14 296.38 298.99	173.92 171.98 173.39 171.21 172.41 173.63	371.39 372.60 374.33 373.70 376.65 379.73	451.50 454.29 457.90 451.95 458.34 456.92	176.11 175.81 177.00 175.52 177.61 178.20	4.8 5.0 4.4 2.6 3.3 3.7	1. 1. 

Also includes other private industry groups shown in Table 8-37.
 Earnings in current dollars divided by the consumer price index on a 1977=100 base.
 Based on data not seasonally adjusted.

Note.—See Note, Table B-37.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-40.—Productivity and related data, business sector, 1947-84 [1977 = 100; quarterly data seasonally adjusted]

Voca ex		per hour persons	Out	put 1		of all	Compens	ation per		pensation hour 4	Unit lat	oor costs	Implic defl	it price ator <sup>5</sup>
Year or quarter	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busl- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector
1947	43.7	49.9	35.0	34.0	80.1	68.1	17.0	18.5	46.1	50.1	38.9	37.0	38.1	36.6
1948	46.1	52.0	37.2	36.0	80.7	69.2	18.4	20.1	46.4	50.5	40.0	38.6	40.8	39.1
1949	46.7	53.1	36.5	35.3	78.0	66.6	18.7	20.7	47.6	52.5	40.1	38.9	40.3	39.4
1950	50.4	56.3	39.8	38.6	78.9	68.6	20.0	21.9	50.5	55.1	39.8	38.8	41.0	40.1
1951	51.8	57.3	42.1	41.1	81.2	71.8	22.0	23.8	51.4	55.4	42.5	41.5	44.0	42.8
1952	53.5	58.6	43.5	42.5	81.3	72.6	23.4	25.1	53.4	57.2	43.8	42.8	44.5	43.5
1953	55.2	59.6	45.4	44.3	82.2	74.4	24.9	26.5	56.5	60.0	45.1	44.5	44.9	44.4
1954	56.1	60.4	44.6	43.4	79.4	71.9	25.7	27.3	58.0	61.6	45.9	45.2	45.3	45.0
1955	58.3	62.8	48.1	47.0	82.4	74.9	26.4	28.3	59.7	64.0	45.2	45.1	46.0	46.0
1956	58.9	62.9	49.3	48.3	83.7	76.7	28.1	30.0	62.6	66.8	47.7	47.6	47.6	47.6
1957	60.4	64.0	49.8	48.9	82.5	76.3	29.9	31.7	64.5	68.3	49.5	49.5	49.2	49.3
1958	62.3	65.5	49.0	48.0	78.7	73.2	31.2	32.9	65.5	68.9	50.2	50.2	49.8	49.7
1959	64.3	67.7	52.6	51.8	81.8	76.4	32.6	34.2	67.8	71.1	50.7	50.5	50.8	50.9
1960	65.2	68.3	53.5	52.5	82.0	76.9	33.9	35.7	69.5	73.1	52.1	52.3	51.6	51.6
1961	67.4	70.3	54.4	53.5	80.7	76.1	35.2	36.8	71.4	74.6	52.3	52.4	51.9	51.9
1962	69.9	72.8	57.4	56.6	82.1	77.8	36.8	38.3	73.8	76.7	52.7	52.6	52.6	52.7
1963	72.5	75.2	59.9	59.1	82.6	78.6	38.2	39.6	75.6	78.4	52.7	52.7	53.2	53.3
1964	75.6	78.1	63.5	62.8	83.9	80.5	40.2	41.4	78.4	80.9	53.1	53.1	53.7	53.9
1965	78.3	80.5	67.8	67.2	86.6	83.5	41.7	42.8	80.1	82.3	53.3	53.2	54.7	54.8
1966	80.8	82.5	71.5	71.2	88.6	86.3	44.6	45.4	83.3	84.8	55.3	55.0	56.4	56.3
1967	82.6	84.1	73.1	72.7	88.5	86.5	47.0	47.9	85.3	86.9	57.0	57.0	57.9	58.1
1968	85.3	86.8	76.8	76.6	90.0	88.2	50.7	51.5	88.3	89.7	59.4	59.3	60.3	60.4
1969	85.5	86.6	79.0	78.8	92.4	91.0	54.2	54.9	89.7	90.7	63.4	63.4	63.2	63.3
1970	86.2	86.8	78.4	78.0	90.9	89.8	58.2	58.7	90.8	91.5	67.5	67.6	66.0	66.3
1971	89.3	89.7	80.7	80.3	90.4	89.4	62.0	62.5	92.8	93.6	69.5	69.7	69.0	69.3
1972	92.4	93.0	86.1	85.8	93.2	92.2	66.1	66.7	95.7	96.6	71.5	71.7	71.3	71.3
1973	<b>94.8</b>	<b>95.3</b>	91.7	91.7	<b>96.8</b>	<b>96.2</b>	71.4	71.8	97.3	97.9	75.3	75.3	75.3	<b>74.0</b>
1974	<b>92.5</b>	<b>92.9</b>	89.9	89.8	<b>97.2</b>	<b>96.6</b>	78.1	78.5	95.9	96.5	<b>84</b> .4	84.5	82.4	<b>81.6</b>
1975	94.6	94.8	88.2	87.8	93.2	92.6	85.6	86.1	96.4	96.9	90.5	90.8	90.4	90.0
1976	97.6	97.8	93.8	93.7	96.0	95.8	92.9	93.0	98.9	99.0	95.1	95.1	94.7	94.6
1977	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	100.0
1978	100.5	100.6	105.5	105.7	104.9	105.1	108.5	108.6	100.8	100.8	108.0	108.0	107.5	107.1
1979	99.3	99.0	107.8	108.0	108.6	109.0	118.7	118.4	99.1	98.8	119.5	119.5	117.2	116.5
1980	98.8	98.3	106.5	106.5	107.8	108.3	131.1	130.6	96.4	96.0	132.6	132.8	128.1	128.1
1981	100.7	99.8	109.2	108.7	108.4	109.0	143.4	143.1	95.5	95.3	142.4	143.5	140.4	140.6
1982	100.9	100.0	106.3	105.9	105.4	106.0	155.0	154.5	97.3	97.0	153.6	154.5	147.9	148.6
1983	103.7	103.4	111.0	111.2	107.1	107.5	161.7	162.0	98.4	98.6	156.0	156.6	152.4	153.4
1984 *	107.4	106.6	120.8	120.7	112.5	113.2	169.3	169.5	98.8	98.9	157.7	158.9	157.3	158.1
1982:	100.9	99.8	107.1	106.4	106.1	106.7	151.4	151.0	96.9	96.7	150.0	151.4	145.9	146.5
	100.3	99.4	106.4	106.0	106.1	106.7	153.9	153.2	97.2	96.8	153.4	154.2	147.9	148.6
	100.9	100.3	106.1	106.0	105.1	105.7	156.7	156.0	97.3	96.9	155.3	155.6	148.7	149.3
	101.6	100.5	105.8	105.2	104.1	104.7	158.4	157.9	98.0	97.7	155.9	157.1	149.3	150.2
1983:	102.2	101.6	106.9	106.7	104.7	105.1	160.2	160.1	99.0	99.0	156.8	157.6	151.0	151.9
	103.6	103.6	110.1	110.4	106.2	106.5	161.0	161.5	98.5	98.8	155.4	155.9	151.7	152.7
	104.3	104.1	112.5	112.7	107.9	108.2	161.8	162.4	98.0	98.3	155.1	155.9	152.7	153.8
V	104.7	104.4	114.7	115.2	109.5	110.3	164.2	164.0	98.4	98.2	156.8	157.1	154.2	155.2
1984: 	107.0	105.2 106.6 106.3 106.7	117.8 121.0 121.5 122.8	118.0 121.0 121.3 122.4	111.4 113.0 113.4 113.8	112.3 113.6 114.1 114.7	166.7 167.5 169.3 171.0	166.5 168.0 169.5 170.9	98.6 98.2 98.4 98.5	98.5 98.5 98.5 98.4	157.7 156.5 158.0 158.5	158.3 157.6 159.5 160.2	155.6 156.7 158.1 158.8	156.3 157.3 159.0 159.9

<sup>1</sup> Output refers to gross domestic product originating in the sector in 1972 dollars.
2 Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.
3 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.
4 Hourly compensation divided by the consumer price index for all urban consumers.
5 Current dollar gross domestic product divided by constant dollar gross domestic product.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-41.—Changes in productivity and related data, business sector, 1948-84 [Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

	Output of all	per hour Dersons	Outp	ut 1	Hours perso	of all	Compensa hou	ation per	Real com per h	pensation our <sup>4</sup>	Unit lab	or costs	Implici defla	t price tor <sup>5</sup>
Year or quarter	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector
1948 1949	5.3 1.5	4.3 2.0	6.1 -1.9	6.0 -1.9	0.7 -3.3	1.6 -3.8	8.5 1.6	8.6 2.9	0.7 2.6	0.8 3.9	3.0 .1	4.1 .9	7.0 1.0	6.8 .9
1950 1951 1952 1953 1954	2.8 3.2 3.2	6.0 1.7 2.3 1.7 1.4	9.1 5.8 3.3 4.3 -1.8	9.4 6.5 3.4 4.2 2.0	1.1 2.9 .1 1.0 -3.3	3.1 4.6 1.0 2.5 -3.4	7.1 9.8 6.4 6.4 3.2	5.8 8.8 5.5 5.6 3.2	6.0 1.7 4.1 5.7 2.8	4.8 .7 3.2 4.8 2.7	8 6.9 3.0 3.1 1.6	2 6.9 3.1 3.9 1.7	1.6 7.4 1.1 .9 1.0	1.7 6.6 1.8 2.0 1.4
1955 1956 1957 1958	1.0 2.5 3.1	3.9 .3 1.7 2.4 3.4	7.9 2.6 1.0 1.6 7.3	8.2 2.8 1.2 -1.9 7.9	3.8 1.5 -1.5 -4.5 3.9	4.1 2.5 5 -4.2 4.4	2.5 6.5 6.5 4.4 4.3	3.6 6.0 5.7 3.8 4.0	2.8 4.9 2.9 1.6 3.5	3.9 4.4 2.2 1.0 3.2	-1.4 5.5 3.9 1.3 1.0	3 5.7 3.9 1.4 .6	1.6 3.3 3.5 1.3 2.0	2.2 3.5 3.6 .9 2.3
1960 1961 1962 1963 1964	3.3 3.8 3.7	.8 2.9 3.6 3.2 3.9	1.6 1.7 5.5 4.3 6.0	1.5 1.8 5.8 4.4 6.4	-1.5 1.6 .6 1.6	.6 -1.1 2.2 1.1 2.4	4.2 3.8 4.6 3.7 5.2	4.3 3.2 4.0 3.5 4.5	2.6 2.7 3.4 2.5 3.8	2.7 2.1 2.8 2.2 3.2	2.7 .5 .7 0 .8	3.5 .3 .4 .2 .6	1.4 .6 1.5 1.1 1.0	1.5 .6 1.5 1.2
1965 1966 1967 1968 1969	3.1 2.3 3.3	3.1 2.5 1.9 3.3 3	6.8 5.5 2.2 5.1 2.9	6.9 5.9 2.1 5.3 2.9	3.2 2.3 0 1.7 2.6	3.7 3.4 .3 2.0 3.2	3.9 7.0 5.3 7.8 7.0	3.4 6.0 5.5 7.5 6.5	2.2 4.0 2.4 3.5 1.5	1.7 3.0 2.6 3.2 1.1	.3 3.8 3.0 4.4 6.7	.3 3.5 3.5 4.1 6.8	1.9 3.0 2.7 4.0 4.9	1.6 2.8 3.2 4.0 4.7
1970 1971 1972 1973 1974	.8 3.6 3.5 2.6 -2.4	.3 3.3 3.7 2.4 -2.5	8 3.0 6.6 6.6 -2.0	-1.0 2.9 6.9 6.8 -2.0	1.6 5 3.0 3.9 .4	-1.3 4 3.1 4.3 .5	7.3 6.6 6.5 8.0 9.4	7.0 6.6 6.7 7.6 9.4	1.3 2.2 3.1 1.6 -1.4	1.0 2.2 3.3 1.3 -1.4	6.4 2.9 2.9 5.3 12.1	6.6 3.1 2.8 5.0 12.2	4.5 4.4 3.4 5.5 9.5	4.8 4.5 3.0 3.8 10.2
1975 1976 1977 1978 1979		2.0 3.2 2.2 .6 -1.5	-2.0 6.4 6.6 5.5 2.3	-2.2 6.7 6.7 5.7 2.2	-4.1 3.0 4.1 4.9 3.5	-4.1 3.4 4.4 5.1 3.7	9.6 8.5 7.7 8.5 9.4	9.6 8.1 7.5 8.6 9.0	.5 2.6 1.2 .8 -1.7	.4 2.2 1.0 .8 -2.0	7.3 5.1 5.1 8.0 10.7	7.5 4.7 5.2 8.0 10.7	9.8 4.7 5.6 7.5 9.0	10.3 5.1 5.7 7.1 8.8
1980 1981 1982 1983 1984 p	1.9	7 1.5 .2 3.5 3.1	-1.2 2.5 -2.6 4.4 8.8	-1.4 2.1 -2.6 5.0 8.5	7 .6 -2.8 1.6 5.0	6 6 -2.8 1.5 5.2	10.4 9.4 8.1 4.3 4.7	10.3 9.6 8.0 4.9 4.6	-2.7 9 1.9 1.1 .4	-2.8 7 1.7 1.6 .3	11.0 7.3 7.9 1.6 1.1	11.1 8.0 7.7 1.4 1.5	9.3 9.6 5.3 3.0 3.2	10.0
1982: !!!! !!!!	-2.3 2.4	2.5 -1.6 3.6 1.1	-3.6 -2.6 -1.3 -1.2	-3.8 -1.4 1 -3.0	-5.9 3 3.6 3.8	-6.1 -3.6 -4.0	10.7 6.8 7.5 4.5	10.5 5.9 7.5 5.1	6.7 1.3 .3 2.9	6.5 .4 .3 3.5	8.0 9.4 5.0 1.7	7.9 7.6 3.7 4.0	3.7 5.4 2.3 1.8	3.8 5.7 2.0 2.4
1983: 	5.9 2.8	4.4 8.1 2.1 1.0	4.4 12.4 9.3 7.8	6.0 14.3 8.7 9.1	2.2 6.1 6.4 6.2	1.5 5.7 6.5 8.0	4.4 2.2 2.0 6.1	5.7 3.5 2.2 4.1	4.1 -2.1 -2.1 1.6	5.4 8 1.9 3	2.2 3.5 8 4.6	1.3 4.2 .1 3.0	4.6 1.9 2.5 4.1	4.6 2.2 2.7 3.7
1984: 	4.0 4.9 6	2.9 5.5 -1.1 1.7	1	10.3 10.6 .7 3.9	7.2 6.0 1.2 1.6	ļ	6.2 1.9 4.4 4.1	6.1 3.7 3.6 3.5	1	1.0 0 0 3	2.1 -2.9 3.7 1.5	1	(	1

<sup>1</sup> Output refers to gross domestic product originating in the sector in 1972 dollars.
2 Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data:
3 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.
4 Hourly compensation divided by the consumer price index for all urban consumers.
5 Current dollar gross domestic product divided by constant dollar gross domestic product.

Note.—Data relate to all persons engaged in the sector. Percent changes are based on original data and therefore may differ slightly from percent changes based on indexes in Table B-40.

## PRODUCTION AND BUSINESS ACTIVITY

TABLE B-42.—Industrial production indexes, major industry divisions, 1929-84
[1967=100; monthly data seasonally adjusted]

İ	Total		Manufacturing	3	Mi-	1 64111
Year or month	industrial production	Total	Dura- ble	Non- durable	Min- ing	Utili ties
967 proportion	100.00	87.95	51.98	35.97	6.36	5.6
929	21.6	22.8	22.5	23.2	43.1	7.
933	13.7	14.0	9.1 17.7	19.9 26.1	30.6	6. 10.
939	21.7	<b>−21.5</b>	1	1	42.1	
940	25.0 31.6	25.4 32.4	23.5 31.4	27.5 33.3	46.8 49.7	11. 13.
941 942	36.3	37.8	39.9	34.6	51.3	14.
943	44.0	47.0	54.2 59.9	l 37.1	52.5	16. 17.
944	47.4	50.9	59.9	38.6	56.2	17.
945946	40.7 35.0	42.6 · 35.3	45.2 31.6	38.5 39.7	55.1 54.2	17. 18
947	39.4	39.4	37.7	41.3	61.3	20
948	41.1	40.9	39.3	42.7	64.4	22
949	38.8	38.7	35.7	42.0	57.1	23
950	44.9	45.0	43.5	46.7	63.8 70.0	27 31
951 952	48.7 50.6	48.6 50.6	48.9 51.9	48.3 49.2	69.4	33
953	54.8	55.2	58.7	49.2 51.2 51.6	71.2	33 36 39
954	51.9	51.5	51.8	51.6	69.9	39
955	58.5 61.1	58.2 60.5	59.2 61.1	57.2 60.1	77.9 82.0	43
956 957	61.9	61.2	61.6	61.1	82.1	43 48 51
958	57.9	57.0	53.9	61.6	75.3	53
059	64.8	64.2	61.9	67.7	78.7	59
960	66.2	65.4	62.9	69.3	80.3	63
961	66.7	65.6	61.8	71.5	80.8	67 72
962 963	72.2 76.5	71.5 75.8	68.6 73.1	75.8 80.0	83.1 86.4	1 11
964	81.7	81.0	78.3	85.2	89.9	83
965	89.8	89.7	89.0	90.9	93.2	88
966	97.8	97.9	98.9	96.7	98.2	95
967 968	100.0 106.3	100.0 106.4	100.0 106.5	100.0 106.2	100.0 104.2	100 108
969	111.1	111.0	110.6	111.5	108.3	iii
970	107.8	106.4	102.3	112.3	112.2	124
971	109.6	108.2	102.4	116.6	109.8	130
372l	119.7	118.9	113.7	126.5	113.1	139
773 774	129.8 129.3	129.8 129.4	127.1 125.7	133.8 134.6	114.7 115.3	145 143
)75l	117.8	116.3	109.3	126.4	112.8	140
376	130.5	130.3	122.3	141.8	114.2	15
977	138.2	138.4	130.0	150.5	118.2 124.0	150 16
978 979	146.1 152.5	146.8 153.6	139.7 146.4	156.9 164.0	125.5	166
980	147.0	146.7	136.7	161.2	132.7	168
981	151.0	150.4	140.5	164.8	142.2	169
382l	138.6	137.6	124.7	156.2	142.2 126.1	168
983 984 <i>P</i>	147.6 163.5	148.2 165.0	134.5 154.7	168.1 179.8	116.6 125.9	172 180
983:	103.3	165.0	154./	1/9.0	123.9	100
Jan	137.4	136.7	122.5	157.4	121.9	163
Feb	138.1	138.2	122.5 123.9	159.0	115.6	162
Mar	140.0	140.4	126.3	160.7	112.6	165
Apr May	142.6 144.4	143.1 145.1	129.1 131.0	163.3 165.4	111.6 112.8	169 169
June	146.4	147.4	133.2	167.8	112.6	169
July	149.7	150.6	136.8	170.6	115.0	176
Aug	151.8	152.8	138.8	172.9	116.1	179
Sept	153.8	155.1	141.6	174.6	117.1	179
Oct	155.0 155.3	156.2 156.4	142.8	175.6 174.8	118.3	176 176
Dec	156.2	156.8	143.6 145.0	173.9	121.1 123.7	182
						"
84: Jan	158.5	159.5	148.6	175.2	124.8	18
Feb	160.0	161.4	150.5	177.2	124 1	17
Mar	160.8	162.1	151.4	177.6 179.1	123.8	18
Apr	162.1 162.8	163.4	152.6	179.1 179.9	123.3	18: 18:
May	162.8 164.4	164.2 165.7	153.3 154.9	179.9	123.8 123.3 125.0 127.0	18
June	204,4	1 -55.7	ı			1
June	165.0	1672				
June	165.9 166.0	167.3 167.6	157.2 157.8	181.8 181.7	129.9 128.3	
July	166.0 165.0	167.6 166.6	157.8 157.1	181.7 180.3	128.3 128.7	180 180
July	166.0	167.6	157.8	181.7	129.9 128.3 128.7 123.8 125.4	181 180 180 180

Source: Board of Governors of the Federal Reserve System.

TABLE B-43.—Industrial production indexes, market groupings, 1947-84 [1967=100; monthly data seasonally adjusted]

				Fina	produc	ts		_			Materials	
	Total		Cor	sumer goo	ds 1		Equipmen	it	Inter-			
Year or month	industrial production	Total	Total	Auto- motive products	Home goods	Total	Busi- ness	De- fense and space	mediate products	Total	Dura- ble goods	Non- durable goods
1967 proportion	100.00	47.82	27.68	2.83	5.06	20.14	12.63	7.51	12.89	39.29	20.35	10.47
1947	39.4	38.6	42.4 43.7	45.3	37.5	30.6	38.0	10.3	41.9	39.5	38.3	
1947 1948 1949	41.1 38.8	40.0 38.8	43.7 43.4	47.4 47.0	39.1 36.2	32.2 28.7	39.5 34.5	12.1 12.7	44.3 42.0	39.5 41.2 37.6	39.4 35.3	
1950	44.9	43.7	49.6	59.1	49.9	31.1	37.0	14.9	48.8	45.0	44.4	
1051	48.7 50.6	47.2 50.7	49.1 50.2	52.3 47.1	43.0 43.0	43.3 51.9	45.2 51.2	36.6 51.4	51.3 50.9	49.8 50.5	50.5	
1952 1953 1954 1955	54.8	54.1 51.3	53.2 52.9	59.5	48.6	56.3	53.3	61.6	54.5 54.3	56.1	51.6 60.3 52.0 63.7	
1954	51.9	51.3	52.9	55.4 73.6	44.9 53.0	49.3	46.8	54.2 49.7	54.3 61.7	51.8 61.3	52.0	45.9 52.5 54.9 54.7
1955	58.5 61.1	55.4 58.6	59.0 61.2	60.6	55.7	50.4 55.3	50.8 58.8	49.7	64.4	62.8	63.9	52.5 54.9
1957	61.9	58.6 60.3	62.6	63.5	54.5	57.5	61.1	50.7	64.4	62.8	63.9 63.8 53.7	54.7
1956	57.9 64.8	57.6 63.2	62.1 68.1	50.5 63.3	51.4 59.0	51.5 56.5	51.5 57.9	50.9 53.7	63.0 69.5	62.8 62.8 56.5 65.2	53.7 64.0	54.4 62.1
1303	04.0	03.2	00.1			30.3	i	33.7	l .	03.2	04.0	l
1960	66.2	65.3 65.8	70.7	72.5	59.4 61.3	58.1 57.3	59.4 57.7	55.1 56.0	70.0	66.1	64.8 63.3	63.2
1961	66.7 72.2 76.5	71.4	72.2 77.1	66.1 80.1	66.5	57.3 63.7	57.7 62.7	64.9	71.4 75.7	66.2 72.1 76.7	70.4	65.8 71.3
1963	76.5	71.4 75.5	81.3	87.7	66.5 71.8	67.5	65.8	69.9	75.7 79.9	76.7	70.4 75.1	75.6
		79.7 87.6	85.9 92.6	91.9 113.3	78.4 88.9	71.4 80.7	73.7 84.4	67.7 74.9	85.2 90.6	82.9 92.4	81.9 93.8	75.6 82.2 90.3
1965	97.8	95.9	97.3	112.8	97.9	94.0 100.0	97.7	88.1	962	100.7	1 1033	97.5
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1 100 0	100.0	1000
1969	106.3 111.1	106.2 109.6	105.9 109.8	119.4 118.1	106.4 113.2	106.5 109.3	105.5 112.5	108.2 104.0	100.0 106.3 112.9	106.5 112.5	100.0 106.2 112.1	108.8 115.7
			[									l
1970	107.8 109.6	105.3 106.3 115.7	109.0 114.7	98.8 124.4	110.2	100.1 94.7	107.0 104.1	88.5 78.8	112.9 116.7	109.2 111.3 122.3	103.8	115.4 120.2
1972	119.7	115.7	124.4	141.4	115.6 129.5	103.8	118.0	79.9	126.5	122.3	104.9 117.7	132.9 142.2
1973	129.8 129.3	1244	131.5	153.0	142.5	114.5	134.2 142.4	81.4	137.2	1 133 9	134.6 132.7 109.1 128.0	142.2
1974	117.8	118.2	128.9 124.0	132.8 125.8 155.7	136.8 118.8	120.0	128.2	82.4 80.0	135.3 123.1 137.2	132.4 115.5 131.7	109.1	142.6 126.6 147.8
1976	130.5	127.6	124.0 137.1	155.7	134.1	114.6	128.2 135.4	79.8	137.2	131.7	128.0	147.8
1970 1971 1972 1973 1974 1975 1976 1976 1977	138.2 146.1	125.1 118.2 127.6 135.9 142.2	145.3 149.1	175.6 179.9	141.9 147.7	123.0 132.8	147.8 160.3	81.3 86.5	145.1 154.1	138.6 148.3	136.1 149.0	155.6 165.6
1979	152.5	147.2	150.8	167.7	149.2	142.2	171.3	93.4	160.5	156.4	157.8	175.9
	i e	145.3	145.4	132.8	138.9	145.2	173.2	98.2	151.9	147.6	143.0	171.5
1980 1981	151.0	149.5 141.5	147.9	132.8 137.9	142.0	151.8	181.1	102.7	154.4 143.3	151.6 133.7	149.1	174.6 157.5
1982	138.6 147.6	141.5	142.6 151.7	129.5 158.2	129.1 141.4	139.8 140.8	157.9 153.3	109.4 119.9	143.3 156.6	133.7	125.0 138.6	15/.5
1982 1983 1984 P	163.5	147.1 162.7	161.8	181.4	151.5	163.8	180.7	135.5	172.5	145.2 161.5	161.8	174.5 185.0
1983:										i		1
Jan	137.4 138.1 140.0	140.1 138.9 139.9	143.6	136.2	129.1 128.8 132.8	135.3 132.7	146.6	116.4	143.7	132.0 134.9 137.6	121.5 125.3 128.7	159.7
Feb Mar	138.1	138.9	143.4 144.3	144.3 142.6	132.8	133.8	142.7 143.7	116.1 117.0	145.3 147.8	134.9	123.3	164.0 167.5
Apr	142.6	142.8	147.7	144.9 152.2	138.1	136.2	146.9	118.2	150.8 152.2	139.7	132.4 134.7	168.7
Apr	144.4 146.4	144.5 146.4	150.4 152.4	152.2 160.0	141.8 143.2	136.5 138.2	147.7 150.2	117.6 118.0	152.2 154.5	141.7 143.7	134.7	172.1 174.3
Inlu	149.7	149 0	15/19	167.0	144.9	141.0	153.3	120.4	158.1	147.8	141.1	177.0
July Aug Sept Oct	151.8	150.7	156.3 157.3 156.9 156.1	168.1	146.4	143.1	156.6	120.2 121.8	162.2	149.7 152.2	144.2 147.4	178.0
Sept	153.8 155.0 155.3	150.7 152.1 152.7 153.2	157.3	168.1 172.9 171.3	148.8 148.4 147.2	144.9 147.0	158.7 161.3	121.8 122.9	1 165.4	152.2	147.4 149.4	182.3 185.3
Nov	133.3	153.2	156.1	1/1.5	147.2	149.1	164.1	124.0	166.5 165.5	154.0 154.5	150.3	184.8
Dec	156.2	155.2	157.7	178.4	147.5	151.8	167.3	125.7	165.4	154.5	151.3	180.3
1984:												
lan	158.5	157.5	159.5	184.5	151.5	154.9 156.1	170.7	128.3 129.5	167.8	156.6	154.6	181.2
reu Mar	160.0 160.8	158.0 158.6	159.4 160.2	182.1 184.1	151.5 151.3	156.4	171.9 172.1	130.1	169.0 170.2	159.4 160.4	158.6 159.5	184.1 185.9
FebAprApr	162.1 162.8	160.2 161.1	161.4	184.1 180.9	151.7	156.4 158.5	173.5	133.2	170.2 171.0	161.5 162.0	159.5 161.3	185.7 187.4
May June	162.8 164.4	161.1 163.1	161.7 163.0	179.8 184.3	151.1 152.0	160.3 163.3	176.5 181.1	133.1 133.5	171.6 173.5	162.0 162.9	161.6 163.0	187.4 186.7
Inlu	165.9		163.8	185.0	151.8	167.0	185.5	135.9	175.8	163.5		186.5
Aug	166.0	165.2 165.1	162.5	181.8	151.9	168.7	187.6	136.8	175.1	164.0	164.2 165.3	186.7
Sept	165.0	164.6	161.6	173.0	152.0	168.9	186.4	139.5 141.1	175.1 173.0 173.7	162.8 160.7	164.3 163.0	184.0 182.5
Nov P	164.5 165.2	164.6 165.2 166.0	161.8 162.8	171.3 184.2	151.3 150.2	170.0 170.2	187.1 187.1	141.8	1/3./	161.5	163.0	184.6
July	166.2	167.0	163.7	186.5	150.9	171.6	188.5	143.8	174.7	162.3	163.3	186.5

Also includes clothing and consumer staples, not shown separately.
 Also includes energy materials, not shown separately.
 Source: Board of Governors of the Federal Reserve System.

TABLE B-44.—Industrial production indexes, selected manufactures, 1947-84 [1967=100; monthly data seasonally adjusted]

				Durable ma	enufacture	s			No	ndurable n	nanufactu	res
Voor orth		nary tals	Fabri-	Non-	Electri-	Transp equi	ortation oment	Lumber	Annorel	Printing	Chem-	
Year or month	Total	iron and steel	cated metal prod- ucts	elec- trical machin- ery	cal machin- ery	Total	Motor vehicles and parts	and prod- ucts	Apparel prod- ucts	and publish- ing	icals and <b>prod</b> - ucts	Foods
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
947 948 949	63.3 65.8 55.4		49.9 50.8 45.8	39.0 39.2 33.4	22.2 23.0 21.6	31.8 34.8 34.9		58.9 61.3 54.1	57.8 60.3 59.7	43.3 45.4 46.6	19.7 21.3 21.0	55.8 55.2 55.9
950 951	69.7 75.8 69.2		56.1 59.9 58.5	37.5 47.7 51.9	29.6 29.8 34.0	41 8		65.7 65.5	64.3 63.1	48.9 49.7 49.7	26.2 29.7 31.1	57.9 59.0 60.2
953 954 955	78.5 63.5 82.5	70.1	66.0 59.4 67.8	54.0 46.1 50.6	39.0 34.7 39.9	46.6 54.2 68.0 59.2 68.0	60.5 81.2	64.7 68.4 68.0 75.9	66.3 67.2 66.4 73.3	52.0 54.1 59.5	33.6 34.1 39.8	61.4 62.7 66.3
950 951 952 953 954 955 956 957 958	82.5 82.0 78.5 62.3 72.7	93.2 91.5 88.2 66.5 76.5	68.8 70.6 63.3 71.0	58.0 57.9 48.6 56.7	43.1 42.8 39.2 47.6	66.0 70.7 55.8 63.2	65.8 69.0 51.0 66.2	75.9 75.0 68.8 69.9 79.3	75.0 74.9 72.8 80.1	63.2 65.4 63.9 68.2	42.7 45.2 46.6 54.3	70.1 71.1 72.9 76.5
960 961	72.4 71.1 76.3	77.7 74.2 77.3	71.1 69.4 75.4	56.9 55.4 62.1	51.6 54.8 62.9	65.4 61.5 71.1	74.7 65.5 79.8	74.7 78.2 82.5	81.7 82.2 85.5	71.0 71.3 73.9	56.4 59.2	78.6 80.9
1963 1964 1965	82.3 92.8 102.1 108.4	84.3 95.9 105.2 108.4	77.8 82.6 90.8	66.3 75.6 85.0 98.8	64.7 68.4 81.7 97.9	78.0 80.0 95.1	88.3 90.7 115.9 113.9	86.3 92.7	89.1 92.2 97.4 99.9	77.8 82.6 87.9	65.7 71.8 78.8 87.8	83.4 86.4 90.4 92.4
980 961 1962 963 964 965 966 966 967	108.4 100.0 104.3 113.8	108.4 100.0 103.2 112.6	97.2 100.0 105.6 107.9	98.8 100.0 101.8 109.3	97.9 100.0 105.5 111.9	102.0 100.0 111.1 108.4	113.9 100.0 120.3 116.5	96.3 100.0 100.0 105.5 107.9	99.9 100.0 102.9 106.7	94.6 100.0 103.2 107.4	95.7 100.0 109.5 118.4	96.0 100.0 102.6 106.1
970 971	106.6 100.2 112.1	104.7 96.1 107.1	102.4 103.5 112.1	104.4 100.2 116.0	108.1 107.7 122.2	89.5 97.9 108.2	92.3 118.6 135.8	105.6 113.8 120.8	101.4 104.7	107.0 107.1 112.7	120.4 125.9 143.6	108.9 112.8 116.8
973 1974 1975	126.7 123.1 96.4	122.3 119.8 95.8	124.7 124.2 109.9	133.7 140.1 125.1 134.5	143.1 143.8 116.5	118.3 108.7 97.4	148.8 128.2 111.1	126.0 116.2 107.6	109.4 117.3 114.3 107.6	118.2	154.5 159.4 147.2 170.9	120.9 124.0 123.4 133.0
1970 1971 1972 1973 1973 1974 1975 1976 1977 1978	109.7 111.1 119.9 121.3	104.8 103.8 113.2 113.2	123.9 131.0 141.6 148.5	143.6 153.6 163.7	134.8 145.4 159.4 175.0	111.1 122.2 132.5 135.4	142.0 161.1 169.9 159.9	123.2 131.2 136.3 136.9	125.7 134.2 134.2 134.4	113.3 122.5 127.6 131.5 136.9	170.9 185.7 197.4 211.8	133.0 138.8 142.7 147.5
980 981 982 983 984 P	102.3 107.9 75.3 85.4 95.1	92.4 99.8 61.7 71.5 79.7	134.1 136.4 114.8 120.2 137.6	162.8 171.2 149.0 150.6 181.2	172.8 178.4 169.3 185.5 217.5	116.9 116.1 104.9 117.8 137.7	119.0 122.3 109.8 137.1 165.9	119.3 119.1 112.6 137.2 149.2	127.0 120.4	139.6 144.2 144.1 152.5 169.6	207.1 215.6 196.1 215.0 229.0	149.6 152.1 151.1 156.4 163.7
983: Jan Feb Mar	73.1	59.0	107.6 110.3	138.0	169.5	106.3	113.9	130.0		141.3	197.6	154.4
Mar Apr May June	77.9 81.2 83.1 84.9 84.8	64.3 66.9 68.5 69.5 69.7	113.9 115.3 115.5 118.5	136.2 138.6 143.1 146.1 149.5	168.9 173.8 177.2 180.1 182.4	109.6 110.1 111.4 113.8 116.6	123.0 123.2 125.5 130.4 136.2	130.2 128.7 132.1 135.8 137.4		144.0 145.9 145.7 145.2 147.4	202.3 205.7 208.5 211.0 214.7	153.0 152.0 153.7 155.6 157.7
July	85.5 87.5 90.6 95.3 92.2	71.8 75.1 78.2 84.3	122.7 126.0 127.4 126.9	154.2 157.3 158.3 159.2 161.8	188.3 189.2 195.8 198.4 200.1	119.7 121.1 124.7 125.5 127.3	142.3 144.3 150.9 150.9 152.9	141.3 141.6 142.3 141.7 141.0		152.0 157.8 161.7 162.7 162.0	218.3 220.3 224.1 228.4 225.6	159.9 159.3 158.2 157.6 157.1
Dec984:	90.4	79.2 74.1	128.5 129.2	164.3	201.5	130.8	158.9	143.8	•••••••	161.7	221.1	157.7
Jan Feb Mar Apr May June	93.2 98.4 97.5 99.3 98.2 97.9	80.7 86.0 84.4 84.0 83.5 83.5	131.7 132.8 134.9 135.5 136.5 138.7	169.5 170.9 171.9 174.9 178.8 182.0	206.2 209.9 212.0 214.6 214.5 216.0	134.9 135.2 135.8 134.5 135.0 137.2	166.3 164.4 165.8 161.9 163.0 165.3	149.3 151.2		163.4 164.8 165.2 166.3 167.5	221.5 224.8 225.0 228.3 227.9 231.0	159.4 160.0 161.2 163.1 164.2 165.1
July	94.5 94.4 94.1 93.0	76.5 77.7 77.5	140.6 140.0 139.5 140.7	186.9 189.1 187.9 187.2	221.5 221.5 222.8 221.9 224.0	140.6 141.0 137.6 137.1	169.0 169.6 162.4 161.6	146.0 148.8 149.2		169.0 172.6 173.1 170.5 172.2	231.0 231.6 231.6 230.8 229.5	164.9 164.7 164.3 165.0
Nov P Dec P	90.5 88.9	75.6 72.9	139.6 140.9	186.4 187.1	224.0 224.7	141.8 142.8	171.4 172.6	152.4		173.9 173.5	230.5	163.U

Source: Board of Governors of the Federal Reserve System.

TABLE B-45.—Capacity utilization rate, 1948-84 [Percent; quarterly data seasonally adjusted]

				Manufacturing	3				
Year or quarter	Total industry	Total	Durable goods	Non- durable goods	Primary processing	Advanced processing	Mining	Utilities	Industrial materials
1948 1949		82.5 74.2			87.2 76.2	80.0 73.3			
1950 1951 1952	1 !	82.8 85.8 85.4			88.5 90.2 84.9	79.8 83.4 85.9			
1952 1953 1954	, t	89.2 80.3 87.1				89.3 80.1 84.3			
1955 1956 1957 1958 1959		86.4 83.7 75.2 81.9			89.7 84.7 75.4 83.4	84.5 83.1 75.1 81.1			***************************************
1960 1961 1962 1963 1964		80.2 77.4 81.6 83.5 85.6			1	80.4 77.2 81.7 83.4			
1965	i	89.6			87.8 91.1	84.6 88.9			
1966 1967 1968 1969	86.9	91.1 86.9 87.2 86.3	87.1 87.2 85.9	86.8 87.1 87.0	91.4 85.7 87.7 88.5	91.2 87.7 86.9 85.2	81.5 83.9 86.0	92.4 94.2 95.6	85.9 87.3 88.3
1970 1971 1972 1973 1974	l 79.8 i	79.5 78.5 83.5 87.6 83.7	76.5 74.6 80.7 87.2 83.1	83.9 84.0 87.4 88.1 84.7	82.9 82.3 88.1 92.4 87.8	77.6 76.4 81.0 85.0 81.5	88.5 86.4 89.1 90.2 90.2	94.8 92.8 94.0 92.9 86.9	82.4 81.4 86.9 91.7 87.0
1975 1976 1977 1978	74.4 80.4 82.6 84.8 85.9	72.9 79.6 82.2 84.7 86.0	70.3 77.1 81.1 86.0 86.7	76.6 83.0 85.0 85.6 86.3	73.8 82.3 84.6 87.9 89.5	72.5 78.2 80.9 82.9 84.0	87.6 87.7 87.8 87.9 85.2	84.3 84.9 84.9 84.5 85.2	73.3 81.1 82.6 85.6 87.6
1980 1981 1982 1983 1984 P	80.2 80.2 72.1 75.3 81.6	79.6 79.4 71.1 75.2 81.7	77.8 78.2 68.2 72.4 81.5	81.8 81.1 74.8 78.8 82.1	80.3 80.8 68.9 75.8 81.8	79.2 78.7 72.3 74.9 81.7	86.4 88.6 76.6 70.5 <b>75.8</b>	84.7 83.4 81.9 81.9 83.6	80.4 80.7 70.1 75.2 82.1
1980: 	84.3 79.1 77.4 80.3	83.8 78.3 76.4 79.7	83.0 76.5 73.9 78.0	85.0 80.7 79.7 81.9	87.2 78.0 74.8 81.3	82.2 78.5 77.3 78.7	88.0 86.9 84.4 86.7	84.9 84.1 85.8 84.0	86.2 79.2 75.6 80.6
1981:	81.4 81.3 81.0 77.0	80.6 80.8 80.3 75.9	<b>79.2</b> <b>79.8</b> 79.2 74.3	82.4 82.0 81.8 78.0	83.5 82.6 81.9 75.2	<b>79.1</b> <b>79.7</b> 79.4 76.3	90.2 86.1 90.4 88.1	82.9 84.1 84.1 82.5	82.7 81.9 82.0 76.2
1982: 	74.2 72.6 71.7 69.8	72.9 71.6 71.0 69.0	70.5 <b>69.1</b> 68.1 65.1	75.8 74.7 74.8 74.0	71.5 68.8 68.6 66.8	73.7 73.1 72.3 70.2	86.2 <b>78.3</b> 71.1 70.9	83.4 82.9 81.3 80.1	73.0 70.7 69.4 67.1
1983: 	71.2 73.9 77.3 78.8	70.7 73.8 77.4 78.9	67.2 70.7 74.7 76.9	75.1 77.8 80.7 81.3	70.5 74.6 78.3 79.9	71.1 73.5 <b>76.9</b> <b>78.2</b>	70.6 67.9 <b>70.2</b> <b>73.1</b>	78.5 80.8 84.4 84.0	70.1 73.5 77.5 79.6
1984: 	80.5 81.7 82.4 81.7	80.7 81.8 82.5 81.9	79.9 81.2 82.6 82.2	81.6 82.5 82.4 81.6	81.7 82.4 81.9 81.4	80.3 81.4 82.8 82.1	75.0 75.4 77.7 75.3	83.8 85.0 83.5 82.4	81.6 82.7 82.9 81.4

TABLE B-46.—New construction activity, 1929-84
[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

				Priva	te constr	uction			Pub	lic constri	uction
Year or month	Total new construc-			lential lings <sup>1</sup>	Nonre	sidential bu constru	ildings and	d other			State and
	tion	Total	Total <sup>2</sup>	New housing units	Total	Com- mercial <sup>9</sup>	Indus- trial	Other 4	Total	Federal	State and local <sup>5</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 1941 1942 1943	12.0 14.1 8.3	5.1 6.2 3.4 2.0 2.2	3.0 3.5 1.7 .9	2.6 3.0 1.4 .7 .6	2.1 2.7 1.7 1.1 1.4	.3 .4 .2 .0	.4 .8 .3 .2 .2	1.3 1.5 1.2 .9 1.1	3.6 5.8 10.7 6.3 3.1	1.2 3.8 9.3 5.6 2.5	2.4 2.0 1.3 .7
1945 1946	5.8 14.3	3.4 12.1	1.3 6.2	.7 4.8	2.1 5.8	.2 1.2	.6 1.7	1.3 3.0	2.4 2.2	1.7 .9	1.4
New series 1947 1948 1949	26.1	16.7 21.4 20.5	9.9 13.1 12.4	7.8 10.5 10.0	6.9 8.2 8.0	1.0 1.4 1.2	1.7 1.4 1.0	4.2 5.5 5.9	3.3 4.7 6.3	.8 1.2 1.5	2.5 3.5 4.8
1950 1951 1952 1953 1954	35.4 36.8 39.1	26.7 26.2 26.0 27.9 29.7	18.1 15.9 15.8 16.6 18.2	15.6 13.2 12.9 13.4 14.9	8.6 10.3 10.2 11.3 11.5	1.4 1.5 1.1 1.8 2.2	1.1 2.1 2.3 2.2 2.0	6.1 6.7 6.8 7.3 7.2	6.9 9.3 10.8 11.2 11.7	1.6 3.0 4.2 4.1 3.4	5.2 6.3 6.6 7.1 8.3
1955	47.6 49.1 50.0	34.8 34.9 35.1 34.6 39.3	21.9 20.2 19.0 19.8 24.3	18.2 16.1 14.7 15.4 19.2	12.9 14.7 16.1 14.8 15.1	3.2 3.6 3.6 3.6 3.9	2.4 3.1 3.6 2.4 2.1	7.3 8.0 9.0 8.8 9.0	11.7 12.7 14.1 15.5 16.1	2.8 2.7 3.0 3.4 3.7	8.9 10.0 11. 12. 12.3
1960 1961 1962 1963 1964	56.4 60.2 64.8	38.9 39.3 42.3 45.5 47.7	23.0 23.1 25.2 27.9 28.0	17.3 17.1 19.4 21.7 21.8	15.9 16.2 17.2 17.6 19.7	4.2 4.7 5.1 5.0 5.4	2.9 2.8 2.8 2.9 3.6	8.9 8.7 9.2 9.7 10.7	15.9 17.1 17.9 19.4 20.4	3.6 3.9 3.9 4.0 3.9	12.1 13.1 14.0 15.0
1965	76.8 78.5 87.5	52.0 52.8 52.9 59.9 66.3	27.9 25.7 25.6 30.6 33.2	21.7 19.4 19.0 24.0 25.9	24.1 27.1 27.3 29.3 33.1	7.8 9.4	6.0 6.8		22.1 24.0 25.5 27.6 28.0	4.0 4.0 3.5 3.4 3.3	18.0 20.0 22 24.1 24.1
1970 1971 1972 1973 1974	110.3 124.4 138.4	67.1 80.4 94.2 105.9 100.9	31.9 43.3 54.3 59.7 50.4	24.3 35.1 44.9 50.1 40.6	35.3 37.2 40.0 46.2 50.5	9.8 11.6 13.5 15.5 15.9	6.5 5.4 4.7 6.2 7.9	19.0 20.1 21.8 24.5 26.7	28.1 29.9 30.2 32.5 38.3	3.3 4.0 4.4 4.9 5.3	24.1 25.1 25.1 27.1 33.0
1975	173.8 205.6	95.1 112.0 135.7 159.7 181.6	46.5 60.5 81.0 93.4 99.0	34.4 47.3 65.7 75.8 78.6	48.6 51.4 54.7 66.2 82.6	12.8 12.8 14.8 18.6 24.9	8.0 7.2 7.7 11.0 15.0	27.8 31.5 32.2 36.7 42.7	40.9 39.1 38.2 45.9 48.8	6.3 7.0 7.3 8.4 8.6	34.0 32.3 30.0 37.4
1980 1981 1982 1983 1984 P.	239.1	175.7 185.8 179.1 211.4 256.2	87.3 86.6 74.8 111.7 135.1	63.1 62.7 51.9 86.1 102.8	88.4 99.2 104.3 99.6 121.0	29.9 34.2 37.3 35.8 49.4	13.8 17.0 17.3 12.9 14.5	44.7 47.9 49.7 51.0 57.2	55.0 53.3 51.0 50.8 55.8	9.6 10.4 10.1 10.6 11.2	45.4 42.9 40.8 40.4 44.6

TABLE B-46.—New construction activity, 1929-84—Continued

(Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates)

				Priva	te constr	uction			Pub	lic constru	uction
Year or month	Total new construc-			dential lings <sup>1</sup>	Nonre	sidential bu constru	ildings an	d other			0
	tion	Total	Total 2	New housing units	Total	Com- mercial <sup>3</sup>	Indus- trial	Other •	Totai	Federal	State and local <sup>6</sup>
1983: Jan	245.0 243.2 248.7	191.0 195.3 195.2 200.1 205.2 213.1	90.7 95.6 98.5 103.5 108.5 113.7	64.3 70.2 73.8 78.6 83.2 88.2	100.3 99.7 96.7 96.5 96.7 99.4	36.4 35.0 34.0 33.4 33.5 34.8	15.1 13.8 13.6 13.0 12.8 13.3	48.8 50.9 49.1 50.2 50.3 51.4	53.8 49.7 48.0 48.7 49.7 51.0	10.6 10.3 10.5 10.6 10.2 9.9	43.1 39.4 37.6 38.1 39.5 41.1
July Aug Sept Oct Nov Dec	278.0 281.7 267.9 267.0	220.2 224.7 229.6 219.2 217.4 213.3	120.9 126.8 128.6 118.6 113.5 109.7	91.2 93.9 93.8 94.2 94.9 95.0	99.3 97.9 101.0 100.6 104.0 103.6	35.6 36.4 37.2 37.4 38.1 37.4	13.0 13.6 12.6 10.4 11.6 12.2	50.7 47.9 51.3 52.8 54.2 54.0	52.0 53.3 52.1 48.8 49.6 50.6	11.3 10.9 10.9 10.0 10.4 11.5	40.7 42.3 41.2 38.8 39.2 39.1
1984: Jan	300.4 309.7 308.6 316.4	230.0 248.1 255.0 254.1 261.2 257.8	121.9 137.4 141.1 136.6 138.4 136.4	96.9 102.3 102.4 102.7 106.4 105.0	108.0 110.7 113.9 117.5 122.8 121.4	41.1 42.1 45.3 47.4 49.7 48.9	12.9 14.0 14.4 13.6 15.2 14.1	54.1 54.7 54.2 56.5 57.9 58.4	50.9 52.3 54.8 54.5 55.2 57.5	10.2 10.6 10.9 11.1 11.2 11.8	40.8 41.7 43.8 43.4 44.0 45.7
July	318.0 318.7 317.9 316.0	258.2 261.2 260.9 261.2 259.8 262.8	137.8 138.9 137.1 135.2 132.2 130.4	104.6 105.0 103.2 103.4 102.1 100.8	120.4 122.2 123.8 126.0 127.6 132.3	48.4 49.5 50.9 53.5 54.6 58.2	13.8 14.6 14.9 14.9 15.4 15.7	58.2 58.1 58.0 57.5 57.7 58.5	56.0 56.9 57.8 56.7 56.1 56.0	10.5 11.3 12.1 11.3 11.5 11.3	45.4 45.6 45.7 45.4 44.6 44.7

<sup>Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.

Total includes additions and alterations and nonhousekeeping units, not shown separately.

Office buildings, warehouses, stores, restaurants, garages, etc.

Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities, and all other private.

Includes Federal grants-in-aid for State and local projects.</sup> 

Source: Department of Commerce, Bureau of the Census.

TABLE B-47.—New housing units started and authorized, 1959-84 [Thousands of units]

		Ne	w housing ur	its started			New priva	te housing (	inits auth	orized *
	Private an	d public 1	Privat	te (farm and	1 nonfarm	) 1		Туре	of struct	ıre
Year or month	Total			Туре	of struct	ıre	Total		24.4	£
	(farm and nonfarm)	Nonfarm	Total	1 unit	2 to 4 units	5 units or more		1 unit	2 to 4 units	5 units or more
1959	1,553.7	1,531.3	1,517.0	1,234.0	28	3.0	1,208.3	938.3	77.1	192.9
1960	1,365.0 1,492.5 1,634.9	1,274.0 1,336.8 1,468.7 1,614.8 1,534.0	1,252.2 1,313.0 1,462.9 1,603.2 1,528.8	994.7 974.3 991.4 1,012.4 970.5	25 33 47 59 108.4	7.4 8.7 1.5 0.8 450.0	998.0 1,064.2 1,186.6 1,334.7 1,285.8	746.1 722.8 716.2 750.2 720.1	64.6 67.6 87.1 118.9 100.8	187. 273. 383. 465. 464.
1965 1966 1967 1968	1,195.8 1,321.9 1,545.4	1,487.5 1,172.8 1,298.8 1,521.4 1,482.3	1,472.8 1,164.9 1,291.6 1,507.6 1,466.8	963.7 778.6 843.9 899.4 810.6	86.6 61.1 71.6 80.9 85.0	422.5 325.1 376.1 527.3 571.2	1,239.8 971.9 1,141.0 1,353.4 1,323.7	709.9 563.2 650.6 694.7 625.9	84.8 61.0 73.0 84.3 85.2	445. 347. 417. 574. 612.
1970 1971 1972 1973 1974	2,084.5 2,378.5 2,057.5	(3) (3) (3) (3) (3)	1,433.6 2,052.2 2,356.6 2,045.3 1,337.7	812.9 1,151.0 1,309.2 1,132.0 888.1	84.8 120.3 141.3 118.3 68.1	535.9 780.9 906.2 795.0 381.6	1,351.5 1,924.6 2,218.9 1,819.5 1,074.4	646.8 906.1 1,033.1 882.1 643.8	88.1 132.9 148.6 117.0 64.3	616. 885. 1,037. 820. 366.
1975 1976 1977 1978 1979	1,547.6 12,001.7 2,036.1	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1,160.4 1,537.5 1,987.1 2,020.3 1,745.1	892.2 1,162.4 1,450.9 1,433.3 1,194.1	64.0 85.9 121.7 125.0 122.0	204.3 289.2 414.4 462.0 429.0	939.2 1,296.2 1,690.0 1,800.5 1,551.8	675.5 893.6 1,126.1 1,182.6 981.5	63.9 93.1 121.3 130.6 125.4	199. 309. 442. 487. 444.
1980 1981 1982 1983 1984 *	1,100.3 1,072.1 1,712.5	(3) (3) (3) (3) (3)	1,292.2 1,084.2 1,062.2 1,703.0 1,744.7	852.2 705.4 662.6 1,067.6 1,079.9	109.5 91.1 80.0 113.5 121.8	330.5 287.7 319.6 522.0 543.0	1,190.6 985.5 1,000.5 1,605.2 1,645.4	710.4 564.3 546.4 901.5 893.6	114.5 101.8 88.3 133.6 140.0	365. 319. 365. 570. 611.
					Sea	sonally ad	usted annua	l rates		
1983: Jan Feb Mar Apr May June	96.7 135.8 136.4 175.5	(3) (3) (3) (3) (3) (3)	1,632 1,706 1,592 1,549 1,779 1,743	1,087 1,066 1,016 1,030 1,150 1,124	97 116 103 113 102 118	448 524 473 406 527 501	1,431 1,456 1,492 1,556 1,660 1,764	862 831 859 860 943 1,010	118 115 124 138 136 141	45 510 50 55 58 61
July	177.8 156.8 159.9	(3) (3) (3) (3) (3) (3)	1,793 1,873 1,679 1,672 1,730 1,694	1,048 1,124 1,038 1,017 1,074 1,021	127 109 115 96 130 133	618 640 526 559 526 540	1,752 1,671 1,540 1,650 1,649 1,602	930 900 864 905 919 913	138 132 130 144 141 143	684 639 546 60 589 546
1984: Jan	130.4 138.1 173.0 182.2	(3) (3) (3) (3) (3)	1,980 2,262 1,662 2,015 1,794 1,877	1,301 1,463 1,071 1,196 1,131 1,084	114 148 137 169 116 107	565 651 454 650 547 686	1,799 1,902 1,727 1,758 1,745 1,768	989 1,083 974 957 913 916	155 151 162 155 163 151	65: 66: 59: 64: 66: 70:
July	163.1 147.8 149.6 152.7 123.7 96.9	(3) (3) (3) (3) (3) (3)	1,754 1,554 1,683 1,535 1,554 1,587	990 932 1,016 964 1,009 1,064	118 113 109 106 124 122	646 509 558 465 421 401	1,565 1,506 1,440 1,418 1,591 1,588	823 803 841 <b>794</b> <b>824</b> <b>822</b>	138 140 122 116 138 123	604 563 477 508 629 643

¹ 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.

2 Authorized by issuance of local building permit: in 16,000 permit-issuing places beginning 1978; in 14,000 places for 1972-77; in 13,000 places for 1967-71; in 12,000 places for 1963-66; and in 10,000 places prior to 1963.

3 Not available separately beginning January 1970.

Source: Department of Commerce, Bureau of the Census.

TABLE B-48.—Business expenditures for new plant and equipment, 1947-85 [Billions of dollars; quarterly data at seasonally adjusted annual rates]

			In	dustries	surveyed	quarte	rly				A	ddenda		
		Ma	nufactur	ing		Nor	ımanufactu	ring		Total		Nonn	nanufact	turing
Year or quarter	All indus- tries	Total	Dura- ble goods	Non- durable goods	Total 1	Min- ing	Trans- portation	Public utili- ties	Com- mercial and other	non- farm busi- ness <sup>2</sup>	Manu- facturing	Total	Sur- veyed quar- terly	Sur- veyed annu- ally <sup>3</sup>
1947 1948 1949	19.64 22.27 19.78	8.73 9.25 7.32	3.39 3.54 2.67	5.34 5.71 4.64	10.91 13.02 12.47	0.69 .93 .88	2.21 2.66 2.30	1.64 2.67 3.28	6.38 6.77 6.01	21.80 25.46 23.54	8.73 9.25 7.32	13.07 16.21 16.22	10.91 13.02 12.47	2.16 3.19 3.76
1950 1951 1952 1953 1954	21.07 26.26 27.59 29.35 28.36	7.73 11.07 12.12 12.43 12.00	3.22 5.12 5.75 5.71 5.49	4.51 5.95 6.37 6.72 6.51	13.34 15.19 15.47 16.92 16.36	.84 1.11 1.21 1.25 1.29	2.38 3.05 2.99 2.97 2.42	3.42 3.75 3.96 4.61 4.23	6.70 7.29 7.31 8.09 8.42	25.32 30.83 31.59 33.58 33.13	7.73 11.07 12.12 12.43 12.00	17.59 19.76 19.47 21.16 21.13	13.34 15.19 15.47 16.92 16.36	4.25 4.57 4.00 4.23 4.76
1955 1956 1957 1958	30.44 37.41	12.50 16.33 17.50 12.98 13.76	5.87 8.19 8.59 6.21 6.72	6.62 8.15 8.91 6.77 7.04	17.94 21.08 22.54 20.47 21.73	1.31 1.64 1.69 1.43 1.35	2.60 3.07 3.35 2.34 3.17	4.26 4.78 5.95 5.74 5.46	9.77 11.59 11.56 10.97 11.74	36.58 44.76 48.12 42.17 44.78	12.50 16.33 17.50 12.98 13.76	24.08 28.43 30.62 29.19 31.02	17.94 21.08 22.54 20.47 21.73	6.14 7.35 8.08 8.72 9.29
1960 1961 1962 1963 1964	30.00	16.36 15.53 16.03 17.27 21.23	8.28 7.43 7.81 8.64 10.98	8.08 8.10 8.22 8.63 10.25	22.73 22.48 24.50 26.06 29.67	1.29 1.26 1.41 1.26 1.33	3.19 2.82 3.26 3.36 4.46	5.40 5.20 5.12 5.33 5.80	12.85 13.21 14.71 16.11 18.08	48.63 47.82 51.28 53.25 61.66	16.36 15.53 16.03 17.27 21.23	32.28 32.29 35.25 35.99 40.43	22.73 22.48 24.50 26.06 29.67	9.55 9.80 10.75 9.93 10.76
1965	59.15 70.00 72.35 75.95 85.25	25.41 31.37 32.25 32.34 36.27	13.49 17.23 17.83 17.93 19.97	11.92 14.15 14.42 14.40 16.31	33.75 38.62 40.10 43.62 48.98	1.36 1.42 1.38 1.44 1.77	5.46 6.43 6.34 6.79 7.04	6.49 7.82 9.33 10.52 11.70	20.44 22.96 23.06 24.88 28.47	70.43 82.22 83.42 88.45 99.52	25.41 31.37 32.25 32.34 36.27	45.02 50.84 51.18 56.11 63.25	33.75 38.62 40.10 43.62 48.98	11.27 12.22 11.07 12.50 14.27
1970 1971 1972 1973 1974	91.37 92.26 102.73 118.54 137.20	36.99 33.60 35.42 42.37 53.21	19.80 16.78 18.22 22.75 27.44	17.19 16.82 17.20 19.62 25.76	54.38 58.66 67.31 76.17 83.99	2.02 2.67 2.88 3.31 4.62	6.95 5.93 6.72 7.41 8.23	13.03 14.70 16.26 17.97 19.83	32.39 35.36 41.45 47.49 51.31	105.61 108.53 120.25 137.70 156.98		68.62 74.93 84.82 95.33 103.78	54.38 58.66 67.31 76.17 83.99	14.24 16.26 17.51 19.16 19.78
1975 1976 1977 1978	138.28 150.91 174.68 203.54	54.92 59.95 69.22 79.72 98.68	26.33 28.47 34.04 40.43 51.07	28.59 31.47 35.18 39.29 47.61	83.36 90.96 105.46 123.82 141.54	6.10 7.44 9.24 10.21 11.38	8.68 8.89 9.40 10.68 12.35	19.98 22.37 26.79 29.95 33.96	48.60 52.27 60.03 72.99 83.85	157.71 171.45 198.08 231.24 270.46	54.92 59.95 69.22 79.72 98.68	102.79 111.50 128.87 151.52 171.77	83.36 90.96 105.46 123.82 141.54	19.43 20.54 23.40 27.70 30.24
1980	264.44	115.81 126.79 119.68 111.53 131.01	58.91 61.84 56.44 51.78 63.02	56.90 64.95 63.23 59.75 67.99	148.63 162.58 163.03 157.69 176.58	13.51 16.86 15.45 11.83 12.90	12.09 12.05 11.95 11.20 12.91	35.44 38.40 41.95 42.00 44.17	87.59 95.27 93.68 92.67 106.61	295.63 321.49 316.43 302.50	115.81 126.79 119.68 111.53 131.01	179.81	148.63 162.58	31.18 32.12 33.72 33.28
1985 4	333.40	146.25	71.79	74.46	187.15	13.54	13.52	44.82	115.28	ļ	146.25	,	187.15	
1983: 	261.71 261.16 270.05 283.96	109.86 108.79 111.12 116.36	50.74 48.48 53.06 54.85	59.12 60.31 58.06 61.50	151.85 152.38 158.93 167.60	12.03 10.91 11.93 12.43	11.04 10.88 11.00 11.86	41.61 41.48 42.22 42.69	87.17 89.10 93.79 100.62		109.86 108.79 111.12 116.36		151.85 152.38 158.93 167.60	
1984: 	302.70 313.11	122.78 127.67 134.49 139.09	58.94 60.20 65.44 67.49	63.84 67.46 69.06 71.60	170.37 175.03 178.61 182.31	13.95 12.13 12.61 12.92	11.46 12.95 13.65 13.56	43.62 44.61 44.75 43.70	101.35 105.35 107.61 112.12				170.37 175.03 178.61	······································
1985: !*	337.85 344.86	146.00 151.23	71.09 74.36	74.91 76.87	191.85 193.63	12.57 13.04	13.00 13.47	45.21 46.20	121.07 120.93		146.00 151.23		191.85 193.63	

¹ Excludes forestry, fisheries, and agricultural services; medical services; professional services; social services and membership organizations; and real estate, which, effective with the April-May 1984 survey, are no longer surveyed quarterly. See last column ("nonmanufacturing surveyed annually") for data for these industries.

² "All industries" plus the part of nonmanufacturing that is surveyed annually.

² Consists of forestry, fisheries, and agricultural services; medical services; professional services; social services and membership organizations; and real estate.

² Planned capital expenditures as reported by business in late October and November 1984, corrected for biases.

Note.—For details about the reduced industry coverage of the plant and equipment survey, see Survey of Current Business, January 1984.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-49.—Sales and inventories in manufacturing and trade 1947-84

[Amounts in millions of dollars; monthly data seasonally adjusted]

	Total ma	nufacturing trade	g and	Mai	nufacturing		Mercha	nt wholes	alers	Ro	etall trade	
Year or month	Sales 1	Inven- tories <sup>2</sup>	Ratio <sup>3</sup>	Sales <sup>1</sup>	Invento- ries <sup>2</sup>	Ratio <sup>3</sup>	Sales 1	Invento- ries <sup>2</sup>	Ratio <sup>3</sup>	Sales 1	Invento- ries <sup>2</sup>	Ratio :
947 948 949.	.  35.260	52,507 49,497	1.42 1.53	15,513 17,316 16,126	25,897 28,543 26,321	1.58 1.57 1.75	6,808 6,514	7,957 7,706	1.13 1.19	10,200 11,135 11,149	14,241 16,007 15,470	1.26 1.39 1.41
.950	38,596 43,356 44,840 47,987	59,822 70,242 72,377 76,122	1.36 1.55 1.58 1.58	18,634 21,714 22,529 24,843	31,078 39,306 41,136 43,948	1.48 1.66 1.78 1.76	7,695 8,597 8,782 9,052	9,284 9,886 10,210 10,686	1.07 1.16 1.12 1.17	12,268 13,046 13,529 14,091	19,460 21,050 21,031 21,488	1.3 1.6 1.5 1.5
954	46,443 51,694 54,063 55,879 54,201 59,729	73,175 79,516 87,304 89,052 87,093 92,129	1.60 1.47 1.55 1.59 1.60	23,355 26,480 27,740 28,736 27,247 30,286	41,612 45,069 50,642 51,871 50,241 52,945	1.81 1.62 1.73 1.80 1.84	8,993 9,893 10,513 10,475 10,257 11,491	10,637 11,678 13,260 12,730 12,739	1.18 1.13 1.19 1.23 1.24 1.15	14,095 15,321 15,811 16,667 16,696 17,951	20,926 22,769 23,402 24,451 24,113 25,305	1.5 1.4 1.4 1.4
960 961 962 963 964	60,827 61,159 65,662 68,995 73,682	94,713 95,594 101,063 105,480 111,503	1.50 1.56 1.54 1.50 1.49	30,879 30,923 33,357 35,058 37,331	53,780 54,885 58,186 60,046	1.70 1.75 1.74 1.70 1.69	11,491 11,656 11,988 12,674 13,382 14,529	13,879 14,120 14,488 14,936 16,048	1.22 1.20 1.16 1.15	18,294 18,249 19,630 20,556	26,813 26,221 27,941 29,386 31,094	1.4 1.4 1.3 1.3
965	80 283	120,907 136,790 144,796 155,697 169,343	1.47 1.45 1.47 1.56 1.54 1.55	<b>40,995</b> 44,870 46,487 50,228	63,409 68,185 77,952 84,664 90,618	1.64 1.60 1.62 1.76 1.74	15,611 16,987 19,448 20,846	17,000 18,317 20,765 24,833 26,134	1.14 1.15 1.15 1.24 1.23 1.22	21,823 23,677 25,330 24,413 27,030	34,405 38,073 35,299 38,945 42,517	1.3 1.4 1.4 1.3
970 971 972 973 974	107,448 116,017 130,030 153,412 177,625	177,556 187,766 201,950 233,237 285,807	1.62 1.58 1.49 1.41 1.45	53,501 52,805 55,906 63,023 72,937 84,794	98,202 101,651 102,658 108,238 124,628 157,792	1.77 1.90 1.83 1.67 1.58	22,609 23,943 26,257 29,584 38,014 47,748	28,624 32,038 35,045 38,633 45,372 56,948	1.27 1.27 1.24 1.11	28,893 30,700 33,853 37,422 42,462 45,082	43,867 50,063 55,079 63,237 71,067	1.4 1.4 1.4 1.4 1.4
975 976 977 978 979	182,230 204,277 229,624 260,263	288,375 318,544 351,055 398,459 449,542	1.45 1.57 1.48 1.46 1.44	86,595 98,802 113,202 126,905 143,936	159,934 175,193 189,214 210,385 240,942	1.65 1.84 1.69 1.61 1.57 1.57	46,623 50,694 55,987 66,117 78,680	56,697 64,078 72,311 85,568 98,008	1.07 1.21 1.19 1.21 1.20 1.18	49,012 54,781 60,435 67,242 74,948	71,744 79,273 89,530 102,504 110,592	1.4 1.3 1.4 1.4
980 981 982 983 984 P		491,431 523,623 505,546 514,336	1.45 1.43 1.50 1.37	154,391 168,129 159,193 170,617 189,442	264,089 282,059 264,599 260,426 285,808	1.66 1.64 1.73 1.52 1.46	92,658 100,673 94,765 98,649	111,792 115,854 115,563 118,067	1.14 1.13 1.23 1.17	80,064 86,960 89,547 97,831 107,985	115,550 125,710 125,384 135,843	
1983: Jan Feb Mar Apr May June	345,890 342,742 348,227	502,209 503,043 499,370 500,263 501,035	1.45 1.47 1.43 1.43 1.39 1.36	159,020 158,184 161,809 162,997 166,603	261,901 261,042 257,803 257,748 258,281 257,661	1.65 1.65 1.59 1.58 1.55	94,344 92,347 92,614 92,890 96,646	115,030 114,425 114,569 114,902 113,557	1.22 1.24 1.24 1.24 1.17	92,526 92,211 93,804 95,125 97,239	125,278 127,576 126,998 127,613 129,197	1.3 1.3 1.3 1.3 1.3 1.3
July	370,181 373,283 379,229 382,457 386,564	500,615 501,379 504,284 506,984 509,171 511,453 514,336	1.35 1.35 1.34 1.33 1.32 1.30	171,756 171,408 174,112 177,521 177,324 180,875 186,352	257,661 257,699 259,074 259,168 259,569 259,873 260,426	1.50 1.50 1.49 1.46 1.46 1.44 1.40	98,577 99,941 100,894 102,171 104,210 103,793 106,892	113,172 114,124 114,227 115,674 116,825 116,958 118,067	1.15 1.14 1.13 1.13 1.12 1.13 1.10	98,638 98,832 98,277 99,537 100,923 101,896 102,438	129,782 129,556 130,983 132,142 132,777 134,622 135,843	1.3
1984 Jan Feb Mar Apr May	401,133 398,815 401,905 405,880 412,725	518,062 527,216 532,766 541,060 545,912 546,834	1.29 1.32 1.33 1.33 1.32 1.32	184,406 185,005 188,479 187,332 189,376 190,401	260,884 264,074 267,379 270,392 274,593 277,481	1.41 1.43 1.42 1.44 1.45 1.46	110,125 108,328 109,553 111,043 115,112	119,201 120,411 121,477 123,785 124,368 123,994	1.08 1.11 1.11 1.11 1.08 1.08	106,602 105,482 103,873 107,505 108,237 109,322	137,977 142,731 143,910 146,883 146,951 145,359	1
July	411,410 411,176 410,505 410,621 414,833	551,366 556,519 560,430 563,810 564,506	1.34 1.35 1.37 1.37 1.36	190,658 192,006 190,151 190,521 191,978 193,549	280,019 283,525 285,185 286,426 285,833 285,808	1.46 1.47 1.48 1.50 1.50 1.49 1.48	114,401 113,310 112,564 112,114 111,367 111,955	126,227 126,676 128,205 128,723 129,578		109,322 107,442 106,606 108,240 108,733 110,900 110,815	145,120 146,318 147,040 148,661 149,095	1.3 1.3 1.3

Monthly average for year and total for month.
 Seasonally adjusted, end of period.
 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

Note,—tariler data are not strictly comparable with data degining 1300 for inentiations, and observed in the gross national 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 the Census.

TABLE B-50.—Manufacturers' shipments and inventories, 1947-84

[Millions of dollars; monthly data seasonally adjusted]

	S	hipments <sup>3</sup>	ı		T		ln	ventories 2				
Year or month	Tatal	Dura- ble	Non- durable	Tatal	Di	rable good	s industrie Work	es	No	ndurable go	ods indus Work	tries
	Total	goods indus- tries	goods indus- tries	Total	Total	Mate- rials and supplies	in proc- ess	Finished goods	Total	Mate- rials and supplies	in proc- ess	Finished goods
1947 1948 1949	15,513 17,316 16,126	6,694 7,579 7,191	8,819 9,738 8,935	25,897 28,543 26,321	13,061 14,662 13,060				12,836 13,881 13,261			
1950 1951 1952 1953 1954	18 634	8,845 10,493 11,313 13,349 11,828	9,789 11,221 11,216 11,494 11,527	31,078 39,306 41,136 43,948 41,612	15,539 20,991 23,731 25,878 23,710	8,966 7,894	ł .		15,539 18,315 17,405 18,070 17,902	8,317 8,167	2,472 2,440	
1955 1956 1957 1958	26,480 27,740 28,736 27,247	11,828 14,071 14,715 15,237 13,563 15,609	12,409 13,025 13,499 13,684	41,612 45,069 50,642 51,871 50,241 52,945	26,405 30,447 31,728 30,258	7,894 9,194 10,417 10,608 10,032 10,776	9,721 10,756 12,317 12,837 12,387 13,063	6,040 6,348 7,565 8,125 7,839 8,239	17,902 18,664 20,195 20,143 19,983 20,868	8,556 8,971 8,775 8,662	2,440 2,571 2,721 2,864 2,828 2,944	7,415 7,666 8,622 8,624 8,491 8,845
1960 1961 1962 1963 1964	30,200	15,609 15,883 15,616 17,262 18,280 19,637	14,677 14,996 15,307 16,095 16,778 17,694	52,945 53,780 54,885 58,186 60,046 63,409	32,077 32,371 32,544 34,632 35,866 38,506	10,776 10,353 10,279 10,810 11,068 11,970	13,063 12,772 13,203 14,159 14,871 16,191	8,239 9,245 9,063 9,662 9,925 10,344	20,868 21,409 22,341 23,554 24,180 24,903	9,080 9,082 9,493 9,813 9,978	2,944 2,946 3,110 3,296 3,406 3,511	9,380 9,738 10,444 10,796
1965 1966 1967 1968	40,995 44,870 46,487 50,228	22,221 24,649 25,267 27,659	18,774 20,220 21,220 22,570	68,185 77,952 84,664 90,618	38,506 42,257 49,920 55,005 58,875 64,739	11,970 13,325 15,489 16,455 17,376 18,693	16,191 18,075 21,939 25,005 27,336 30,408	10,854 12,491 13,547 14,163	25,928 28,032 29,659 31,743	10,131 10,448 11,155 11,715 12,289 12,724	3,806 4,204 4,421 4,848	11,674 12,673 13,523 14,606
1970 1971 1972 1973 1974	33.301	29,437 28,188 29,954 34,024 39,686 44,228	24,064 24,617 25,952 29,000 33,250 40,567	98,202 101,651 102,658 108,238 124,628 157,792	66,780 66,289 70,250 81,398 101,739	19,182 19,759 20,860 26,028 35,151	29,848 28,650 30,788 35,545 42,603	15,639 17,751 17,880 18,601 19,823 23,985	33,463 34,871 36,368 37,988 43,230 56,053	13,150 13,683 14,676 18,132 23,699	5,122 5,274 5,665 5,982 6,707 8,175	15,617 16,448 17,019 17,330 18,391 24,179
1975 1976 1977 1978 1979	86,595 98,802 113,202 126,905	43,656 50,689 59,267 67,848 76,060	42,939 48,113 53,935 59,057 67,876	159,934 175,193 189,214 210,385 240,942	102,874 112,581 121,601 137,825 160,451	33,920 37,548 40,251 45,185 52,606	43,369 46,345 50,620 58,669 69,277	25,586 28,690 30,730 33,971 38,568	57,060 62,612 67,613 72,560 80,491	23,542 25,833 27,398 29,308 32,447	8,837 9,933 11,003 11,922 13,759	24,681 26,846 29,212 31,330 34,285
1980 1981 1982 1983 1984 <i>P</i>	154,391	77,550 83,872 76,859 85,126 98,639	76,841 84,257 82,334 85,491 90,802	264,089 282,059 264,599 260,426 285,808	174,552 186,053 175,009 171,571 191,168	55,077 57,859 52,475 51,640 56,439	77,002 80,977 77,724 77,372 88,439	42,473 47,217 44,810 42,559 46,290	89,537 96,006 89,590 88,855 94,640	36,176 37,661 35,074 36,066 36,702	15,745 16,051 14,309 14,485 14,696	37,616 42,294 40,207 38,304 43,242
1983: Jan Feb Mar Apr May	159,020 158,184 161,809 162,997 166,603	78,005 77,896 79,653 80,124 82,011	81,015 80,288 82,156 82,873 84,592	261,901 261,042 257,803 257,748 258,281 257,661	172,844 172,079 170,144 170,368 171,065	51,561 51,231 50,426 50,548 50,805 50,564	77,169 76,875 76,184 76,277 76,752 76,211	44,114 43,973 43,534 43,543 43,508 43,379	89,057 88,963 87,659 87,380 87,216 87,507	34,956 34,853 34,632 34,472 34,411 34,736	14,377 14,456 14,221 14,369 14,211 14,266	39,724 39,654 38,806 38,539 38,594
June	174.112	85,594 85,076 86,730 88,963 89,181 92,311 96,351	86,162 86,332 87,382 88,558 88,143 88,564 90,001	257,699 259,074 259,168 259,569 259,873 260,426	170,154 169,679 170,283 170,084 170,219 170,656 171,571	50,206 50,759 50,821 50,909 51,174 51,640	76,189 76,335 76,401 76,788 76,582 77,372	43,284 43,189 42,862 42,522 42,900 42,559	88,020 88,791 89,084 89,350 89,217 88,855	34,606 35,394 35,731 35,682 35,558 36,066	14,468 14,441 14,490 14,647 14,841 14,485	38,505 38,946 38,956 38,863 39,021 38,818 38,304
1984: Jan Feb Mar Apr May June	184,406 185,005 188,479 187,332 189,376 190,401	95,283 96,297 96,990 95,697 97,944 99,042	89,123 88,708 91,489 91,635 91,432 91,359	260,884 264,074 267,379 270,392 274,593 277,481	171,549 173,203 175,751 177,993 180,578 182,452	51,910 52,228 52,866 53,072 53,967 54,420	77,058 78,173 79,926 81,465 82,658 83,863	42,581 42,802 42,959 43,456 43,953 44,169	89,335 90,871 91,628 92,399 94,015 95,029	36,486 37,063 36,956 36,931 37,642 37,495	14,656 14,739 14,759 14,862 15,022 15,160	38,193 39,069 39,913 40,606 41,351 42,374
July Aug Sept Oct Nov	100 050	98,390 101,035 98,943 100,427 101,778 101,826	92,268 90,971 91,208 90,094 90,200 91,723	280,019 283,525 285,185 286,426 285,833 285,808	182,432 184,559 187,142 188,915 190,476 190,428 191,168	55,339 56,089 56,578 56,652 56,009 56,439	84,765 86,034 86,916 87,849 88,102 88,439	44,455 45,019 45,421 45,975 46,317 46,290	95,460 96,383 96,270 95,950 95,405 94,640	37,618 37,643 37,648 37,435 37,250 36,702	15,180 15,038 15,239 14,958 14,962 14,834 14,696	42,804 43,501 43,664 43,553 43,321 43,242

<sup>&</sup>lt;sup>1</sup> Monthly average for year and total for month. <sup>2</sup> Book value, seasonally adjusted, end of period.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B-51.—Manufacturers' new and unfilled orders, 1947-84 [Amounts in millions of dollars; monthly data seasonally adjusted]

		New or	ders 1		ย	nfilled orders	2	Unfilled	orders—shi ratio <sup>s</sup>	pments
		Durable indust	goods tries							
Year or month	Total	Total	Capital goods indus- tries, non- defense	Non- durable goods industries	Total	Durable goods industries	Non- durable goods industries	Total	Durable goods industries	Non- durable goods indus- tries
1947 1948 1949	15,256 17,693 15,614	6,388 8,126 6,633		8,868 9,566 8,981	34,473 30,736 24,045	28,579 26,619 19,622	5,894 4,117 4,423			
1950	20,110 23,907 23,204 23,586 22,335	10,165 12,841 12,061 12,147 10,768		9,945 11,066 11,143 11,439 11,566	41,456 67,266 75,857 61,178 48,266	35,435 63,394 72,680 58,637 45,250	6,021 3,872 3,177 2,541 3,016		4.12	
1955	27,465 28,368 27,559 27,002 30,724	14,996 15,365 14,111 13,290 16,003		12,469 13,003 13,448 13,712 14,720	60,004 67,375 53,183 47,370 52,732	56,241 63,880 50,352 44,559 49,373	3,763 3,495 2,831 2,811 3,359	3.63 3.87 3.35 3.09 3.01	4.27 4.55 4.00 3.69 3.54	1.12 1.04 .85 .86
1960	30,235 31,104 33,436 35,524 38,357	15,303 15,759 17,374 18,709 20,652		14,932 15,345 16,061 16,815 17,705	45,080 47,407 48,577 54,327 66,882	42,514 44,375 45,965 51,270 63,691	2,566 3,032 2,612 3,057 3,191	2.78 2.63 2.69 2.80 3.10	3.37 3.13 3.24 3.37 3.72	.72 .79 .68 .73
1965	42,100 46,402 47,056 50,687 53,950	23,278 26,177 25,825 28,116 29,871	6,903 7,660	18,823 20,225 21,231 22,571 24,079	80,071 98,401 104,547 109,926 115,422	76,298 94,575 100,576 105,950 111,250	3,773 3,826 3,971 3,976 4,172	3.33 3.81 3.70 3.85 3.75	3.95 4.55 4.40 4.65 4.50	.80 .76 .73 .69
1970	52,038 55,983 64,167 76,056 87,244	27,388 29,998 35,064 42,726 46,835	6,738 7,444 8,622 10,971 12,673	24,650 25,986 29,104 33,330 40,409	106,158 107,147 121,061 158,884 188,467	101,566 102,119 114,725 151,504 182,925	4,592 5,027 6,336 7,380 5,542	3.65 3.38 3.31 3.86 4.13	4.39 4.06 3.90 4.56 4.96	.77 .77 .88 .93
1975	85,220 99,532 115,032 131,546 147,403	42,099 51,403 61,082 72,339 79,451	11,011 12,791 15,291 19,458 23,231	43,122 48,129 53,950 59,207 67,953	172,037 180,562 203,475 259,755 301,982	164,139 172,273 195,008 249,461 290,750	7,898 8,288 8,467 10,294 11,232	3.76 3.30 3.27 3.59 3.87	4.52 3.94 3.89 4.21 4.60	.84 .76 .70 .78
1980	156,161 167,761 157,389 173,433 191,599	79,360 83,562 75,129 <b>87,806</b> 100,849	23,259 24,050 20,681 22,764 26,854	76,801 84,199 82,260 85,627 90,750	323,312 318,794 296,147 330,122 356,059	312,564 308,767 287,014 319,303 345,861	10,748 10,027 9,133 10,819 10,198	3.80 3.76 3.74 3.37 3.41	4.54 4.56 4.63 4.08 4.12	.67 .59 .53 .55
1983: Jan	162,848 157,844 162,368 165,869 168,090 175,877	81,837 77,515 79,801 82,865 83,286 89,460	20,482 19,172 20,131 21,960 21,849 23,827	81,011 80,329 82,567 83,004 84,804 86,417	299,976 299,636 300,195 303,067 304,554 308,675	290,847 290,466 290,614 293,355 294,630 298,496	9,129 9,170 9,581 9,712 9,924 10,179	3.67 3.70 3.61 3.63 3.59 3.50	4.53 4.56 4.43 4.46 4.41 4.28	.52 .53 .54 .55 .55
July	174,451 176,360 180,336 182,911 186,606 188,374	87,878 88,820 91,509 94,776 97,991 98,444	22,060 22,887 25,295 25,499 24,680 24,893	86,573 87,540 88,827 88,135 88,615 89,930	311,718 313,967 316,782 322,369 328,099 330,122	301,298 303,389 305,935 311,530 317,209 319,303	10,420 10,578 10,847 10,839 10,890 10,819	3.54 3.53 3.48 3.51 3.47 3.37	4.33 4.32 4.23 4.28 4.22 4.08	.56 .58 .56 .56 .55
1984: Jan	188,671 191,336 196,477 189,715 193,680 190,620	99,439 102,345 105,183 98,317 102,256 99,171	25,093 27,018 26,860 25,885 28,958 28,029	89,232 88,991 91,294 91,398 91,424 91,449	334,385 340,725 348,717 351,099 355,398 355,625	323,457 329,512 337,702 340,320 344,631 344,765	10,928 11,213 11,015 10,779 10,767 10,860	3.47 3.51 3.55 3.59 3.55 3.49	4.23 4.26 4.30 4.38 4.33 4.25	.55 .56 .55 .54 .52
July	194,037 192,578 189,817 185,856 194,168 192,845	101,704 102,015 98,676 96,067 104,037 101,002	27,648 26,499 27,835 25,378 27,126 25,501	92,333 90,563 91,141 89,789 90,131 91,843	358,990 359,564 359,232 354,566 356,756 356,059	348,065 349,048 348,782 344,422 346,678 345,861	10,925 10,516 10,450 10,144 10,078 10,198	3.55 3.51 3.52 3.43 3.44 3.41	4.33 4.27 4.28 4.18 4.16 4.12	.53 .51 .51 .49 .49

Monthly average for year and total for month.
 Seasonally adjusted, end of period.
 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-52.—Consumer price indexes, major expenditure classes, 1946-84 [1967 = 100]

		Food			Но	using							
Year or month	All items	Total 1	Food	Total <sup>2</sup>	Shelter	Fuel and other utilities <sup>3</sup>	House- hold furnish- ings and oper- ation <sup>2</sup>	Apparel and upkeep	Trans- portation	Medical care	Enter- tainment	Other goods and services	Ener- gy <sup>s</sup>
1946	58.5		58.1	60.6	 	ļ		67.5	50.3	44.4			
1946 1947 1948	66.9 72.1		70.6 76.6	65.2 69.8		ļ		78.2 83.3	55.5 61.8	48.1			ļ
1949	71.4		73.5	70.9				80.1	66.4	52.7			
1050	72.1	<u></u>	74.5	72.8	ļ 	<b></b>		79.0	68.2	53.7			
1951	77.8		82.8	77.2 78.7	ļ			86.1	68.2 72.5 77.3	56.3			
1952	79.5 80.1		84.3 83.0	80.8	76.5	83.0	91.3	85.3 84.6	77.3 79.5	99.3 61.4		•••••	
1954	80.5		82.8	80.8 81.7	76.5 78.2	83.0 83.5	90.9	84.5	78.3	63.4			
1955 1956	80.2 81.4		81.6 82.2	82.3	79.1 80.4	85.1 87.3	89.9	84.1 85.8	77.4	64.8	}		<b> </b>
1957	84.3		84.9	83.6 86.2 87.7	83.4	89.9	89.9 91.9	87.3	78.8 83.3	69.9			90.1
1957 1958	86.6 87.3		88.5	87.7	85.1	91.7	92.3	87.5	86.0	73.2			90.3
1959			87.1	88.6	86.0	93.8	93.1	88.2	89.6	/6.4			91.8
1960	88.7 89.6		88.0 89.1	90.2	87.8 88.5	95.9 97.1	93.8 93.7	89.6 90.4	89.6 90.6	/9.1 81.4	·····		94.2 94.4
1962	90.6		89.9 91.2	90.9 91.7	88.5 89.6	97.1 97.3 98.2	93.8	90.9	90.6 92.5	83.5			94.7
1963	91.7 92.9		91.2 92.4	92. <b>7</b> 93. <b>8</b>	90.7 92.2	98.2 98.4	94.6 95.0	91.9 92.7	93.0	85.6			95.0
1965	94.5		94.4	94.9	93.8	98.3	95.3	93.7	94.3 95.9				94.6 96.3
1966	97.2		99.1	97.2	96.8	98.8	97.0	96.1	97.2	93.4			97.8
1967	100.0 104.2	100.0	100.0 103.6	100.0 104.0	100.0	100.0 101.3	100.0 103.8	100.0	100.0 103.2	100.0	100.0 105.7	100.0 105.2	100.0
1960 1961 1962 1963 1964 1965 1966 1966 1968	109.8	103.6 108.8	108.9	110.4	104.8 113.3	103.6	107.7	105.4 111.5	107.2	106.1 113.4	111.0	110.4	101.5 104.2
1970	116.3	114.7	114.9	118.2	123.6	107.6	111.5 115.7	116.1	112.7	120.6	116.7	116.8	107.0
1971	121.3	118.3 123.2 139.5 158.7 172.1	118.4 123.5	123.4	128.8 134.5	115.0	115.7	119.8 122.3	118.6 119.9	128.4	122.9 126.5	122.4 127.5 132.5 142.0 153.9 162.7 172.2	
1973	125.3 133.1 147.7	139.5	141.4	128.1 133.7	140.7 154.4	126.9	118.3	126.8	123.8 137.7	132.5 137.7	130.0	132.5	114.3 123.5 159.7
1974	147.7	158.7	161.7 175.4	148.8	154.4	150.2	135.3 151.0	126.8 136.2	137.7	1505	139.8	142.0	159.7
1975	161.2 170.5	177.4	180.8	164.5 174.6	169.7 179.0	182.7	160.1	142.3 147.6	150.6 165.5	168.6 184.7	152.2 159.8	162.7	1/6.5
1977	181.5	188.0	180.8 192.2	186.5	191.1	120.1 126.9 150.2 167.8 182.7 202.2	167.5	154.2	165.5 177.2	202.4	167.7	172.2	176.6 189.3 207.3
1978	195.4 217.4	206.3 228.5	211.4 234.5	202.8 227.6	210.4 239.7	216.0 239.3	177.7 190.3	159.6 166.6	185.5 212.0	219.4 239.7	176.6 188.5	183.3 196.7	220.4 275.9
1980	246.8		254.6		281.7	278.6	205.4	178.4	249.7	265.9	205.3		
1981 1982	272.4	248.0 267.3 278.2	274.6	263.3 293.5	314.7	319.2	221.3	186.9	280.0 291.5	294.5 328.7	221.4	214.5 235.7 259.9	361.1 410.0
1982	289.1	278.2	285.7	314.7	337.0	350.8	233.2	191.8	291.5	328.7	235.8	259.9	II 416.1
1983 1984	298.4 311.1	284.4 295.1	291.7 302.9	323.1 336.5	344.8 361.7	370.3 387.3	238.5 242.5	196.5 200.2	298.4 311.7	357.3 379.5	246.0 255.1	288.3 307.7	419.3 423.6
1983:													
Jan Feb	293.1 293.2	280.7	288.1	317.9	338.3	365.4	235.8	191.0	293.0	347.8	241.5	279.9	414.5
Mar,	293.4	281.6 283.2	289.0 290.5	318.5 318.6	339.2 339.3	364.6 363.8 363.6	236.7 237.6 239.0	192.0 194.5	289.9 287.4	351.3 352.3	243.1 244.6	281.6 281.9	406.7 399.9
Apr	295.5	283.2 284.6 285.0	290.5 291.9	318.6 320.3	341.7	363.6	239.0	194.5 195.5	292.3	352.3 353.5	244.6	283.2	399.9 410.0
May June	297.1 298.1	285.0 284.7	292.4 292.0	321.8 323.1	342.7 343.6	369.3 373.6	238.4 238.6	196.1 195.6	289.9 287.4 292.3 296.2 298.3	354.3 355.4	244.8 245.4	281.9 283.2 283.6 284.5	421.3 427.3
July	299.3		292.0	324.5		375.5	238.9	195.0	300.4	357.7	246.0	287.5	430.1
Aug Sept	300.3	284.7 284.9 285.3 285.7	292.2	324.8	345.3 346.6	3/5.1	238.0	197.3	302.4 303.7	360.0	246.6 247.5	289.0	429.8 429.3
Sept Oct	301.8 302.6	285.3	292.6 292.9	326.4 326.8	348.5 349.8	376.4	238.9 239.4	200.4 200.7	303.7 305.0	361.2 362.9	247.5 249.1	294.4 296.8	429.3 425.1
Nov	303.1	285.3	292.5	327.0	351.1 351.8	374.4 371.3	239.9 240.5	200.7	306.3 306.3	364.9	249.5	298.1	419.9
Dec	303.5	286.5	293.9	327.4	351.8	370.6	240.5	199.3	306.3	366.2	249.5	298.6	418.0
1984: Jan	305.2	291.6	299.4	320.2	353.2	376.0	240.4	196.4	306.0	360 E	249.9	300.5	416.7
Feb	306.6	20/12	302.1	329.2 331.0	354.0 355.5	383.0	240.4	196.2	305.8	369.5 373.2	251.5	301.5	1 4202
Mar I	307.3	294.3	302.2	331.5	355.5 357.8	380.1	241.2	198.8	306.9	374.5	251.7 252.9	302.1	418.1
Apr May June	308.8 309.7	294.3 294.5 293.6	302.3 301.4	331.5 333.2 334.6	358.9	380.9 385.5	242.3 242.4	199.2 198.9	309.6 312.2	374.5 375.7 376.8	253.8 253.5	302.8 303.2	418.1 421.3 426.1
June	310.7	294.3	302.0	336.2	360.2	390.0	242.3	197.4	313.1	378.0	254.5	304.4	428.5
July Aug Sept Oct	311.7	295.3	303.2	338.1	362.7	393.9	241.9	196.6	312.9 312.9 313.7 315.5 316.1 315.8	380.3 381.9	255.3	306.5	428.3 427.3
Aug Sept	313.0 314.5	296.9 296.4	304.8 304.2	339.5 341.4	364.6 366.5	395.5 397.0	242.2 244.1	200.1 204.2 205.7	312.9 313.7	383 1	256.4 257.3 258.3 259.0	307.2 314.6	427.3 429.0
Oct	314.5 315.3 315.3 315.5	296.6 296.3 297.2	304.4	341.2 340.9	366.5 367.8 368.9	392.4 387.5	244.3 244.2	205.7	315.5	385.5 387.5	258.3	314.6 315.8 316.5	426.7
Nov Dec	315.3	296.3	304.1 305.1	340.9 341.2	368.9 370.1	387.5 386.0	244.2 244.2	205.2 203.2	316.1	387.5 388.5	259.0 260.1	316.5 316.7	421.8 418.9
Jec	315.3	231.2	303.1	341.2	370.1	J00.U	244.2	203.2	313.6	J00.J	200.1	310./	410.9

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. Data beginning 1983 incorporate a rental equivalence measure for homeowners' costs and therefore are not strictly comparable with earlier figures. See Economic Report of the President, February 1983 for homeownership costs as measured prior to 1983.

Includes alcoholic beverages, not shown separately.
 Series beginning 1967 not comparable with series for earlier years.
 See tables B-53 and B-54.

TABLE B-53.—Consumer price indexes, selected expenditure classes, 1946-84 [1967=100]

	Fo	od and	beverage	es			Shelte	r			Fue	and other	utilities	
			Food			Renter	s' costs				H	ousehold f	uels	
Year or month	Total 1	Total	At home	Away from home	Total	Total	Rent, resi- dential	Home- owners' costs	Mainte- nance and repairs	Total	Total	Fuel oil, coal, and bottled gas	Gas (piped) and elec- tricity	Other utilities and public services
1946 1947 1948		58.1 70.6 76.6	73.5 79.8				59.2 61.1 65.1				•••••	51.3 58.4 68.6	77.4 77.1 79.1	
1949		73.5 74.5	76.7 77.6	• • • • • • • • • • • • • • • • • • • •			70.4				************	70.3 72.7		
1951 1952		82.8 84.3	86.3 87.8				73.2 76.2			L		76.5 78.0	81.5 82.6	<u></u>
950 951 952 953 954 955 956 957 958		83.0 82.8 81.6 82.2	86.2 85.8 84.1 84.4	68.9 70.1 70.8 72.2			83.2 84.3		72.4 74.1	83.0 83.5 85.1 87.3	••••••••••• ••••••••••	81.5 81.2 82.3 85.9	87.5 88.4	
1957 1958		84.9 88.5 87.1	84,4 87.2 91.0 88.8	74.9 77.2 79.3	83.4 85.1 86.0		87.5	l	80.5	89.9 91.7 93.8		90.3 88.7 89.8	89.3 92.4 94.7	
960		88.0 89.1 89.9	89.6 90.4 91.0	81.4 83.2 85.4	87.8 88.5 89.6		91.7 92.9		84.6 85.9	95.9 97.1 97.3		89.2 91.0 91.5	98.6 99.4	
963 964 965		34.4	92:2 93.2 95.5	87.3 88.9 90.9	90.7 92.2 93.8		95.9 96.9		89.5 91.3	98.2 98.4 98.3		93.2 92.7 94.6	99.4 99.4	
1966 1967 1968 1969	100.0 103.6 108.8	99.1 100.0 103.6 108.9	100.3 100.0 103.2 108.2	95.1 100.0 105.2 111.6	100.0 104.8		100.0 102.4		95.2 100.0 106.1 115.0	98.8 100.0 101.3 103.6	100.0 101.4 103.4	97.0 100.0 103.1 105.6	99.6 100.0 100.9 102.8	100 101 104
970 971	114.7 118.3	114.9 118.4 123.5	113.7 116.4 121.6	119.9 126.1 131.1	123.6		110.1		124.0 133.7 140.7	107.6 115.0 120.1	107.9 115.3 120.1	110.1 117.5 118.5	107.3 114.7	107 114 120
973 974 975	123.2 139.5 158.7 172.1	141.4 161.7 175.4	141.4 162.4 175.8	141.4 159.4 174.3	140.7 154.4 169.7	••••••••••••••••••••••••••••••••••••••	130.6		151.0 171.6 187.6	126.9 150.2 167.8	128.4 160.7 183.8	136.0 214.6 235.3	120.5 126.4 145.8 169.6	124 130 137
972 973 974 975 976 976 977 978	177.4 188.0 206.3 228.5	180.8 192.2 211.4 234.5	179.5 190.2 210.2 232.9	186.1 200.3 218.4 242.9	179.0 191.1 210.4 239.7	••••••••••			199.6 214.7 233.0 256.4	182.7 202.2 216.0 239.3	202.3 228.6 247.4 286.4	250.8 283.4 298.3 403.1	189.0 213.4 232.6 257.8	145 152 158 159
980 981 982 983 984		254.6 274.6 285.7 291.7	251.5 269.9 279.2 282.2	267.0 291.0 306.5 319.9 333.4	281.7 314.7 337.0 344.8 361.7	103.0	191.6 208.2 224.0 236.9	102.5 107.3	285.7 314.4 334.1 346.3 359.2	278.6 319.2 350.8 370.3	349.4 407.0 446.2 469.2 485.5	556.0 675.9 667.9 628.0	301.8 345.9 393.8 428.7	165 181 200 213
.984 .983: 	1	302.9	292.6		ľ	108.6	249.3	107.3	359.2 342.9	387.3 365.4	485.5 463.5	641.8 671.1	445.2 413.5	230
Feb	281.6 283.2 284.6 285.0	288.1 289.0 290.5 291.9 292.4 292.0	279.3 280.3 281.9 283.4 283.8 283.0	314.5 315.2 316.5 318.0 318.6 319.3	338.3 339.2 339.3 341.7 342.7 343.6	101.2 101.4 101.8 102.2 102.5	232.2 233.1 233.6 234.5 235.1 235.9	100.9 100.9 101.7 102.0 102.2	339.4 339.9 343.6 344.3 345.1	364.6 363.8 363.6 369.3 373.6	461.5 459.7 459.2 468.3 475.2	654.0 625.3 610.6 621.0 620.0	414.5 418.0 420.5 429.1 437.4	210 210 211 211 212 213
July	284.7 284.9 285.3 285.7	292.0 292.2 292.6 292.9 292.5	282.8 282.5 282.5 282.3 281.4	319.8 321.0 322.2 323.9 324.8 325.5	345.3 346.6 348.5 349.8 351.1	103.1 103.7 104.4 104.8 105.0	237.1 238.2 239.5 240.4 241.3	102.7 103.0 103.5 103.9	346.1 347.9 346.6 351.1	375.5 375.1 376.4 374.4 371.3	477.7 476.5 478.3 474.4 468.1	619.3 619.0 623.2 624.7 623.9	440.5 439.1 440.5 435.6	214 214 215 215 217
Dec 984:	286.5	293.9	283.0		351.8	105.1	242.0	104.3 104.5	353.4 354.7	370.6	467.4	623.9	428.2 427.5	216
Jan Feb Mar Apr May	294.2 294.3 294.5 293.6	299.4 302.1 302.2 302.3 301.4	290.2 293.6 293.1 292.8 290.7	327.2 328.5 329.8 330.9 332.6 333.1	353.2 354.0 355.5 357.8 358.9	105.7 106.0 106.5 107.4 107.8	242.9 243.6 244.8 246.4 247.2	104.9 105.1 105.6 106.2 106.5	356.7 353.5 355.3 356.3 357.3	376.0 383.0 380.1 380.9 385.5	470.4 479.6 475.2 476.0 483.5 490.7	642.8 688.6 660.0 650.7 649.2	427.3 429.0 429.5 432.3 441.4	224 228 227 228 228
July Aug Sept	295.3 296.9 296.4	302.0 303.2 304.8 304.2 304.4	291.4 292.5 294.4 293.4 293.4	334.4 335.5 335.8 336.6	360.2 362.7 364.6 366.5 367.8	108.2 108.9 109.6 110.2	248.4 249.7 251.1 252.4 253.8	106.8 107.6 108.1 108.7 109.1	358.9 360.3 360.1 362.7 361.6	390.0 393.9 395.5 397.0 392.4	496.5 498.6 500.1	646.0 637.4 625.5 622.1 626.8	450.6 459.1 463.9 466.4 456.0	229 230 231 232 232
Oct Nov Dec	296.6 296.3 297.2	304.4 304.1 305.1	293.4 293.4 292.4 293.2	336.6 337.7 339.2	367.8 368.9 370.1	110.7 110.9 111.3	253.8 254.8 256.1	109.1 109.4 109.8	361.6 362.9 364.4	392.4 387.5 386.0	492.1 482.6 480.2	626.8 626.9 625.9	456.0 444.7 442.2	23

TABLE B-53.—Consumer price indexes, selected expenditure classes, 1946-84-Continued [1967 = 100]

				Transp	ortation				1	Aedical car	B
			F	rivate trai	sportatio	n					
Year or month	Total	Total 2	New cars	Used cars	Motor fuel <sup>s</sup>	Auto- mobile mainte- nance and repair	Other	Public transpor- tation	Total	Medical care com- modities	Medi- cal care serv- ices
1946	50.3 55.5 61.8 66.4	54.3 61.5 68.2 72.3	69.2 75.6 82.8		54.9 62.2 70.4 72.3	52.0 56.4 59.6 61.1		34.4 36.0 40.7 45.2	44.4 48.1 51.1 52.7	76.2 81.8 86.1 87.4	40.1 43.5 46.4 48.1
1950	68.2 72.5 77.3 79.5 78.3 77.4 78.8 83.3 86.0 89.6	72.5 75.8 80.8 82.4 80.3 78.9 80.1 84.7 87.4 91.1	83.4 87.4 94.9 95.8 94.3 90.9 93.5 101.5	89.2 75.9 71.8 69.1 77.4 80.2 89.5	71.8 73.9 75.8 80.3 82.5 83.6 86.5 90.0 88.8 89.9	62.3 67.0 68.6 72.3 74.8 76.5 79.5 82.4 83.7 85.5		48.9 54.0 57.5 61.3 65.5 67.4 70.0 72.7 76.1 78.3	53.7 56.3 59.3 61.4 63.4 64.8 67.2 69.9 73.2 76.4	88.5 91.0 91.8 92.6 93.7 94.7 96.7 99.3 102.8 104.4	49.2 51.7 55.0 57.0 58.7 60.4 62.8 65.5 68.7 72.0
1950 1961 1962 1963 1964 1965 1966 1967 1968	89.6 90.6 92.5 93.0 94.3 95.9 97.2 100.0 103.2	90.6 91.3 93.0 93.4 94.7 96.3 97.5 100.0 103.0	104.5 104.5 104.1 103.5 103.2 100.9 99.1 100.0 102.8 104.4	83.6 86.9 94.8 96.0 100.1 99.4 97.0 100.0 (4)	92.5 91.4 91.9 91.8 91.4 94.9 97.0 100.0 101.4 104.7	87.2 89.3 90.4 91.6 92.8 94.5 96.2 100.0 105.5 112.2	100.0 103.4 109.7	81.0 84.6 87.4 88.5 90.1 91.9 95.2 100.0 104.6 112.7	79.1 81.4 83.5 85.6 87.3 89.5 93.4 100.0 106.1	104.5 103.3 101.7 100.8 100.5 100.5 100.5 100.0 100.2	74.9 77.7 80.2 82.6 84.6 87.3 92.0 100.0 107.3
1970	112.7 118.6 119.9 123.8 137.7 150.6 165.5 177.2 185.5 212.0	111.1 116.6 117.5 121.5 136.6 149.8 164.6 176.6 185.0 212.3	107.6 112.0 111.0 111.1 117.5 127.6 135.7 142.9 153.8 166.0	104.3 110.2 110.5 117.6 122.6 146.4 167.9 182.8 186.5 201.0	105.6 106.3 107.6 118.1 159.9 170.8 177.9 188.2 196.3 265.6	120.6 129.2 135.1 142.2 156.6 176.6 189.7 203.7 220.6 242.6	119.2 128.4 129.1 127.8 132.4 141.2 163.1 177.3 184.6 198.6	128.5 137.7 143.4 144.8 148.0 158.6 174.2 182.4 187.8 200.3	120.6 128.4 132.5 137.7 150.5 168.6 184.7 202.4 219.4 239.7	103.6 105.4 105.6 105.9 109.6 118.8 126.0 134.1 143.5	124.2 133.3 138.2 144.3 159.1 179.1 197.1 216.7 235.4 258.3
1980	249.7 280.0 291.5 298.4 311.7	249.2 277.5 287.5 293.9 306.6	179.3 190.2 197.6 202.6 208.5	208.1 256.9 296.4 329.7 375.7	369.1 410.9 389.4 376.4 370.7	268.3 293.6 315.8 330.0 341.5	222.6 241.3 257.8 260.8 273.3	251.6 312.0 346.0 362.6 385.2	265.9 294.5 328.7 357.3 379.5	168.1 186.5 205.7 223.3 239.7	287.4 318.2 356.0 387.0 410.3
1983: Jan	293.0 289.9 287.4 292.3 296.2 298.3	288.4 285.2 282.7 287.5 291.7 293.8	201.0 201.3 201.2 201.1 201.6 201.6	311.0 309.1 309.3 312.7 317.1 <b>322.7</b>	372.2 359.7 348.8 367.6 380.7 385.9	324.4 325.9 326.6 327.4 328.7 329.5	259.9 259.7 259.2 258.4 258.7 258.1	357.7 355.2 354.5 361.1 359.2 361.2	347.8 351.3 352.3 353.5 354.3 355.4	215.3 216.7 218.6 221.2 222.5 <b>223.2</b>	377.4 381.5 382.2 382.8 383.5 384.6
July	300.4 302.4 303.7 305.0 306.3 306.3	296.0 298.0 299.2 300.4 301.7 301.8	201.4 202.1 202.7 204.3 206.2 207.0	329.6 336.8 343.9 350.4 356.1 357.6	389.0 389.4 387.0 382.5 378.3 375.4	329.8 331.0 332.3 333.5 335.2 335.4	258.6 260.0 260.8 263.3 265.6 266.8	363.2 365.0 366.6 368.2 370.3 369.0	357.7 360.0 361.2 362.9 364.9 366.2	224.2 225.4 226.3 227.5 228.9 229.9	387.2 389.8 391.0 392.9 395.0 396.3
1984:  Jan	306.0 305.8 306.9 309.6 312.2 313.1	300.9 300.8 301.9 304.8 307.4 308.1	207.2 207.2 207.2 207.4 207.6 207.7	357.3 357.2 362.2 370.0 378.0 382.0	370.6 369.4 369.1 374.3 376.9 375.2	336.1 337.4 338.3 338.9 340.2 340.7	267.6 267.7 268.3 269.0 270.4 271.5	378.2 377.4 377.4 378.0 380.7 385.2	369.5 373.2 374.5 375.7 376.8 378.0	231.2 232.9 235.0 236.9 238.7 239.4	400.2 404.4 405.3 406.3 407.1 408.4
July	312.9 312.9 313.7 315.5 316.1 315.8	307.5 307.5 308.4 310.2 310.8 310.4	208.1 208.1 208.2 209.6 211.4 212.0	383.2 383.8 384.2 384.6 383.6 382.7	370.2 366.6 368.5 370.9 369.8 366.4	341.6 342.7 344.2 345.3 345.8 346.2	272.4 274.9 275.9 278.7 280.7 282.3	389.3 390.8 389.5 391.1 391.8 392.8	380.3 381.9 383.1 385.5 387.5 388.5	240.7 241.6 242.4 244.1 245.6 247.3	410.9 412.7 413.9 416.5 418.5 419.3

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-52.

 <sup>&</sup>lt;sup>1</sup> Includes alcoholic beverages, not shown separately.
 <sup>2</sup> Includes direct pricing of new trucks and motorcycles, beginning September 1982.
 <sup>3</sup> Includes direct pricing of diesel fuel and gasohol beginning September 1981.
 <sup>4</sup> Not available.

TABLE B-54.—Consumer price indexes, commodities, services, and special groups, 1940-84
[1967=100]

		Γ	Ca	ommoditie	s		<u> </u>	Services			Special i	ndexes	
Year or month	All items	All com- modities	Food	Comm	odities les Durable	Non- durable	All services	Medi- cal care serv- ices	Serv- ices less medi- cal care	All items less food	All items less energy	All items less food and ener- gy	Ener- gy 1
1940	48.8 51.8 52.7 53.9 58.5 66.9 72.1	40.6 43.3 49.6 54.0 54.7 56.3 62.4 75.0 80.4 78.3	35.2 38.4 45.1 50.3 49.6 50.7 58.1 70.6 76.6 73.5	48.0 50.4 56.0 58.4 61.6 64.1 76.8 82.7 81.5	48.1 51.4 58.4 60.3 65.9 70.9 74.1 80.3 86.2 87.4	44.7 46.7 51.6 53.8 56.6 58.6 62.9 72.2 77.8 76.3	43.6 44.2 45.6 46.4 47.5 48.2 49.1 51.1 54.3 56.9	32.5 32.7 33.7 35.4 36.9 37.9 40.1 43.5 46.4 48.1		47.3 48.7 52.1 53.6 55.7 56.9 64.9 69.6 70.3			
1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	72.1 77.8 79.5 80.1 80.5 80.2 81.4 84.3 86.6	78.8 85.9 87.0 86.7 85.9 85.1 85.9 88.6 90.6	74.5 82.8 84.3 83.0 82.8 81.6 82.2 84.9 88.5 87.1	81.4 87.5 88.3 88.5 87.5 86.9 87.8 90.5 91.5	88.4 95.1 96.4 95.7 93.3 91.5 91.5 94.4 95.9 97.3	76.2 82.0 82.4 83.1 83.5 85.3 87.6 88.2 89.3	58.7 61.8 64.5 67.3 69.5 70.9 72.7 75.6 78.5 80.8	49.2 51.7 55.0 57.0 58.7 60.4 62.8 65.5 68.7 72.0	77.6 80.4 82.5	71.1 75.7 77.5 79.0 79.5 79.7 81.1 83.8 85.7 87.3	83.9 86.3 87.0	83.3 85.2 87.0	90.1 90.3 91.8
1960	88.7 89.6 90.6 91.7 92.9 94.5 97.2 100.0 104.2	91.5 92.0 92.8 93.6 94.6 95.7 98.2 100.0 103.7 108.4	88.0 89.1 89.9 91.2 92.4 94.4 99.1 100.0 103.6 108.9	93.1 93.4 94.1 94.8 95.6 96.2 97.5 100.0 103.7 108.1	96.7 96.6 97.6 97.9 98.8 98.4 98.5 100.0 103.1 107.0	90.7 91.2 91.8 92.7 93.5 94.8 97.0 100.0 104.1 108.8	83.5 85.2 86.8 88.5 90.2 92.2 95.8 100.0 105.2 112.5	74.9 77.7 80.2 82.6 84.6 87.3 92.0 100.0 107.3 116.0	85.2 86.7 88.1 89.6 91.2 93.2 96.4 100.0 104.9 112.0	88.8 89.7 90.8 92.0 93.2 94.5 96.7 100.0 104.4 110.1	88.3 89.3 90.4 91.6 92.9 94.3 97.3 100.0 104.4 110.3	88.3 89.3 90.5 91.6 93.0 94.3 96.6 100.0 104.6 110.7	94.2 94.4 94.7 95.0 94.6 96.3 97.8 100.0 101.5 104.2
1970 1971 1972 1973 1974 1976 1977 1978 1979	125.3 125.3 133.1 147.7	113.5 117.4 120.9 129.9 145.5 158.4 165.2 174.7 187.1 208.4	114.9 118.4 123.5 141.4 161.7 175.4 180.8 192.2 211.4 234.5	112.5 116.8 119.4 123.5 136.6 149.1 156.6 165.1 174.7 195.1	111.8 116.5 118.9 121.9 130.6 145.5 154.3 163.2 173.9 191.1	113.1 117.0 119.8 124.8 140.9 151.7 158.3 166.5 174.3 198.7	121.6 128.4 133.3 139.1 152.1 166.6 180.4 194.3 210.9 234.2	124.2 133.3 138.2 144.3 159.1 179.1 197.1 216.7 235.4 258.3	121.3 127.7 132.6 138.3 151.0 164.7 177.7 190.6 206.9 230.1	116.7 122.1 125.8 130.7 143.7 157.1 167.5 178.4 191.2 213.0	117.0 122.0 126.1 133.8 146.9 160.2 169.2 179.8 193.8 213.1	117.6 123.1 126.9 131.3 142.2 155.3 165.5 175.8 188.7 207.0	107.0 111.2 114.3 123.5 159.7 176.6 189.3 207.3 220.4 275.9
1980 1981 1982 1983 1984	246.8 272.4 289.1 298.4 311.1	233.9 253.6 263.8 271.5 280.7	254.6 274.6 285.7 291.7 302.9	222.0 241.2 250.9 259.0 267.0	210.4 227.1 241.1 253.0 266.5	235.2 257.5 261.6 266.3 270.8	270.3 305.7 333.3 344.9 363.0	287.4 318.2 356.0 387.0 410.3	266.6 302.2 328.6 338.1 355.6	244.0 270.6 288.4 298.3 311.3	238.0 261.7 279.3 289.3 302.9	232.8 257.1 276.1 287.0 301.2	361.1 410.0 416.1 419.3 423.6
1983: Jan Feb Mar Apr June July Aug Sept Nov	293.1 293.2 293.4 295.5 297.1 298.1 299.3 300.8 301.8 302.6 303.5	267.2 266.7 266.7 269.2 270.9 271.6 272.5 273.4 274.5 275.0 275.2	288.1 289.0 290.5 291.9 292.4 292.0 292.0 292.2 292.6 292.9 292.5 293.9	254.4 253.2 252.4 257.6 258.9 260.2 261.4 262.9 263.6 264.1 263.8	247.3 247.1 247.4 248.7 249.5 251.2 252.9 254.3 256.4 258.7 261.0	262.4 260.5 258.9 263.0 266.3 267.3 268.4 269.6 270.6 270.2 269.5 268.5	337.9 338.9 339.4 341.2 342.6 344.0 345.6 346.8 349.0 350.2 351.0	377.4 381.5 382.2 382.8 383.5 384.6 387.2 389.8 391.0 392.9 395.0 396.3	331.4 332.2 332.7 334.5 336.0 337.4 338.9 339.9 342.2 343.3 344.1 344.5	292.6 292.4 294.7 296.5 297.8 299.3 300.5 302.3 303.2 303.9 304.0	283.8 284.7 285.6 287.0 287.6 288.2 299.3 292.1 293.4 294.4 295.0	281.1 282.0 282.6 284.0 284.7 285.5 286.8 288.2 290.2 291.8 293.2 293.6	414.5 406.7 399.9 410.0 421.3 427.3 430.1 429.8 429.3 425.1 419.9 418.0
1984: Jan	305.2 306.6 307.3 308.8 309.7 310.7 311.7 313.0 314.5 315.3 315.3 315.3	276.8 278.3 278.7 280.1 280.4 280.6 280.6 281.4 282.3 283.1 283.0 282.8	299.4 302.1 302.2 302.3 301.4 302.0 303.2 304.8 304.2 304.1 305.1	263.0 263.8 264.4 266.5 267.4 267.4 266.8 267.1 268.8 269.8 269.9 269.2	261.4 260.9 262.2 265.2 267.0 267.8 267.8 267.8 268.7 269.3 270.0 269.8	267.4 269.1 269.3 270.7 271.1 270.5 269.5 270.0 272.3 273.6 273.3 272.2	353.9 355.3 356.5 358.1 359.9 361.9 366.5 366.5 369.7 369.9 370.6	400.2 404.4 405.3 406.3 407.1 408.4 410.9 412.7 413.9 416.5 418.5 419.3	346.6 347.8 349.0 350.6 352.5 354.5 357.1 359.2 361.7 362.3 362.3 363.0	304.8 305.9 306.8 308.6 310.0 311.0 312.0 313.2 315.2 316.1 316.2	297.0 298.2 299.2 390.5 301.1 301.9 303.1 304.6 306.1 307.1 307.2	294.6 295.5 296.7 298.3 299.3 300.2 301.3 302.8 304.9 306.1 306.9 307.3	416.7 420.2 418.1 421.3 426.1 428.5 428.3 427.3 429.0 426.7 421.8

<sup>&</sup>lt;sup>1</sup> Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel. Motor oil, coolant, etc. also included through 1982. Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-52.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-55.—Changes in special consumer price indexes, 1958-84
[Percent change]

	All it	ems	All iten		All iten ene		All iten food ene	and	All items energy, a	less food, nd shelter
Year or month	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
1958 1959	1.8 1.5	2.7 .8	1.6 2.3	2.3 1.9	1.9 1.4	2.9 .8	1.8 2.2	2.3 2.1	] 	
1960	1.5 .7 1.2 1.6 1.2	1.6 1.0 1.1 1.2 1.3	1.0 1.1 1.2 1.6 1.0	1.7 1.0 1.2 1.3 1.3	1.4 .8 1.2 1.8 1.3	1.5 1.1 1.2 1.3 1.4	.8 1.5 1.1 1.8 1.2	1.5 1.1 1.3 1.2 1.5		
1965	1.9 3.4 3.0 4.7 6.1	1.7 2.9 2.9 4.2 5.4	1.6 3.3 3.5 4.9 5.7	1.4 2.3 3.4 4.4 5.5	1.9 3.5 3.1 4.9 6.4	1.5 3.2 2.8 4.4 5.7	1.5 3.3 3.9 5.1 6.1	1.4 2.4 3.5 4.6 5.8	4.6 5.0	4.6 4.8
1970	5.5 3.4 3.4 8.8 12.2	5.9 4.3 3.3 6.2 11.0	6.5 3.1 3.0 5.6 12.2	6.0 4.6 3.0 3.9 9.9	5.6 3.3 3.5 8.3 11.5	6.1 4.3 3.4 6.1 9.8	6.6 3.1 3.0 4.7 11.3	6.2 4.7 3.1 3.5 8.3	5.7 3.2 2.6 3.5 11.3	5.1 4.9 2.4 3.0 7.6
1975	7.0 4.8 6.8 9.0 13.3	9.1 5.8 6.5 7.7 11.3	7.1 6.2 6.3 8.5 14.0	9.3 6.6 6.5 7.2 11.4	6.7 4.6 6.8 9.2 11.1	9.1 5.6 6.3 7.8 10.0	6.7 6.1 6.4 8.5 11.3	9.2 6.6 6.2 7.3 9.7	6.4 7.0 5.2 6.5 7.2	8.9 7.0 6.0 5.7 6.9
1980	12.4 8.9 3.9 3.8 4.0	13.5 10.4 6.1 3.2 4.3	12.9 9.9 4.0 4.1 4.0	14.6 10.9 6.6 3.4 4.4	11.7 8.6 4.2 4.4 4.5	11.7 10.0 6.7 3.6 4.7	12.1 9.6 4.5 4.9 4.7	12.5 10.4 7.4 3.9 4.9	9.9 9.4 6.1 5.0 4.4	8.8 9.5 7.7 5.2 5.0
				Cha	nge from p	eceding mo			L	
	Unad- justed	Sea- sonally ad- justed	Unad- justed	Sea- sonally ad- justed	Unad- justed	Sea- sonally ad- justed	Unad- justed	Sea- sonally ad- justed	Unad- justed	Sea- sonally ad- justed
1983: Jan Feb Mar Apr May June July Aug Sept Oct	0.0.4.7.5.m <b>4</b> .m.5.m.v.	0.3 1 .7 .4 .2 .4 .4 .4 .4	00   00   1864 546330	0.1-10.855.3 5.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	চূল্লুদ্ধ্ব ল্বক্ৰ্লুথ	0.5325.522 444.543	สูตุณตุล กุรกุรเลย	0.532.523 5.55.4.53	0.3 4.4 4.2 3.3 4.5 8.6 5.1	0.54.34.23 5.5.5.5.53
Nov Dec	.2 .6 .5 .2 .5	.6 .4 .2 .5 .2	4.0 9.4.9.6.5.9	१.२ ४.ग.ग. <b>६.ग.२</b>	7.4.7.4.7.7.7	7 4 3 4 2 3	ין שמאפימט	5.3.4.5.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.	ĺ	
June	.3 .4 .5 .3 0	.2 .3 .5 .4 .4 .2 .2	3 3 4 6 3 0	3 4 4 4 2 2	เฉ ส.จ.จ.ซ.จ.จ.จ	4,53,4,23	.3 .4 .5 .7 .4 .3	3. 4.5.4.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.	335533 35743	634533 344322

<sup>&</sup>lt;sup>1</sup> Changes from December to December are based on unadjusted indexes.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-52.

TABLE B-56.—Changes in consumer price indexes, 1929-84 [Percent change]

	All it	tems		·····	Commo	odities				Serv	rices		Ener	gy a
Year	Dec.	Year	To	tal	Fo	od	Commi		To	tal	Medic: serv	al care rices	Dec.	Year
	to Dec. <sup>1</sup>	to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to Year	to Dec. 1	to year
1929	0.2	0			2.3	1.3							***************************************	
1933	.5	-5.1			7.0	2.9								
1939	5	-1.4	-1.0	-2.0	-2.5	-2.8	0.2	-1.6	0.2	0.2	0.3	0.3	••••••	······································
1940 1941 1942 1943 1944	1.0 9.7 9.3 3.2 2.1	1.0 5.0 10.7 6.1 1.7	1.2 13.5 13.0 4.0 2.2	1.0 6.7 14.5 8.9 1.3	2.6 16.4 17.5 3.1 .2	1.7 9.1 17.4 11.5 -1.4	.4 10.8 6.4 5.4 5.0	5.0 11.1 4.3 5.5	.7 2.5 2.0 2.6 1.7	.2 1.4 3.2 1.8 2.4	0 1.5 3.9 5.8 2.8	0 .6 3.1 5.0 4.2		
1945 1946 1947 1948 1949	2.3 18.2 9.0 2.7 -1.8	2.3 8.5 14.4 7.8 -1.0	2.9 24.9 10.4 1.7 -4.1	2.9 10.8 20.2 7.2 -2.6	3.0 31.5 11.2 0.8 3.7	2.2 14.6 21.5 8.5 -4.0	3.0 12.9 9.1 5.3 -4.8	4.1 6.2 12.8 7.7 -1.5	1.0 3.5 5.2 6.1 3.6	1.5 1.9 4.1 6.3 4.8	2.9 8.9 6.5 7.0 2.1	2.7 5.8 8.5 6.7 3.7		
1950 1951 1952 1953 1954	5.8 5.9 9.6 5	1.0 7.9 2.2 .8 .5	7.7 5.9 7 6 -1.4	9.0 1.3 3 9	9.6 7.4 -1.1 -1.3 -1.6	1.4 11.1 1.8 -1.5 2	5.7 4.6 5 -2 -1.4	7.5 9 .9 -1.1	3.6 5.2 4.6 4.2 1.9	3.2 5.3 4.4 4.3 3.3	3.3 5.8 5.5 3.6 2.6	2.3 5.1 6.4 3.6 3.0		
1955 1956 1957 1958 1959	.4 2.9 3.0 1.8 1.5	4 1.5 3.6 2.7 .8	4 2.6 2.6 1.3 .6	9 .9 3.1 2.3 .1	9 3.1 2.8 2.2 8	-1.4 .7 3.3 4.2 -1.6	0 2.5 2.2 .8 1.5	7 1.0 3.1 1.1 1.3	2.3 3.1 4.5 2.7 3.7	2.0 2.5 4.0 3.8 2.9	3.2 4.1 4.5 4.9 4.6	2.9 4.0 4.3 4.9 4.8	-0.7 4.3	0.2 1.7
1960 1961 1962 1963 1964	1.5 .7 1.2 1.6 1.2	1.6 1.0 1.1 1.2 1.3	1.1 0 1.0 1.4 .8	.9 .5 .9 .9	3.1 9 1.5 1.9 1.4	1.0 1.3 .9 1.4 1.3	3 .6 .7 1.2	.4 .3 .7 .7 .8	2.7 1.9 1.7 2.3 1.8	3.3 2.0 1.9 2.0 1.9	3.8 3.5 3.0 2.6 2.6	4.0 3.7 3.2 3.0 2.4	1.5 -1.1 2.1 8 2	2.6 .2 .3 .3 4
1965 1966 1967 1968 1969	1.9 3.4 3.0 4.7 6.1	1.7 2.9 2.9 4.2 5.4	1.6 2.5 2.5 3.8 5.5	1.2 2.6 1.8 3.7 4.5	3.4 3.9 1.2 4.3 7.2	2.2 5.0 .9 3.6 5.1	.7 1.9 3.1 3.7 4.5	.6 1.4 2.6 3.7 4.2	2.6 4.9 4.0 6.1 7.4	2.2 3.9 4.4 5.2 6.9	3.5 8.1 7.9 7.4 7.0	3.2 5.4 8.7 7.3 8.1	2.0 1.8 1.4 1.7 3.1	1.8 1.6 2.2 1.5 2.7
1970 1971 1972 1973 1974	5.5 3.4 3.4 8.8 12.2	5.9 4.3 3.3 6.2 11.0	4.0 2.9 3.4 10.4 12.7	4.7 3.4 3.0 7.4 12.0	2.2 4.3 4.7 20.1 12.2	5.5 3.0 4.3 14.5 14.4	4.8 2.3 2.5 5.0 13.2	4.1 3.8 2.2 3.4 10.6	8.2 4.1 3.6 6.2 11.3	8.1 5.6 3.8 4.4 9.3	8.3 5.3 3.8 5.8 13.3	7.1 7.3 3.7 4.4 10.3	4.5 3.1 2.8 16.8 21.6	2.7 3.9 2.8 8.0 29.3
1975 1976 1977 1978 1979	7.0 4.8 6.8 9.0 13.3	9.1 5.8 6.5 7.7 11.3	6.3 3.3 6.1 8.9 13.0	8.9 4.3 5.8 7.1 11.4	6.5 .6 8.0 11.8 10.2	8.5 3.1 6.3 10.0 10.9	6.2 5.1 4.9 7.7 14.3	9.2 5.0 5.4 5.8 11.7	8.1 7.3 7.9 9.3 13.7	9.5 8.3 7.7 8.5 11.0	10.3 10.7 9.0 9.2 10.6	12.6 10.1 9.9 8.6 9.7	11.6 6.9 7.2 8.0 37.4	10.6 7.2 9.5 6.3 25.2
1980 1981 1982 1983 1984	12.4 8.9 3.9 3.8 4.0	13.5 10.4 6.1 3.2 4.3	11.1 6.0 3.6 2.9 2.6	12.2 8.4 4.0 2.9 3.4	10.2 4.3 3.1 2.6 3.8	8.6 7.9 4.0 2.1 3.8	11.5 6.7 3.8 3.1 2.0	13.8 8.6 4.0 3.2 3.1	14.2 13.0 4.3 4.8 5.4	15.4 13.1 9.0 3.5 5.2	10.0 12.7 11.2 6.1 5.8	11.3 10.7 11.9 8.7 6.0	18.1 11.9 1.3 5 .2	30.9 13.5 1.5 .8 1.0

<sup>&</sup>lt;sup>1</sup> Changes from December to December are based on unadjusted indexes.

<sup>a</sup> Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel. Motor oil, coolant, etc. also included through 1982.

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

See also Note, Table B-52.

TABLE B-57.—Producer price indexes by stage of processing, 1947-84 [1967=100]

					Finish	ed goods				<del></del>
	1 1	Co	nsumer foo	ds	Finis	hed goods	excluding	consumer	foods	Total
Year or month	Total finished			D		Con	sumer goo	ds	014-1	finished
	goods	Total	Crude	Proc- essed	Total	Total	Durable	Non- durable	Capital equipment	consumer goods
1947 1948 1949	74.0 79.9 77.6	82.8 90.4 83.1	99.4 107.1 101.3	80.2 87.6 80.1		79.0 84.0 82.2	74.6 79.7 81.8	80.7 85.8 82.3	55.4 60.4 63.4	80.5 86.5 82.5
1950 1951 1952 1953	79.0 86.5 86.0 85.1	84.7 95.2 94.3 89.4 88.7	92.2 105.9 112.8 105.2 94.7	83.4 93.2 91.3 86.7 87.6		83.5 89.5 88.3 89.1 89.4	82.7 88.2 88.9 89.6 90.3	83.6 90.0 87.8 88.6 88.9	64.9 71.2 72.4 73.6 74.5	83.9 91.8 90.7 89.2 89.1
1955	85.5 87.9 91.1 93.2	86.5 86.3 89.3 94.5 90.1	98.8 98.7 97.4 103.5 94.3	84.4 84.3 87.9 93.1 89.5		90.1 92.3 94.6 94.7 95.9	91.2 94.3 97.1 98.4 99.6	89.4 91.1 93.2 92.6 94.0	76.7 82.4 87.5 89.8 91.5	88.5 89.8 92.4 94.4 93.6
1960	937	92.1 91.7 92.5 91.4 91.9	100.6 96.1 97.0 95.5 98.2	90.7 90.9 91.7 90.7 90.8		96.3 96.2 96.0 96.0 95.9	99.2 98.8 98.3 97.8 98.2	94.7 94.7 94.8 95.1 94.8	91.7 91.8 92.2 92.4 93.3	94.5 94.3 94.6 94.1 94.3
1965	95.7 98.8 100.0	95.4 101.6 100.0 103.6 110.0	98.6 104.8 100.0 107.5 116.0	94.9 101.0 100.0 103.0 108.9	100.0 102.6 105.4	96.6 98.1 100.0 102.1 104.6	97.9 98.5 100.0 102.2 104.0	95.9 97.8 100.0 102.2 105.0	94.4 96.8 100.0 103.5 106.9	96.1 99.4 100.0 102.7 106.6
1970	110.3	113.5 115.3 121.7 146.4 166.9	116.3 115.8 121.2 160.7 180.8	113.1 115.1 121.7 143.9 164.6	109.1 113.1 115.4 120.1 139.3	107.7 111.4 113.5 118.6 138.6	106.9 110.8 113.3 115.4 125.9	108.3 111.7 113.6 120.5 146.8	112.0 116.6 119.5 123.5 141.0	109.9 112.9 116.6 129.2 149.3
1975	163.4	181.0 180.4 189.9 207.2 226.2	181.2 193.9 201.0 216.8 233.1	181.3 177.8 187.3 204.6 223.8	156.2 166.1 177.7 190.7 213.3	153.1 162.6 174.3 186.7 211.5	138.2 144.5 152.8 166.9 183.2	163.0 174.8 189.3 200.0 231.3	162.5 173.4 184.6 199.2 216.5	163.6 169.7 180.7 194.9 217.9
1980	. 247.0 . 269.8 . 280.7 . 285.2	239.5 253.6 259.3 261.8 273.5	237.2 263.8 252.7 258.7 283.9	237.8 250.6 257.7 260.0 270.3	247.8 273.3 285.8 290.8 294.8	250.8 276.5 287.8 291.4 294.1	206.2 218.6 226.7 233.1 236.6	283.9 319.6 333.6 335.3 337.4	239.8 264.3 279.4 287.2 294.1	248.9 271.3 281.0 284.6 290.4
1983: Jan	. 283.4 . 283.1 . 284.2	258.4 261.0 261.1 262.9 262.6 <b>261.2</b>	232.9 240.8 247.9 265.8 267.2 251.2	258.5 260.7 260.1 260.5 260.1 <b>260.0</b>	290.3 289.6 288.7 287.7 289.3 290.8	291.4 290.3 288.9 287.3 289.4 291.6	231.7 232.9 231.9 232.2 232.9 233.1	336.6 333.7 332.0 328.7 332.0 335.7	285.2 285.6 285.6 286.2 286.5 286.7	283.5 283.7 282.7 282.3 283.6 284.6
July Aug Sept Oct Nov Dec	286.1 285.1 287.6 286.8	260.7 260.7 263.0 263.7 261.9 264.3	247.1 259.9 267.4 287.3 270.4 266.0	259.8 258.7 260.5 259.5 259.0 262.0	291.8 292.5 290.3 293.4 293.0 292.6	292.8 293.5 291.4 293.9 293.2 292.5	233.4 233.8 229.2 235.3 235.4 235.9	337.7 338.6 338.6 338.1 336.8 335.2	287.2 287.7 285.1 289.9 290.0 290.4	285.2 285.7 285.1 287.0 285.9 286.3
1984: ¹ Jan Feb Mar Apr June	. 290.6	272.2 274.7 276.6 274.3 271.7 270.8	306.9 313.6 323.7 299.0 270.7 258.9	266.9 269.0 2 <b>70.2</b> 2 <b>69.9</b> 2 <b>69.6</b> 269.7	292.9 293.6 294.0 294.6 295.3 295.4	292.5 293.1 293.6 293.5 294.9 294.9	235.9 236.1 236.6 236.7 236.6 236.4	335.0 336.1 336.7 336.4 338.9 339.2	291.6 292.3 292.3 294.5 293.9 293.9	288.9 290.1 291.1 290.3 290.3 290.1
July	. 291.6	275.3 274.0 273.4 271.8 272.3 274.4	270.8 274.6 274.7 277.2 265.5 270.8	273.4 271.7 271.0 269.1 270.7 272.5	295.7 294.8 292.9 295.9 296.7 296.1	295.0 293.8 291.9 294.8 295.7 294.9	236.6 236.7 232.5 237.9 238.4 238.8	339.2 336.9 336.9 337.7 339.1 337.2	294.6 294.6 292.9 296.0 296.3 296.4	291.6 290.4 288.9 290.3 291.2 291.3

TABLE B-57.—Producer price indexes by stage of processing, 1947-84-Continued [1967=100]

•		In	termediat	e materials, s	supplies, an	d compo	nents		Crude	material	s for fur	ther proc	essing
Year or month		Foods		Materia compo	ls and nents	Proc- essed				Food- stuffs		Other	1
	Total	and feeds*	Other	For manufac- turing	For con- struction	fuels and lubri- cants	Con- tainers	Supplies	Total	and feed- stuffs	Total	Fuel	Other
1947 1948 1949	72.4 78.3 75.2		70.0 76.1 74.2	72.1 77.8 74.5	66.0 73.1 73.2	85.5 96.9 88.2	66.8 69.8 70.1	77.5 81.0 76.3	101.2 110.9 96.0	111.7 120.8 100.3		66.6 78.7 78.3	90.6 100.7 91.6
1950 1951 1952 1953 1954			77.7 87.0 84.3 85.3 85.7	78.1 88.5 84.8 86.2 86.3	77.0 84.3 83.7 85.1 85.5	89.9 93.9 92.8 93.4 93.3	72.0 84.5 79.9 80.0 81.5	78.9 88.8 88.8 84.3 86.3	104.6 120.1 110.3 101.9 101.0	107.6 124.5 117.2 104.9 104.9		77.9 79.4 79.9 82.7 79.0	104.7 120.7 104.6 100.1 98.2
1955 1956 1957 1958	88.1 92.0 94.1 94.3 95.6		88.3 92.6 95.0 94.8 96.4	88.4 92.6 94.8 95.2 96.5	88.9 93.5 94.0 94.0 96.6	93.3 96.2 101.9 96.0 95.6	82.6 88.6 92.5 94.7 94.2	84.8 87.1 88.0 90.0 91.2	97.1 97.6 99.8 102.0 99.4	95.1 93.1 97.2 103.0 96.2		78.8 84.4 89.2 90.3 91.9	103.8 107.6 106.2 102.2 105.8
1960	95.6 95.0 94.9 95.2 95.5		96.8 95.5 95.3 95.0 95.6	96.5 95.3 94.7 94.9 95.9	95.9 94.6 94.2 94.5 95.4	98.2 99.4 99.0 98.1 96.0	95.5 94.7 95.9 94.7 94.0	90.7 91.8 93.8 95.2 94.3	97.0 96.5 97.5 95.4 94.5	95.1 93.8 95.7 92.9 90.8		92.8 92.6 92.1 93.2 92.8	101.4 102.5 102.0 100.7 102.4
1965 1966 1967 1968 1969	96.8 99.2 100.0 102.3 105.8	100.0 99.4 102.7	96.9 98.9 100.0 102.5 106.1	97.4 99.3 100.0 102.2 105.8	96.2 98.8 100.0 105.0 110.8	97.4 99.2 100.0 97.6 98.5	95.8 98.4 100.0 102.4 106.3	95.2 99.4 100.0 101.0 102.8	99.3 105.7 100.0 101.6 108.4	97.1 105.9 100.0 101.3 109.3	100.0 102.2 106.8	93.5 96.3 100.0 102.3 106.6	104.5 106.7 100.0 102.1 106.9
1970 1971 1972 1973		109.1 111.7 118.5 168.4 200.2	109.9 114.3 118.9 128.1 159.5	110.0 112.8 117.0 127.7 162.2	112.6 119.7 126.2 136.7 161.6	105.0 115.2 118.9 131.5 199.1	111.4 116.6 121.9 129.2 152.2	108.0 111.0 115.6 140.6 154.5	112.3 115.1 127.6 174.0 196.1	112.0 114.2 127.5 180.0 189.4	112.7 117.0 128.0 162.5 208.9	122.6 139.0 148.7 164.5 219.4	109.8 110.7 121.9 161.5 205.4
1975 1976 1977 1978 1979		195.3 185.3 190.5 203.1 226.1	178.6 189.4 202.3 216.5 244.4	178.7 185.4 195.4 208.7 234.4	176.4 188.4 203.4 224.7 247.4	233.0 250.1 282.5 295.3 364.8	171.4 180.2 188.3 202.8 226.8	168.1 179.0 188.7 198.5 218.2	196.9 202.7 209.2 234.4 274.3	191.8 190.2 192.1 216.2 247.9	206.9 228.5 245.0 272.3 330.0	271.5 305.3 372.1 426.8 507.6	188.3 206.7 212.2 233.1 284.5
1980	280.3 306.0 310.4 312.3 320.0	252.6 250.3 239.4 247.9 253.1	282.3 310.1 315.7 317.1 325.0	265.7 286.1 289.8 293.4 301.8	268.3 287.6 293.7 301.8 310.3	503.0 595.4 591.7 564.8 566.3	254.5 276.1 285.6 286.6 302.1	244.5 263.8 272.1 277.1 283.3	304.6 329.0 319.5 323.6 331.0	259.2 257.4 247.8 252.2 259.7	401.0 482.3 473.9 477.4 484.7	615.0 751.2 886.1 931.5 931.4	346.1 413.7 376.8 372.2 380.6
1983: Jan Feb Mar Apr May June	309.2 309.9 309.5 308.7 309.7 311.3	236.4 238.8 238.0 243.6 244.4 242.8	314.6 315.2 314.8 313.6 314.6 316.4	288.6 291.1 290.2 291.0 291.9 292.4	296.5 298.8 299.6 300.9 301.2 302.4	577.9 565.4 564.2 543.3 547.8 562.0	285.0 285.3 285.2 284.8 285.8 285.9	273.1 273.5 273.9 275.5 275.6 275.6	313.9 320.2 321.6 325.8 325.8 323.3	239.6 249.3 249.1 256.8 256.5 252.1	473.6 473.0 477.7 474.6 475.4 476.8	930.7 937.7 961.8 941.6 935.9 936.7	368.0 366.0 366.8 367.0 369.0 370.5
July	312.8 314.0 315.5 315.6 315.5 315.7	244.0 250.9 263.2 258.2 257.4 256.9	318.0 318.7 319.5 320.0 319.9 320.2	294.1 294.7 296.7 296.4 296.5 297.6	302.9 303.7 303.1 303.6 303.9 304.9	567.9 572.0 573.2 574.2 568.1 561.7	286.1 286.3 287.2 288.1 289.3 289.9	276.2 277.9 280.2 280.6 281.6 281.6	320.6 327.1 328.5 324.8 324.0 327.5	248.4 256.4 257.2 253.7 251.8 256.0	476.2 479.6 482.5 478.2 479.4 481.6	927.8 926.9 931.0 910.9 915.3 921.1	371.6 375.6 378.1 377.1 377.7 379.1
1984: ¹ Jan Feb Mar Apr May June	316.3 317.6 319.7 320.3 320.9 321.6	260.7 255.1 257.5 259.1 260.8 257.8	320.6 322.3 324.4 325.0 325.4 326.4	298.9 299.8 301.8 302.9 303.3 303.4	305.5 307.8 309.6 310.5 309.8 310.3	556.4 561.3 567.8 562.9 567.2 575.2	292.3 294.8 297.3 299.4 300.9 301.8	282.6 282.2 283.0 284.2 284.3 283.9	333.5 332.6 338.8 339.4 338.0 333.0	264.0 260.5 269.9 269.7 266.4 260.3	483.4 488.1 487.5 490.1 492.3 489.6	926.1 926.6 910.6 920.8 928.4 932.6	380.1 385.5 387.8 388.8 389.9 386.1
July	321.7 321.1 320.3 319.9 320.5 319.8	255.3 251.4 248.0 243.8 244.1 243.1	326.7 326.3 325.7 325.6 326.1 325.5	303.2 302.5 301.7 301.2 301.8 301.1	310.9 312.0 311.3 311.6 311.6 312.3	576.6 569.2 567.6 564.2 566.2 561.1	303.0 304.1 304.7 307.9 309.4 309.3	283.2 284.1 283.3 283.1 283.1 283.1	334.1 328.9 326.7 320.0 323.7 323.1	263.6 256.5 253.1 245.5 253.4 253.7	486.4 485.0 485.1 480.2 475.4 473.0	940.2 953.1 938.8 935.0 934.1 930.9	380.9 376.8 379.8 374.8 369.4 367.2

Data have been revised through August 1984 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.
 Intermediate materials for food manufacturing and feeds.

TABLE B-58.—Producer price indexes by stage of processing, special groups, 1974-84 [1967 = 100]

			Finishe	d goods			Interme	diate ma	terials, s	upplies,	Crude	materia		ther
				Exclu	ding foor energy	ds and		and com	housing			proce	some	
Year or month	Total	Foods	Ener- 8y	Total	Cap- ital equip- ment	Con- sumer goods exclud- ing foods and energy	Total	Foods and feeds <sup>1</sup>	Ener- 8y	Other	Total	Food- stuffs and feed- stuffs	Ener- gy	Other
1974	147.5 163.4 170.6 181.7 195.9 217.7	166.9 181.0 180.4 189.9 207.2 226.2	215.2 252.4 282.3 326.7 347.7 469.9	133.3 148.5 156.8 166.3 178.7 194.7	141.0 162.5 173.4 184.6 199.2 216.5	129.1 141.0 148.1 156.6 168.0 183.3	162.9 180.0 189.1 201.5 215.6 243.2	200.2 195.3 185.3 190.5 203.1 226.1	188.7 220.8 236.8 267.3 280.3 348.6	156.7 174.7 185.0 196.1 210.4 234.2	196.1 196.9 202.7 209.2 234.4 274.3	189.4 191.8 190.2 192.1 216.2 247.9	223.0 266.9 283.1 323.5 362.5 439.9	198.3 165.0 191.0 190.1 209.2 253.0
1980	247.0 269.8 280.7 285.2 291.2	239:5 253.6 259.3 261.8 273.5	701.3 835.4 822.9 783.6 750.8	216.4 235.1 248.6 256.1 262.3	239.8 264.3 279.4 287.2 294.1	204.2 220.1 232.6 239.9 245.8	280.3 306.0 310.4 312.3 320.0	252.6 250.3 239.4 247.9 253.1	484.9 573.6 570.8 543.9 545.2	261.8 283.4 290.1 294.8 303.5	304.6 329.0 319.5 323.6 331.0	259.2 257.4 247.8 252.2 259.7	586.1 783.4 801.5 791.1 785.6	269.4 266.0 238.1 250.7 266.1
1983: Jan	284.1	258.4 261.0 261.1 262.9 262.6 261.2	811.1 788.0 774.1 749.2 769.0 791.1	253.8 254.5 254.4 254.9 255.3 255.6	285.2 285.6 285.6 286.2 286.2 286.7	237.5 238.5 238.2 238.7 239.2 239.5	309.2 309.9 309.5 308.7 309.7 311.3	236.4 238.8 238.0 243.6 244.4 242.8	556.8 545.3 543.7 524.3 528.0 541.0	290.5 292.4 292.3 293.1 293.7 294.3	313.9 320.2 321.6 325.8 325.8 325.8	239.6 249.3 249.1 256.8 256.5 252.1	812.1 799.9 801.6 793.3 790.9 791.1	230.7 237.8 244.3 244.7 247.5 249.7
July Aug Sept Oct Nov Dec	285.1 287.6	260.7 260.7 263.0 263.7 261.9 264.3	794.1 797.6 795.7 788.5 777.4 767.6	256.5 256.9 254.7 258.5 258.7 258.9	287.2 287.7 285.1 289.9 290.0 290.4	240.5 240.9 238.9 242.2 242.5 242.7	312.8 314.0 315.5 315.6 315.5 315.7	244.0 250.9 263.2 258.2 257.4 256.9	546.4 550.1 551.4 552.1 546.7 540.9	295.4 295.8 296.6 297.1 297.6 298.6	320.6 327.1 328.5 324.8 324.0 327.5	248.4 256.4 257.2 253.7 251.8 256.0	786.3 785.8 787.8 779.7 781.6 783.3	251.9 257.7 261.1 259.5 260.2 262.7
1984: 2 Jan Feb Mar Apr May June	290.6 291.4 291.2 291.1	272.2 274.7 276.6 274.3 271.7 270.8	753.8 757.3 757.9 751.1 762.7 764.8	260.1 260.6 261.0 262.0 262.1 262.0	291.6 292.3 292.3 294.5 293.9 293.9	243.8 244.2 244.7 245.2 245.6 245.5	316.3 317.6 319.7 320.3 320.9 321.6	260.7 255.1 257.5 259.1 260.8 257.8	536.2 540.8 546.7 542.2 546.2 553.5	299.5 301.0 302.7 303.8 303.9 304.2	333.5 332.6 338.8 339.4 338.0 333.0	264.0 260.5 269.9 269.7 266.4 260.3	786.0 786.4 780.1 783.1 786.4 787.7	263.7 271.1 274.3 276.4 277.8 272.8
July Aug Sept Oct Nov Dec	291.3 289.8 291.6	275.3 274.0 273.4 271.8 272.3 274.4	755.6 741.0 737.1 745.0 747.4 736.4	262.8 262.9 261.2 263.8 264.5 264.5	294.6 294.6 292.9 296.0 296.3 296.4	246.4 246.4 244.8 247.2 247.9 248.0	321.7 321.1 320.3 319.9 320.5 319.8	255.3 251.4 248.0 243.8 244.1 243.1	554.5 547.7 546.5 543.3 544.9 540.2	304.4 304.8 304.2 304.4 304.9 304.6	334.1 328.9 326.7 320.0 323.7 323.1	263.6 256.5 253.1 245.5 253.4 253.7	790.5 795.0 789.7 787.0 779.9 775.4	265.6 260.4 264.1 257.9 254.8 253.9

Intermediate materials for food manufacturing and feeds.
 Data have been revised through August 1984 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Table B-59.—Producer price indexes for major commodity groups, 1947-84 [1967=100]

	Farm p	roducts and foods and fe	processed eds		Ind	lustrial comm	odities	
Year or month	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products, and power 1	Chemical and allies products
947 948 949	94.3 101.5 89.6	109.4 117.5 <b>101.6</b>	82.9 88.7 80.6	70.8 76.9 <b>75.3</b>	103.6 108.1 98.9	83.3 84.2 79.9	76.9 90.5 86.2	93. 95. 87.
950. 951. 952. 953. 954. 9555. 955. 955. 957. 957.	93.9 106.9 102.7 96.0 95.7 91.2 90.6 93.7 98.1 93.5	106.7 124.2 117.2 106.2 104.7 98.2 96.9 99.5 103.9 97.5	83.4 92.7 91.6 87.4 88.9 85.0 84.9 87.4 91.8 89.4	78.0 86.1 84.1 84.8 85.0 90.8 93.3 93.6 95.3	102.7 114.6 103.4 100.8 98.6 98.7 98.7 98.8 97.0 98.4	86.3 99.1 80.1 81.3 77.6 77.3 81.9 82.0 82.9 94.2	87.1 90.3 90.1 92.6 91.3 91.2 94.0 99.1 95.3 95.3	88. 101: 96. 97. 98. 98. 99. 101. 102.
160	93.7 93.7 94.7 93.8 93.2 97.1 103.5 100.0 102.4 108.0	97.2 96.3 98.0 96.0 94.6 98.7 105.9 100.0 102.5 109.1	89.5 91.0 91.9 92.5 92.3 95.5 101.2 100.0 102.2 107.3	95.3 94.8 94.8 94.7 95.2 96.4 98.5 100.0 102.5 106.0	99.5 97.7 98.6 98.5 99.2 99.8 100.1 100.0 103.7 106.0	90.8 91.7 92.7 90.0 90.3 94.3 103.4 100.0 103.2 108.9	96.1 97.2 96.7 96.3 93.7 95.5 97.8 100.0 98.9 100.9	101. 100. 99. 97. 98. 99. 99. 99.
)70	111.7 113.9 122.4 159.1 177.4 184.2 183.1 188.8 206.6 229.8	111.0 112.9 125.0 176.3 187.7 186.7 191.0 192.5 212.5 241.4	112.1 114.5 120.8 148.1 170.9 182.6 178.0 186.1 202.6 222.5	110.0 114.1 117.9 125.9 153.8 171.5 182.4 195.1 209.4 236.5	107.1 109.0 113.6 123.8 139.1 137.9 148.2 154.0 159.8 168.7	110.3 114.1 131.3 143.1 145.1 148.5 167.8 179.3 200.0 252.4	106.2 115.2 118.6 134.3 208.3 245.1 265.6 302.2 322.5 408.1	102. 104. 104. 110. 146. 181. 187. 192. 198. 222.
880	244.7 251.5 248.9 253.9 262.6	249.4 254.9 242.4 248.2 255.7	241.2 248.7 251.5 255.9 265.3	274.8 304.1 312.3 315.7 322.6	183.5 199.7 204.6 205.1 209.9	248.9 260.9 262.6 271.1 286.5	574.0 694.5 693.2 664.7 657.0	260. 287. 292. 293. 300.
983: Jan	245.8 250.4 250.6 254.7 254.7 252.5	233.2 240.7 241.5 250.5 250.4 247.4	251.7 254.7 254.5 256.0 256.1 254.3	313.9 313.5 312.4 313.6 315.3	202.7 202.6 203.4 203.5 204.3 204.7	266.7 264.3 264.9 267.4 269.4 271.2	683.6 668.6 658.0 644.8 651.9 665.5	289. 290. 289. 291. 291. 290.
July	251.5 255.5 259.1 257.5 256.0 257.9	244.3 253.5 256.4 255.2 251.0 254.0	254.4 255.5 259.6 257.8 257.6 259.0	316.5 317.3 317.1 318.5 318.3 318.4	205.3 206.0 206.2 207.0 207.7 207.8	272.3 274.7 274.4 273.7 277.0 277.3	668.7 671.7 672.3 669.5 663.7 658.0	293.7 294.4 295.5 295.5 296.4 297.7
184: 2 Jan	264.4 263.4 267.9 267.3 265.8 262.8	263.4 261.6 267.4 265.4 260.8 257.1	263.8 263.4 267.1 267.2 267.5 264.8	319.1 320.6 321.9 322.6 323.2 323.8	208.2 209.6 209.9 209.9 210.5 210.2	279.1 283.3 286.7 286.8 288.5 290.1	652.1 656.0 658.7 654.7 660.6 665.9	298.1 296.5 300.1 302.0 302.0
July Aug. Sept. Oct Nov. Dec.	264.9 261.4 259.6 255.8 258.4 259.2	258.7 253.3 249.7 240.1 245.5 245.7	267.3 264.8 264.0 263.3 264.4 265.5	323.9 323.3 322.3 323.2 323.8 323.0	210.5 210.1 210.6 209.6 210.0 209.8	288.9 288.7 290.3 288.9 283.2 282.9	665.0 657.9 654.8 654.5 655.3 648.9	302.6 301.1 301.4 301.6 301.6

TABLE B-59.—Producer price indexes for major commodity groups, 1947-84—Continued [1967 = 100]

				Industria	l commodities	s—Continue	<u></u>		
Year or month	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 wehicles and equipment s	Miscella- neous products
1947 1948 1949	70.5 72.8 70.5	73.4 84.0 77.7	72.5 75.7 72.4	54.9 62.5 63.0	53.7 58.2 61.0	77.0 81.6 82.9	66.3 71.6 73.5	64.1 70.8 75.7	73.5 76.5 78.0
1950	85.9 105.4 95.5 89.1 90.4 102.4 103.8	89.3 97.2 94.4 94.3 92.6 97.1 98.5	74.3 88.0 85.7 85.5 85.5 87.8 93.6	66.3 73.8 73.9 76.3 76.9 82.1 89.2	63.1 70.5 70.6 72.2 73.4 75.7 81.8	84.7 91.8 90.1 91.9 92.9 93.3 95.8	75.4 80.1 80.1 83.3 85.1 87.5 91.3	75.3 79.4 84.0 83.6 83.8 86.3 91.2	79.2 83.9 83.4 85.6 86.4 86.5 87.6
1957 1958 1959	103.3 102.9	93.5 92.4 98.8	95.4 96.4 97.3	91.0 90.4 92.3	87.6 89.4 91.3	98.3 99.1 99.3	94.8 95.8 97.0	95.1 98.1 100.3	90.2 92.0 92.2
1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967.	99.2 96.3 96.8 95.5 95.9 97.8 100.0 103.4	95.3 91.0 91.6 93.5 95.4 95.9 100.2 100.0 113.3 125.3	98.1 95.2 96.3 95.6 95.4 96.2 98.8 100.0	92.4 91.9 91.2 91.3 93.8 96.4 98.8 100.0 102.6	92.0 91.9 92.0 92.2 92.8 93.9 96.8 100.0 103.2	99.0 98.4 97.7 97.0 97.4 96.9 98.0 100.0 102.8	97.2 97.6 97.6 97.1 97.3 97.5 98.4 100.0 103.7	98.8 98.6 98.6 97.8 98.3 98.5 98.6 100.0 102.8	93.0 93.3 93.7 94.5 95.2 95.9 97.7 100.0 102.2
1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976.	108.3 109.1 109.3 112.4 136.2 150.2	113.6 127.3 144.3 177.2 183.6 176.9 205.6	104.0 108.2 110.1 113.4 122.1 151.7 170.4 179.4 186.4	108.5 116.6 118.7 123.5 132.8 171.9 185.6 195.9 209.0	106.5 111.4 115.5 117.9 121.7 139.4 161.4 171.0 181.7	104.9 107.5 110.0 111.4 115.2 127.9 139.7 145.6 151.5	107.7 112.9 122.4 126.1 130.2 153.2 174.0 186.3 200.5	104.8 108.7 114.9 118.0 119.2 129.2 144.6 153.8 163.7	105.2 109.9 112.9 114.6 119.7 133.1 147.7 153.7 164.3
1977 1978 1979 1980 1981 1982 1983 1984 2	174.8 194.3 217.4 232.6 241.4 243.2 247.2	236.3 276.0 300.4 288.9 292.8 284.7 307.1 307.5	195.6 219.0 249.2 273.8 288.7 298.1 318.3	227.1 259.3 286.4 300.4 301.6 307.2 316.0	196.1 213.9 239.8 263.3 278.8 286.4 293.1	160.4 171.3 187.7 198.5 206.9 214.0 218.6	222.8 248.6 283.0 309.5 320.2 325.2 337.3	176.0 190.5 208.8 237.6 251.3 256.8 261.4	184.3 208.7 258.8 265.7 276.4 289.6 296.0
1983: Jan Feb Mar Apr May June July Aug Sept Oct Now	243.1	293.3 303.1 305.8 307.2 308.0 314.8 314.6 313.9 305.6 305.6 304.9 308.7	293.6 294.2 294.8 295.4 296.0 297.0 297.8 298.8 299.9 302.2 303.6 304.0	300.3 304.7 304.4 304.6 306.1 306.3 307.3 308.2 310.7 310.9 311.9	283.3 284.3 284.7 285.4 286.0 286.2 287.4 287.9 287.6 288.0	210.7 212.5 212.8 213.6 214.0 214.8 214.9 215.4 215.7 215.7	321.5 322.3 322.0 324.1 324.5 325.1 326.3 327.2 328.0 328.9 328.9	257.0 256.3 255.9 256.5 256.5 256.6 256.8 249.1 260.5 260.5	285.7 288.8 287.4 287.4 287.1 288.0 291.5 292.0 291.4 291.7 291.7
1984:2     Jan     Feb     Mar     Apr     June     July     Aug     Sept     Oct     Nov	244.8 246.2 246.4 247.3 247.5 247.6 247.7 247.9 248.1 247.7 247.7	309.1 315.7 316.8 315.1 308.5 307.1 304.4 304.7 303.2 301.1 303.3	309.1 312.0 314.0 316.3 317.7 318.4 319.8 321.3 321.2 322.6 323.8 323.2	312.9 314.8 316.8 317.4 317.3 316.1 316.2 315.3 315.4 316.2 315.3	289.7 290.2 291.0 292.2 292.6 293.1 294.0 294.1 294.5 295.0 295.7 295.6	216.8 217.2 217.4 218.2 219.1 219.2 219.2 219.2 218.9 219.0 219.6 219.7	330.1 332.2 333.4 337.6 338.3 339.8 340.8 340.8 339.6 339.5 339.9	261.1 261.2 261.5 261.9 261.1 261.4 261.1 253.6 263.9	294.5 294.9 294.9 294.6 294.3 295.7 297.3 298.2 296.4 297.0 297.0

<sup>&</sup>lt;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> Data have been revised through August 1984 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.
<sup>3</sup> Index for total transportation equipment is not shown but is available beginning December 1968.

TABLE B-60.—Changes in producer price indexes for finished goods, 1950-84
[Percent change]

	finis	tal shed ods	cons	shed umer ods	Fin	ished go	ods exclu	ding cons	sumer foc	nds	ene	shed ergy ods	Finisher excluding and e	d goods og foods nergy
Year or month	Dec. to	Year	Dec. to	Year	То	tal	Cons		Cap equip		Dec. to	Year	Dec. to	Year
	Dec. 1	to year	Dec. 1	to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to year	Dec. 1	to year	Dec. 1	to year
1950 1951 1952 1953	2.2 .5	1.8 9.5 6 -1.0	13.3 5.3 -5.9 -2.2	1.9 12.4 9 -5.2			8.2 .9 -1.1 1.6	1.6 7.2 -1.3 .9	10.3 3.4 .8 2.3	2.4 9.7 1.7 1.7				
1955 1956 1957 1958	1	.2 2.8 3.6 2.3	-1.9 -2.9 3.6 5.3	8 2.5 2 3.5 5.8			.3 1.7 2.5 1.7	.3 .8 2.4 2.5 .1	1.1 5.6 8.3 4.3 1.3	1.2 3.0 7.4 6.2 2.6				
1959 1960 1961 1962 1963	4 1.8 5	2 .8 0 .3	-3.7 5.2 -1.8 .5 -1.3	-4.7 2.2 4 .9 -1.2			.2 .8 .4 3 1	1.3 .4 1 2 0	1.0 .1 .2 .3 .5	1.9 .2 .1 .4 .2				
1964 1965 1966 1967	.5 3.3 2.2 1.6	.4 1.7 3.2 1.2	.4 9.1 1.4 —.4	3.8 6.5 —1.6	······································		.1 .9	1 .7 1.6 1.9	1.5 3.9 3.1	1.0 1.2 2.5 3.3	••••••			
1968 1969 1970 1971 1972	4.8 2.2 3.2 3.8	2.8 3.7 3.5 3.1 3.1	4.8 8.2 -2.5 5.9 8.0	3.6 6.2 3.2 1.6 5.6	2.4 3.4 4.3 2.1 2.1	2.6 2.7 3.5 3.7 2.0	2.1 2.0 2.9 3.9 2.0 2.0	2.1 2.4 3.0 3.4 1.9	3.0 4.6 4.9 2.4 2.0	3.5 3.3 4.8 4.1 2.5	***************************************			
1973 1974 1975 1976	11.8 18.3 6.6 3.7 6.9	9.1 15.3 10.8 4.4 6.5	22.5 13.0 5.5 -2.5 6.9	20.3 14.0 8.4 3 5.3	6.6 21.2 7.2 6.2 6.9	4.1 16.0 12.1 6.3 7.0	7.4 20.5 6.7 6.0 6.7	4.5 16.9 10.5 6.2 7.2	5.3 22.6 8.2 6.4 7.3	3.3 14.2 15.2 6.7 6.5	16.4 11.5 12.1	17.3 11.8 15.7	6.1 5.6 6.3 8.3	11.4 5.6 6.1
1977 1978 1979 1980 1981	9.2 12.8 11.8 7.1	7.8 11.1 13.5 9.2	11.7 7.4 7.5 1.4	9.1 9.2 5.9 5.9	8.3 14.8 13.3 8.8	7.3 11.9 16.2 10.3	8.5 17.5 14.2 8.5	7.1 13.3 18.6 10.2	7.9 8.8 11.4 9.2 3.9	7.9 8.7 10.8 10.2 5.7	8.5 58.0 27.8 14.1	6.4 35.1 49.2 19.1	9.4 10.7 7.8	7.5 9.0 11.1 8.6 5.7
1982 1983 1984 <sup>2</sup>	3.7 .6 1.8	4.0 1.6 2.1	2.1 2.3 3.8	2.2 1.0 4.5	4.1 .0 1.2	4.6 1.7 1.4	4.2 8 .8	4.1 1.3 .9	3.9 1.9 2.1	5.7 2.8 2.4	1 -9.2 -4.1	-1.5 -4.8 4.2	4.9 1.8 2.2	5.7 3.0 2.4
İ	·	· · · ·	<del></del>	,	Percent c	hange fr	om prece	ding mor	nth			r	Т	
	Unad- justed	Sea- son- ally ad- justed	Unad- justed	Sea- son- ally ad- justed	Unad- justed	Sea- son- ally ad- justed	Unad- justed	Sea- son- ally ad- justed	Unad- justed	Sea- son- ally ad- justed	Unad- justed	Sea- son- ally ad- justed	Unad- justed	Sea- son- ally ad- justed
1983: Jan Feb Mar Apr May June	1 1 1	-0.7 1 0 .3	0.0 1.0 .0 .7 1 5	-0.2 .8 0 .8 4 6	-0.8 2 3 3 6	-0.9 1 2 3 5	-1.2 4 5 6 .7	-1.4 3 3 4 .6	0.1 .1 0 .2 .1	-0.1 .3 .3 .0 .2	-4.1 -2.8 -1.8 -3.2 2.6 2.9	-3.5 -3.0 -3.0 -1.9 2.6 2.4	-0.2 .3 0 .2 .2	0.4 .4 .4 .0 .1
July	3 3 3	0 .4 .1 .2 1 .2	2	5 .3 .7 1.0 3	.3 .2 8	.2 .3	.4 7 9 2 2	.1 .3 _ 0	.2 .2 9 1.7 .0	.2 .5 1 .0	.4 2 9 -1.4 -1.3	3 2 .1 5 -1.2 -1.1	.4 9 1.5 .1	.4 .0 .1 .3 .3 .5 1 0 .3
1984: <sup>2</sup> Jan	.8 .4 .3 1 0		1	ł .	1	0 .3 .3 .3 .2	0 .2 .2 0 5	1 .2 .3 .1 .3	.4 .2 0 .8 2 0	.2 .4 .3 .6 1	-1.8 .5 .1 9 1.5	-1.2 .3 1.2 .4 1.5	.5 .2 .2 .4 .0 0	.2 .3 .6 .2
July Aug Sept Oct Nov Dec	.8 .4 .3 0 1 5 5 6 2.0	.3 1 0 2 .5	3.0 .9 .7 8 9 3 1.7 5 2 6 .2	2.6 .6 .7 -7.7 -1.1 4 1.3 1 4 .7	3 6 1.0	0 .3 .3 .2 .1 1 1 2 .4 1	.0 4 6 1.0 .3 3	-1.2.3.1.3.2 -2.3.0 -1.5.2 -1.5.2	.2 0 6 1.1 .1	યંત્રણના સગ્રસલ્સસ	-1.2 -1.9 5 1.1 .3 -1.5	-1.2 .3 1.2 .4 1.5 -2.5 -2.5 -2.1.5 .6 -1.3	3.0 6 1.0 3.0	.2 .3 .6 .2 0 .2 .3 .2 .5 .1

Changes from December to December are based on unadjusted indexes.
 Data have been revised through August 1984 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

## MONEY STOCK, CREDIT, AND FINANCE

TABLE B-61.—Money stock, liquid assets, and debt measures, 1959-84
[Averages of daily figures; billions of dollars, seasonally adjusted]

	M1	M2	M3	L	Debt 1
Period	Sum of currency, demand deposits, travelers checks, and other checkable deposits (OCDs)	M1 plus overnight RP's and Eurodollars, MMMF balances (general purpose and broker/ dealer), MMDAs, and savings and small time deposits	M2 plus large time deposits, term RPs, and institution- only MMMF balances	M3 plus other liquid assets	Debt of domestic nonfinancial sectors (monthly average)
0					_
December: 1959 1960 1961 1962 1963 1964 1965 1966 1966 1967 1968 1970 1971 1972 1973 1974 1975 1976 1977 1978 1978 1979 1978 1979 1980 1980 1981 1982 1983	154.7 161.9 169.5 173.7 185.1 199.4 205.8 216.6 230.8 252.0 265.9 277.6 291.2 310.4 335.4 341.9 441.9 480.5 525.4	297.8 312.3 335.5 362.7 393.2 424.8 459.4 480.0 566.3 566.3 566.3 1,023.3 1,163.6 1,286.7 1,498.5 1,632.6 1,965.4 2,196.3 2,376.3	299.8 315.3 341.0 371.4 406.0 442.5 505.1 557.1 606.2 615.0 677.5 786.0 985.0 1,070.5 1,172.4 1,311.9 1,647.1 1,804.8 1,990.0 2,462.5 2,462.5 2,987.3	388.6 403.6 430.8 466.1 503.8 540.4 584.4 614.8 666.5 728.9 763.5 815.3 903.1 1,023.0 1,141.7 1,249.3 1,367.9 1,510.6 2,117.1 2,326.2 2,870.8 3,183.1	683.4 718.7 761.6 814.5 870.4 934.0 1,002.8 1,070.1 1,242.4 1,330.7 1,420.5 1,555.5 1,715.3 2,081.8 2,270.8 2,270.8 2,233.3 2,829.1 3,200.0 3,583.5 3,266.1 4,710.0 5,224.6
1984:  Jan	533.0 535.3 535.3 541.2 546.3 545.8 546.6 548.5 549.4	2,206.8 2,222.6 2,230.0 2,242.9 2,258.6 2,272.1 2,281.0 2,305.6 2,317.2 2,346.4 2,376.3	2,723.1 2,746.2 2,767.1 2,792.1 2,819.1 2,841.6 2,862.6 2,873.6 2,873.6 2,915.7 2,952.9 2,987.3	3,198.3 3,227.9 3,269.8 3,296.1 3,328.6 3,372.9 3,410.7 3,432.5 3,455.7	5,871.6

<sup>&</sup>lt;sup>1</sup>Consists of outstanding credit market debt of the U.S. Government, State and local governments, and private confinancial sectors; data from flow of funds accounts.

Note.—The nontransactions portion of M2 is seasonally adjusted as a whole to reduce distortions caused by substantial portfolio shifts arising from regulatory and financial changes in recent years, especially shifts to MMDAs in 1983. A similar procedure is used to seasonally adjust the remaining nontransactions balances in M3. See Table B-62 for components.

TABLE B-62.—Components of money stock measures and liquid assets, 1959-84
[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

					Overnight repur- chase	Money mar fund (I bala	ket mutual MMMF) nces		
Period	Currency	Travelers checks	Demand deposits	Other checkable deposits (OCDs)	agree- ments (RPs) net, plus overnight Eurodol- lars NSA	General purpose and broker/- dealer NSA	Institu- tion only NSA	Money market deposit accounts (MMDAs) NSA	Savings deposits
December:	29.0	0.4	111.6	0.0	0.0	0.0	0.0	0.0	146.4
1960 1961 1962 1963 1964	29.5 30.6	.4 .4 .5 .5	112.5 116.5 118.2 121.7 127.0	.0 .0 .0 .1 .1	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	159.1 175.5 194.8 214.4 235.2
1965	38.3 40.4 43.4	.6 .6 .7 .8	132.5 134.6 143.9 155.1 158.8	.1 .1 .1 .1	.0 .0 .0 .0 2.2	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	256.9 253.1 263.7 268.9 263.7
1970 1971 1972 1973 1974	52.6 56.8 61.5	1.0 1.1 1.3 1.5 1.8	166.3 176.9 193.7 202.5 207.5	.1 .2 .2 .3 .4	1.3 2.3 2.8 5.3 5.6	.0 .0 .0 .1 1.7	.0 .0 .0 .0	.0 .0 .0 .0	261.0 292.2 321.4 326.8 338.5
1975	80.5 88.5	2.3 2.8 3.1 3.5 3.7	214.2 224.4 239.6 253.8 261.9	.9 2.7 4.2 8.5 17.1	5.8 10.6 14.7 20.3 21.2	2.7 2.4 2.4 6.4 33.4	.4 .6 .9 3.1 9.5	.0 .0 .0 .0	388.7 452.8 491.3 480.8 423.1
1980 1981 1982 1983 1984 P	124.0 134.1	4.2 4.3 4.3 4.9 5.2	266.5 236.2 239.7 243.7 248.3	27.6 77.4 102.4 128.9 143.0	28.3 35.9 44.1 56.2 57.6	61.6 150.6 185.2 138.2 168.1	15.2 38.0 51.1 43.2 62.7	.0 .0 43.0 376.0 410.0	401.4 345.7 362.1 312.9 294.3
1984: Jan	151.8	4.9 5.0 5.0 5.1 5.1 5.1	244.5 243.8 244.0 245.3 245.2 248.2	130.8 134.0 135.4 133.3 138.0 138.8	58.6 59.5 58.3 57.5 59.1 56.5	137.8 142.1 144.8 145.9 146.5 148.9	43.5 44.6 45.0 45.0 45.3 45.7	380.3 386.0 392.5 396.4 394.6 392.9	309.9 306.6 305.5 305.5 305.5 305.1
July	156.0	5.2 5.2 5.1 5.0 5.1 5.2	247.1 245.5 246.4 243.8 245.7 248.3	138.5 139.9 140.7 139.6 141.1 143.0	56.9 58.7 56.8 56.8 58.2 57.6	150.5 150.6 152.0 155.7 162.2 168.1	46.1 46.2 46.9 52.2 58.3 62.7	389.2 383.8 383.4 386.8 397.3 410.0	303.0 299.7 298.8 297.3 296.1 294.3

TABLE B-62.—Components of money stock measures and liquid assets, 1959-84—Continued [Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Period	Small denomi- nation time deposits <sup>1</sup>	Large denomi- nation time deposits <sup>3</sup>	Term repur- chase agree- ments (RPs) NSA	Term Eurodol- lars (net) NSA	Savings bonds	Short- term Treasury securities	Bankers' accept- ances	Commer- cial paper
December: 1959	11.4	1.2	0.0	0.7	46.1	38.6	0.6	3.6
1960 1961 1962 1962 1963		2.0 3.9 7.0 10.8 15.2	0000	.8 1.4 1.6 1.9 2.4	45.7 46.5 46.9 48.1 49.0	36.7 37.0 39.8 <b>40.7</b> <b>38.</b> 5	.9 1.1 1.1 1.2 1.3	5.1 5.2 6.8 7.7 <b>9.</b> 1
1965	55.0	21.2 23.1 30.9 37.4 20.4	.0 .0 .0 .0 2.6	1.7 2.1 2.1 2.9 2.7	49.6 50.2 51.2 51.8 51.7	40.7 43.2 38.7 46.1 59.5	1.6 1.8 1.8 2.3 3.3	10.2 14.4 17.8 22.5 34.0
1970	190.5 232.2 266.0	45.2 57.7 73.3 111.0 144.7	1.6 2.7 3.5 6.8 8.0	2.2 2.7 3.6 5.4 8.0	52.0 54.3 57.6 60.4 63.3	48.9 36.1 40.7 49.4 52.9	3.5 3.8 3.5 5.0 12.6	34.5 32.7 35.2 41.9 50.1
1975 1976 1977 1978 1978	391.0 446.0	129.7 118.1 145.1 195.2 222.1	8.4 14.1 19.4 27.0 30.1	9.7 14.8 20.2 31.8 44.7	67.2 71.8 76.4 80.3 79.5	69.5 70.4 78.4 82.0 108.6	10.7 10.8 14.1 22.0 27.1	48.0 51.7 62.9 79.2 97.0
1980 1981 1982 1983 1984 P	827.3 856.9 793.1	258.4 301.3 327.4 325.4 409.7	34.7 37.0 40.2 56.0 64.6	50.3 67.5 81.7 93.4 81.5	72.3 67.7 67.9 71.0	133.8 149.9 187.8 223.3	32.0 39.8 43.8 43.3	98.1 104.2 108.8 130.8
1984: Jan. Feb. Mar. Apr. Apr. June	800.9 803.4 808.3 816.7	333.0 339.9 347.9 355.5 367.3 378.8	53.3 54.5 55.9 59.8 61.6 59.6	89.9 89.9 93.2 93.1 94.1 90.3	71.2 71.7 72.2 72.5 72.8 73.0	226.3 231.2 245.2 241.4 239.9 254.4	42.7 41.6 42.4 43.1 45.3 46.9	134.9 137.3 142.9 146.9 151.4 157.1
July Aug Sept Oct Nov	. 862.0 874.3 884.9	389.0 391.9 392.8 401.0 404.3	59.6 63.4 64.7 66.4 68.2	88.8 86.1 84.4 79.0 80.1	73.2 73.4 73.6	267.4 276.8 286.3	47.3 47.3 46.2	160.2 161.4 158.2
Dec P		409.7	64.6	81.5				

<sup>&</sup>lt;sup>1</sup> Small denomination and large denomination deposits are those issued in amounts of less than \$100,000 and more than \$100,000, respectively.

Note.—NSA indicates data are not seasonally adjusted. See also Table B-61.

TABLE B-63.—Aggregate reserves of depository institutions and monetary base, 1959-84 [Averages of daily figures; millions of dollars; seasonally adjusted, except as noted]

[					reserve req	r		
Year and month	Rese	rves of depo	Sitory institu	tions	Mone-	instituti	wings of dep ons from the Reserve, NS	e Federal
real allu montii	Total <sup>2</sup>	Nonbor- rowed	rowed plus extended credit	Required	tary base 3	Total	Seasonal	Extended credit
1959: Dec	13,695	12,754	12,754	13,189	43,425	941		
1960: Dec	13,863 14,293 14,556 14,856 15,336	13,789 14,160 14,296 14,524 15,072	13,789 14,160 14,296 14,524 15,072	13,120 13,709 13,985 14,366 14,930	43,408 44,437 45,683 47,935 50,285	74 133 260 332 264		
1965: Dec	15,881 15,875 17,279 18,181 18,471	15,437 15,342 17,051 17,435 17,352	15,437 15,342 17,051 17,435 17,352	15,458 15,536 16,904 17,755 18,185	52,961 55,036 58,453 62,533 65,678	444 532 228 746 1,119		
1970: Dec. 1971: Dec. 1972: Dec. 1973: Dec. 1974: Dec.	19,356 20,594 22,663 23,671 24,904	19,023 20,468 21,613 22,373 24,176	19,023 20,468 21,613 22,373 24,323	19,107 20,412 22,379 23,368 24,645	69,685 74,377 80,921 87,436 94,629	332 126 1,050 1,298 727	41 32	
1975: Dec	25,044 25,596 26,627 27,906 29,087	24,914 25,543 26,057 27,038 27,615	24,926 25,543 26,057 27,038 27,615	24,778 25,322 26,437 27,674 28,759	100,771 108,347 117,461 128,043 138,903	130 53 569 868 1,473	14 13 55 135 81	1:
1980: Dec	31,038 32,096 34,283 36,138 38,704	29,348 31,460 33,649 35,364 35,518	29,351 31,608 33,835 35,366 38,122	30,524 31,777 33,783 35,578 37,857	150,342 158,097 170,145 185,486 198,007	1,690 636 634 774 3,186	116 54 33 96 113	14 18 2,60
1983: 'Jan Feb	33,959 34,393 34,944 35,271 35,377 35,848	33,430 33,811 34,152 34,261 34,424 34,212	33,587 34,089 34,469 34,666 34,937 35,170	33,411 33,958 34,511 34,794 34,928 35,368	171,003 172,821 174,668 175,882 177,166 178,808	529 582 792 1,009 952 1,636	33 40 53 82 99 122	157 278 317 405 513 958
July	36,003 36,043 36,139 36,157 36,103 36,138	34,550 34,496 34,698 35,313 35,198 35,364	35,128 34,987 35,213 35,569 35,204 35,366	35,495 35,596 35,641 35,652 35,574 35,578	179,789 180,619 182,272 183,357 184,472 185,486	1,453 1,546 1,441 844 906 774	171 198 190 142 121 96	578 491 515 256
1984: Jan	36,357 37,025 37,097 37,109 37,447 38,282	35,642 36,458 36,145 35,875 34,459 34,982	35,646 36,463 36,172 35,919 34,496 36,855	35,744 36,083 36,388 36,619 36,870 37,516	187,469 189,277 189,417 190,357 191,977 193,858	715 567 952 1,234 2,988 3,300	86 103 133 139 196 264	44 5 27 44 37 1,873
July	38,233 38,380 38,135 37,745 38,099 38,704	32,309 30,363 30,894 31,728 33,482 35,518	37,317 37,406 37,352 36,785 37,319 38,122	37,626 37,697 37,515 37,138 37,419 37,857	194,755 195,980 195,992 196,375 197,022 198,007	5,924 8,017 7,242 6,017 4,617 3,186	308 346 319 299 212 113	5,008 7,043 6,459 5,057 3,837 2,604

¹ Reserve aggregates include required reserves of member banks and Edge Act corporations and other depository institutions.

Discontinuities associated with the implementation of the Monetary Control Act, the inclusion of Edge Act corporation reserves, and other changes in Regulation D have been removed. Beginning with the week ended December 23, 1981, reserves aggregates have been reduced by shifts of reservable liabilities to international banking facilities (IBFs). On the basis of reports of liabilities transferred to IBFs by U.S. commercial banks and U.S. agencies and branches of foreign banks, it is estimated that required reserves were lowered on average by \$10 to \$20 million in December 1981 and \$40 to \$70 million in January 1982.

Reserve balances with Federal Reserve Banks (which exclude required clearing balances) plus vault cash at institutions with required reserve balances plus vault cash equal to required reserves at other instittions.

³ Includes reserve balances and required clearing balances at Federal Reserve Banks in the current week plus vault cash held two weeks earlier used to satisfy reserve requirements at all depository institutions plus currency outside the U.S. Treasury, Federal Reserve Banks, the vaults of depository institutions, and surplus vault cash at depository institutions.

TABLE B-64.—Commercial bank loans and investments, 1972-84 [Monthly average, billions of dollars, seasonally adjusted 1]

		Loa	ins	Invest	ments
Year and month	Total loans and investments	Totai	Commercial and industrial	U.S. Government securities	Other securities
1972: Dec	572.3 647.8 713.7	390.5 460.1 519.8	137.5 165.0 196.6	88.6 88.2 86.3	93.2 99.4 107.5
1975: Dec	744.9 804.6 891.4 1,013.8 1,135.4	516.9 554.8 632.2 746.9 849.1	189.3 190.9 211.0 246.1 291.1	116.7 136.3 136.6 137.6 144.4	111.2 113.5 122.7 129.2 141.9
1980: Dec	1,239.4 1,307.4 1,400.5 1,553.0 1,713.6	914.2 967.4 1,032.8 1,122.7 1,313.1	326.9 355.1 391.5 412.8 469.9	170.9 179.6 202.7 260.8 260.2	154.4 160.4 165.0 169.6 140.3
1983: Jan Feb	1,411.7 1,419.5 1,432.3 1,443.3 1,453.6 1,466.9	1,035.1 1,038.2 1,044.4 1,049.1 1,051.3 1,057.9	392.9 393.8 395.5 394.5 393.2 394.6	208.8 213.4 220.9 226.0 233.4 238.5	167.8 167.8 167.0 168.2 169.0 170.5
July	1,481.4 1,495.0 1,506.8 1,520.8 1,539.1 1,553.0	1,069.0 1,079.4 1,086.2 1,095.3 1,108.5 1,122.7	397.9 401.2 402.1 405.0 409.6 412.8	240.7 242.2 246.9 252.9 257.8 260.8	171.7 173.4 173.7 172.6 172.7 169.6
1984: Jan. Feb. Mar	1,565.0 1,584.1 1,599.6 1,612.9 1,629.8 1,636.6	1,160.8 1,181.2 1,196.3 1,213.2 1,232.0 1,243.2	414.1 421.7 432.2 438.5 448.0 452.2	260.4 260.7 261.0 257.6 257.3 253.7	143.7 142.2 142.3 142.1 140.5 139.7
July Aug Sept Oct Nov	1,652.6 1,662.1 21,674.9 1,683.0	1,256.7 1,264.2 21,275.0 1,284.5 1,299.9 1,313.1	455.0 458.1 2460.0 463.9 469.5 469.9	256.4 257.1 258.0 257.0 259.4 260.2	139.5 140.8 141.9 141.5 141.6 140.3

Data are prorated averages of Wednesday figures for domestically chartered banks and averages of month-end data for foreign-related

Note.—Data are not strictly comparable because of breaks in the series.

institutions.

Beginning September 26, 1984, a transfer of Toans from Continental Illinois National Bank to the Federal Deposit Insurance Corporation reduced total loans and investments and total loans by \$1.9 billion, commercial and industrial loans by \$1.4 billion, and real estate loans (not shown here) by \$0.4 billion.

TABLE B-65.—Total funds raised in credit markets by nonfinancial sectors, 1975-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

[United by decision, quarterny data at seasonally superior annual rates]									
Item	1975	1976	1977	1978	1979	1980	1981	1982	1983
		Ne	t credit m	narket bo	rrowing by	nonfinar	icial sect	ors	
Total net borrowing by domestic nonfinancial sectors	193.0	243.5	319.4	369.8	386.0	344.6	380.4	404.1	526.4
U.S. Government	85.4	69.0	56.8	53.7	37.4	79.2	87.4	161.3	186.6
Treasury issuesAgency issues and mortgages	85.8 4	69.1 1	57.6 —.9	55.1 -1.4	38.8 -1.4	79.8 —.6	87.8 —.5	162.1 9	186.7 1
Private domestic nonfinancial sectors	107.6	174.5	262.6	316.2	348.6	265.4	293.1	242.8	339.8
Debt capital instruments	100.9	123.6	171.1	199.7	211.2	192.0	159.1	158.9	239.3
Tax-exempt obligations Corporate bonds Mortgages	16.1 27.2 57.6	15.7 22.8 <b>85.1</b>	21.9 22.9 126.3	28.4 21.1 150.2	30.3 17.3 163.6	30.3 26.7 135.1	22.7 21.8 114.6	53.8 18.7 86.5	56.3 15.7 167.3
Home mortgages Multi-family residential Commercial Farm	42.0 .0 11.0 4.6	63.9 3.9 11.6 5.7	94.0 7.1 18.1 7.1	112.2 9.2 21.7 7.2	120.0 7.8 23.9 11.8	96.7 8.8 20.2 9.3	76.0 4.3 24.6 9.7	52.5 5.5 23.6 5.0	108.7 8.4 47.3 2.9
Other debt instruments	6.7	50.9	91.6	116.5	137.5	73.4	134.0	83.9	100.5
Consumer credit	-2.6	25.4 4.5 4.0 16.9	40.2 27.1 2.9 21.3	48.8 37.4 5.2 25.1	45.4 51.2 11.1 29.7	6.3 36.7 5.7 24.8	26.7 54.7 19.2 33.4	21.0 55.5 -4.1 11.5	51.3 27.3 1.2 23.1
By borrowing sector: Total	107.6	174.5	262.6	316.2	348.6	265.4	293.1	242.8	339.8
State and local governments Households Nonfinancial business	53.5	13.2 91.5 69.8	12.0 140.7 110.0	16.5 172.0 127.6	17.6 179.3 151.7	17.2 122.1 126.1	6.2 127.5 159.4	31.3 94.5 117.1	36.7 175.4 127.7
Farm Nonfarm noncorporate Corporate	12.5	10.2 15.4 44.2	12.3 28.0 69.7	14.6 32.4 80.6	21.4 34.4 96.0	14.4 33.7 78.1	16.3 40.2 102.9	7.6 39.5 70.0	4.3 63.9 59.5
Foreign net borrowing in United States	11.3	19.3	13.5	33.8	20.2	27.2	27.2	15.7	18.9
Bonds	6.2 2.0 .3 2.8	8.6 5.6 1.9 3.3	5.1 3.1 2.4 3.0	4.2 19.1 6.6 3.9	3.9 2.3 11.2 2.9	.8 11.5 10.1 4.7	5.4 3.7 13.9 4.2	6.7 -6.2 10.7 4.5	3.8 4.9 6.0 4.3
Total domestic plus foreign	204.4	262.8	332. <b>9</b>	403.6	406.2	371.8	407.6	419.8	545.3
		Dire	ect and in	direct su	pply of fu	nds to cre	dit mark	ets	-
Total funds supplied to domestic nonfinancial sectors	193.0	243.5	319.4	369.8	386.0	344.6	380.4	404.1	526.4
Private domestic nonfinancial sectors	141.6	170.7	185.5	213.6	246.5	237.2	292.5	276.1	364.7
Deposits and currency	102.0	132.1	149.0	153.9	146.8	181.1	221.9	181.9	222.6
Checkable deposits and currency Time and savings deposits Money market fund shares Security repurchase agreements Foreign deposits	15.6 84.1 1.3 .2 .8	17.8 110.3 .0 2.3 1.7	25.3 120.0 .2 2.2 1.3	25.4 112.1 6.9 7.5 2.0	26.2 78.1 34.4 6.6 1.5	15.5 128.7 29.2 6.5 1.1	27.5 83.9 107.5 2.5 .5	25.4 130.5 24.7 3.8 -2.5	36.0 211.6 -44.1 14.3 4.8
Credit market instruments	39.6	38.7	36.5	59.6	99.6	56.1	70.6	94.2	142.1
Foreign funds	-2.5	10.6	41.0	44.6	23.0	1.5	7.6	8.6	49.2
At banks Credit market instruments	8.6 6.1	-4.5 15.2	1.4 39.6	6.5 38.0	27.6 -4.6	-21.7 23.2	-8.7 16.3	-26.7 18.1	22.1 27.1
U.S. Government and related loans, net U.S. Government cash balances Private insurance and pension reserves Other sources	11.9 -1.7 40.1 3.6	1.1 1 41.5 19.7	4.1 4.3 55.4 29.1	-6.6 6.8 74.9 36.6	11.6 .4 72.8 31.8	1.8 2.6 83.9 22.7	6.8 -1.1 90.4 -15.9	10.4 6.1 104.6 15.6	3.3 -5.3 99.2 15.2

Table B-65.—Total funds raised in credit markets by nonfinancial sectors, 1975-84—Continued
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

		19	83		1984			
ltem	ı	- 11	11)	IV	ı	11		
	Net	credit m	arket bor	rowing b	y nonfina	ncial sec	tors	
Total net borrowing by domestic nonfinancial sectors	428.6	549.3	516.2	611.4	660.9	715.6	652.9	
U.S. Government	209.6	234.5	165.2	136.9	184.1	161.6	186.1	
Treasury issues	209.5	234.8	165.4	137.1	184.4	161.8	186.3	
Agency issues and mortgages		3	2	1	3	1	1	
Private domestic nonfinancial sectors		314.8	351.0	474.4	476.8	554.0	466.7	
Debt capital instruments		253.8	251.7	276.7	256.7	280.3	295.3	
Tax-exempt obligations	50.5 22.0	75.1 24.0	44.0 9.1	55.5 7.8	46.5 29.4	29.6 18.7	54.4 35.9	
Mortgages	102.5	154.7	198.6	213.4	29.4 180.8	232.1	205.0	
Home mortgages	67.1	100.5	131.8 12.3	135.5 15.6	123.3	141.7 18.9	129.2 15.1	
Commercial	35.3	6.1 45.4	50.4	58.3	14.3 41.5	69.0	59.4	
Farm		2.7	4.2	4.0	1.8	2.4	1.2	
Other debt instruments		61.0	99.3	197.8	220.1	273.6	171.4	
Consumer credit	17.1	45.3 9.6	48.7 18.0	84.6 64.5	78.5 96.0	124.2 87.2	87.5 45.9	
Open-market paper	-10.7	-10.5 16.6	7.2 25.4	64.5 9.4 39.3	12.1 33.5	50.9 11.3	23.1 14.9	
By borrowing sector: Total	l .	314.8	351.0	474.4	476.8	554.0	466.7	
State and local governments	l :	52.7		38.0		10.6	31.1	
Households	108.5	161.0 101.1	25.1 195.9 129.9	236.1 200.3	27.4 201.1 248.3	261.6 281.7	241.8 193.8	
Farm	5	2.1 57.8	4.7	11.1 79.9	4.1	-2.6 97.5	5.3 68.3	
Nonfarm noncorporateCorporate	42.4	5/.8 41.2	75.4 49.8	109.4	68.1 176.1	186.8	68.3 120.2	
Foreign net borrowing in United States	8.9	21.6	13.3	31.7	10.9	48.4	33.7	
Bonds	3.6	5.7	2.9	3.0	-1.1	3.3 10.3	2.2	
Bank loans n.e.c	-16.8	4.9 7. <b>6</b>	-3.4 9.1	.3 23.9	-3.7 -13.2 7.2	50.9	-13.4 -30.3	
Ú.S. Government loans	\$	3.4	4.8	4.5	1	4.5	7.8	
Total domestic plus foreign		570.9	529.5	643.1	650.0	764.0	619.1	
	<u> </u>	ct and in		oply of fu			kets	
Total funds supplied to domestic nonfinancial sectors		549.3	516.2	611.4	660.9	715.6	652.9	
Private domestic nonfinancial sectors	322.2	377.4	340.6	418.6	416.2	538.4	457.7	
Deposits and currency	238.2	190.8	208.5	252.9	272.9	316.2	273.7	
Checkable deposits and currencyTime and savings deposits	49.5 259 9	76.1 175.3	13.8 204.6	4.4 206.5	63.3	47.7	-1.4 284.4	
Money market fund shares	105.2	62.7	-6.5	1.8	167.3 44.9	252.2 15.4	20.5	
Security repurchase ageementsForeign deposits	21.7 12.3	.4 1.6	3.5 .0	38.5 5.3	2.6 5.1	8.1 7.2	-23.8 -6.0	
Credit market instruments	84.0	186.6	132.1	165.7	143.3	222.2	184.0	
Foreign funds	15.4	40.6	41.7	130.0	34.8	53.3	39.2	
At banks	-37.4 22.0	9.1 31.6	35.5 6.2	81.5 48.6	21.0 13.8	13.2 40.1	12.2 27.0	
U.S. Government and related loans, net	3.6	19.1	31.2	-40.5	36.1	-18.0	13.9	
U.S. Government cash balances	1.2 86.1	18.9 94.0	-21.7 93.6	- 19.8 123.2	15.1	-12.2	16.1 86.9	
Other sources	30.9	8	30.9	1	86.5 72.2	124.5 29.6	39.1	

TABLE B-66.—Bond yields and interest rates, 1929-84
[Percent per annum]

	U.S	S. Treasury	securities							Corporate bonds				
Year and	Bi (new is		Cons matur	tant ities <sup>2</sup>	(Moo	dy's)	grade munici- pal	New- home	Com- mercial	Prime rate	Discount rate, Federal	Federal		
month	3-month	6-month	3 years	10 years	Aaa s	Ваа	bonds (Stand- ard & Poor's)	mortgage yields (FHLBB) 4	paper, 6 months <sup>6</sup>	charged by banks®	Reserve Bank of New York®	funds rate?		
1929				,	4.73	5.90	4.27		5.85	5.50-6.00	5.16			
1933	0.515				4.49	7.76	4.71		1.73	1.50-4.00	2.56			
1939	.023			i	1	4.96				1.50	1.00			
1940 1941 1942 1943 1944	.014 .103 .326 .373 .375			······································	2.84 2.77 2.83 2.73 2.72	4.75 4.33 4.28 3.91 3.61	2.50 2.10 2.36 2.06 1.86		.56 .53 .66 .69 .73	1.50 1.50 1.50 1.50 1.50	1.00 1.00 *1.00 *1.00 *1.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
1945 1946 1947 1948 1949	.375 .375 .594 1.040 1.102				2.62 2.53 2.61 2.82 2.66	3.29 3.05 3.24 3.47 3.42	1.67 1.64 2.01 2.40 2.21		.75 .81 1.03 1.44 1.49	1.50 1.50 1.50–1.75 1.75–2.00 2.00	*1.00 *1.00 1.00 1.34 1.50	***************************************		
1950 1951 1952 1953 1954	1.218 1.552 1.766 1.931 .953					3.24 3.41 3.52 3.74 3.51	1.98 2.00 2.19 2.72 2.37		1.45 2.16 2.33 2.52 1.58	2.07 2.56 3.00 3.17 3.05	1.59 1.75 1.75 1.99 1.60			
1955 1956 1957 1958 1959	1.753	3.832	2.47	2.82 3.18 3.65 3.32 4.33	3.06 3.36 3.89 3.79 4.38	3.53 3.88 4.71 4.73 5.05	2.53 2.93 3.60 3.56			3.16 3.77 4.20 3.83 4.48	1.89 2.77 3.12 2.15 3.36	1.78 2.73 3.11 1.57 3.30		
1960 1961 1962 1963 1964	2.928 2.378 2.778 3.157 3.549	3.247 2.605 2.908 3.253 3.686	3.98 3.54 3.47 3.67 4.03	4.12 3.88 3.95 4.00 4.19	4.41 4.35 4.33 4.26 4.40	5.19 5.08 5.02 4.86 4.83	3.73 3.46 3.18 3.23 3.22	5.89 5.82	3.85 2.97 3.26 3.55 3.97	4.82 4.50 4.50 4.50 4.50	3.53 3.00 3.00 3.23 3.55	3.22 1.96 2.68 3.18 3.50		
1965 1966 1967 1968 1969	3.954 4.881 4.321 5.339 6.677	4.055 5.082 4.630 5.470 6.853	4.22 5.23 5.03 5.68 7.02	4.28 4.92 5.07 5.65 6.67	4.49 5.13 5.51 6.18 7.03	4.87 5.67 6.23 6.94 7.81	3.27 3.82 3.98 4.51 5.81	5.81 6.25 6.46 6.97 7.80	4.38 5.55 5.10 5.90 7.83	4.54 5.63 5.61 6.30 7.96	4.04 4.50 4.19 5.16 5.87	4.07 5.11 4.22 5.66 8.20		
1970 1971 1972 1973 1974	6.458 4.348 4.071 7.041 7.886	6.562 4.511 4.466 7.178 7.926	7.29 5.65 5.72 6.95 7.82	7.35 6.16 6.21 6.84 7.56	8.04 7.39 7.21 7.44 8.57	9.11 8.56 8.16 8.24 9.50	6.51 5.70 5.27 5.18 6.09	8.45 7.74 7.60 7.96 8.92	7.71 5.11 4.73 8.15 9.84	7.91 5.72 5.25 8.03 10.81	5.95 4.88 4.50 6.44 7.83	7.18 4.66 4.43 8.73 10.50		
1975 1976 1977 1978 1979	5.838 4.989 5.265 7.221 10.041	6.122 5.266 5.510 7.572 10.017	7.49 6.77 6.69 8.29 9.71	7.99 7.61 7.42 8.41 9.44	8.83 8.43 8.02 8.73 9.63	10.61 9.75 8.97 9.49 10.69	6.89 6.49 5.56 5.90 6.39	9.00 9.00 9.02 9.56 10.78	6.32 5.34 5.61 7.99 10.91	7.86 6.84 6.83 9.06 12.67	6.25 5.50 5.46 7.46 10.28	11.19		
1980 1981 1982 1983 1984	11.506 14.029 10.686 8.63 9.58	11.374 13.776 11.084 8.75 9.80	11.55 14.44 12.92 10.45 11.89	11.46 13.91 13.00 11.10 12.44	11.94 14.17 13.79 12.04 12.71	13.67 16.04 16.11 13.55 14.19	8.51 11.23 11.57 9.47 10.15	12.66 14.70 15.14 12.57 12.38	12.29 14.76 11.89 8.89 10.16	15.27 18.87 14.86 10.79 12.04	11.77 13.42 11.02 8.50 8.80	13.36 16.38 12.26 9.09 10.22		
1980:										High-low	High-low			
Jan Feb Mar Apr May June	12.036 12.814 15.526 14.003 9.150 6.995	11.851 12.721 15.100 13.618 9.149 7.218	10.88 12.84 14.05 12.02 9.44 8.91	10.80 12.41 12.75 11.47 10.18 9.78	11.09 12.38 12.96 12.04 10.99 10.58	12.42 13.57 14.45 14.19 13.17 12.71	7.21 8.04 9.09 8.40 7.37 7.60	11.87 11.93 12.62 13.03 13.68 12.66	12.66 13.60 16.50 14.93 9.29 8.03	15.25-15.25 16.75-15.25 19.50-16.75 20.00-19.50 19.00-14.00 14.00-12.00	12.00-12.00 13.00-12.00 13.00-13.00 13.00-13.00 13.00-12.00 12.00-11.00	13.82 14.13 17.19 17.61 10.98 9.47		
July Aug Sept Oct Nov Dec	8.126 9.259 10.321 11.580 13.888 15.661	8.101 9.443 10.546 11.566 13.612 14.770	9.27 10.63 11.57 12.01 13.31 13.65	10.25 11.10 11.51 11.75 12.68 12.84	11.07 11.64 12.02 12.31 12.97 13.21	12.65 13.15 13.70 14.23 14.64 15.14	8.08 8.62 8.95 9.11 9.55 10.09	12.48 12.25 12.35 12.61 13.04 13.28	8.29 9.61 11.04 12.32 14.73 16.49	12.00~11.00 11.50~11.00 13.00~11.50 14.50~13.50 17.75~14.50 21.50~17.75	11.00-10.00 10.00-10.00 11.00-10.00 11.00-11.00 12.00-11.00 13.00-12.00	9.03 9.61 10.87 12.81 15.85 18.90		

TABLE B-66.—Bond yields and interest rates, 1929-84—Continued

## [Percent per annum]

<b>V</b>	U.S Bi	. Treasury s	Cons	tant	Corpi boi (Moo	ids	High- grade munici-	New- home Com-		Dulma usta	Discount rate,	Fadanal
Year and month	(new is	6-month	matur 3 years	ities <sup>2</sup> 10 years	Aaa s	Baa	pal bonds (Stand- ard & Poor's)	mortgage yields (FHLBB) *	mercial paper, 6 months	Prime rate charged by banks •	Federal Reserve Bank of New York	Federal funds rate?
1981:										High-low	High-low	
Jan Feb Mar Apr May June	14.724 14.905 13.478 13.635 16.295 14.557	13.883 14.134 12.983 13.434 15.334 13.947	13.01 13.65 13.51 14.09 15.08 14.29	12.57 13.19 13.12 13.68 14.10 13.47	12.81 13.35 13.33 13.88 14.32 13.75	15.03 15.37 15.34 15.56 15.95 15.80	9.65 10.03 10.12 10.55 10.73 10.56	13.27 13.54 14.02 14.15 14.10 14.67	15.10 14.87 13.59 14.17 16.66 15.22	21.50-20.00 20.00-19.00 19.00-17.50 18.00-17.00 20.50-18.00 20.50-20.00	13.00-13.00 13.00-13.00 13.00-13.00 13.00-13.00 14.00-13.00 14.00-14.00	19.08 15.93 14.70 15.72 18.52 19.10
July Aug Sept Oct Nov Dec	14.699 15.612 14.951 13.873 11.269 10.926	14.402 15.548 15.057 14.013 11.530 11.471	15.15 16.00 16.22 15.50 13.11 13.66	14.28 14.94 15.32 15.15 13.39 13.72	14.38 14.89 15.49 15.40 14.22 14.23	16.17 16.34 16.92 17.11 16.39 16.55	11.03 12.13 12.86 12.67 11.71 12.77	14.72 15.27 15.29 15.65 16.38 15.87	16.09 16.62 15.93 14.72 11.96 12.14	20.50-20.00 20.50-20.50 20.50-19.50 19.50-18.00 18.00-16.00 15.75-15.75	14.00-14.00 14.00-14.00 14.00-14.00 14.00-14.00 14.00-13.00 13.00-12.00	19.04 17.82 15.87 15.08 13.31 12.37
1982: Jan Feb Mar Apr May June	12.412 13.780 12.493 12.821 12.148 12.108	12.930 13.709 12.621 12.861 12.220 12.310	14.64 14.73 14.13 14.18 13.77 14.48	14.59 14.43 13.86 13.87 13.62 14.30	15.18 15.27 14.58 14.46 14.26 14.81	17.10 17.18 16.82 16.78 16.64 16.92	13.16 12.81 12.72 12.45 11.99 12.42	15.25 15.12 15.67 15.84 15.89 15.40	13.35 14.27 13.47 13.64 13.02 13.79	15.75-15.75 17.00-15.75 16.50-16.50 16.50-16.50 16.50-16.50 16.50-16.50	12.00-12.00 12.00-12.00 12.00-12.00 12.00-12.00 12.00-12.00 12.00-12.00 12.00-12.00	14.94 14.45 14.15
July Aug Sept Oct Nov Dec	11.914 9.006 8.196 7.750 8.042 8.013	12.236 10.105 9.539 8.299 8.319 8.225	14.00 12.62 12.03 10.62 9.98 9.88	13.95 13.06 12.34 10.91 10.55 10.54	14.61 13.71 12.94 12.12 11.68 11.83	16.80 16.32 15.63 14.73 14.30 14.14	12.11 11.12 10.61 9.59 9.97 9.91	15.70 15.68 14.98 14.41 13.81 13.69	13.00 10.80 10.86 9.21 8.72 8.50	16.50-15.50 15.50-13.50 13.50-13.50 13.50-12.00 12.00-11.50 11.50-11.50	12.00-11.50 11.50-10.00 10.00-10.00 10.00-9.50 9.50-9.00 9.00-8.50	12.59 10.12 10.31 9.71 9.20 8.95
1983: Jan Feb Mar Apr May June	7.810 8.130 8.304 8.252 8.19 8.82	7.898 8.233 8.325 8.343 8.20 8.89	9.64 9.91 9.84 9.76 9.66 10.32	10.46 10.72 10.51 10.40 10.38 10.85	11.79 12.01 11.73 11.51 11.46 11.74	13.94 13.95 13.61 13.29 13.09 13.37	9.45 9.48 9.16 8.96 9.03 9.51	13.49 13.16 13.41 12.42 12.67 12.36	8.15 8.39 8.48 8.48 8.31 9.03	11.50-11.00 11.00-10.50 10.50-10.50 10.50-10.50 10.50-10.50 10.50-10.50	8.50-8.50 8.50-8.50 8.50-8.50 8.50-8.50 8.50-8.50 8.50-8.50	8.68 8.51 8.77 8.80 8.63 8.98
July Aug Sept Oct Nov Dec	9.12 9.39 9.05 8.71 8.71 8.96	9.29 9.53 9.19 8.90 8.89 9.14	10.90 11.30 11.07 10.87 10.96 11.13	11.38 11.85 11.65 11.54 11.69 11.83	12.15 12.51 12.37 12.25 12.41 12.57	13.39 13.64 13.55 13.46 13.61 13.75	9.46 9.72 9.57 9.64 9.79 9.90	12.50 12.38 12.54 12.25 12.34 12.42	9.36 9.68 9.28 8.98 9.09 9.50	10.50-10.50 11.00-10.50 11.00-11.00 11.00-11.00 11.00-11.00 11.00-11.00	8.50-8.50 8.50-8.50 8.50-8.50 8.50-8.50 8.50-8.50 8.50-8.50	9.37 9.56 9.45 9.48 9.34
Jan Feb Mar Apr May June	8.93 9.03 9.44 9.69 9.90 9.94	9.06 9.13 9.58 9.83 10.31 10.55	10.93 11.05 11.59 11.98 12.75 13.18	11.67 11.84 12.32 12.63 13.41 13.56	12.20 12.08 12.57 12.81 13.28 13.55	13.65 13.59 13.99 14.31 14.74 15.05	9.61 9.63 9.92 9.98 10.55 10.71	12.29 12.23 12.02 12.04 12.18 12.10	9.18 9.31 9.86 10.22 10.87 11.23	11.00-11.00 11.00-11.00 11.50-11.00 12.00-11.50 12.50-12.00 13.00-12.50	8.50-8.50 8.50-8.50 8.50-8.50 9.00-8.50 9.00-9.00 9.00-9.00	10.29 10.32 11.06
July Aug Sept Oct Nov Dec	10.13 10.49 10.41 9.97 8.79 8.16	10.58 10.65 10.51 10.05 8.99 8.36	13.08 12.50 12.34 11.85 10.90 10.56	13.36 12.72 12.52 12.16 11.57 11.50	13.44 12.87 12.66 12.63 12.29 12.13	15.15 14.63 14.35 13.94 13.48 13.40	10.50 10.03 10.17 10.34 10.27 10.04	12.50 12.43 12.53 12.77 12.75 12.55	11.34 11.16 10.94 10.16 9.06 8.55	13.00-13.00 13.00-13.00 13.00-12.75 12.75-12.00 12.00-11.25 11.25-10.75	9.00-9.00 9.00-9.00 9.00-9.00 9.00-9.00 9.00-8.50 8.50-8.00	11.23 11.64 11.30 9.99 9.43 8.38

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 & Poor's Corporation.

<sup>Rate on new issues within period; bank-discount basis.

Yields on the more actively traded issues adjusted to constant maturities by the Treasury Department.

Series excludes public utility issues for January 17, 1984 through October 11, 1984 due to tack of appropriate issues.

Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assuming, on the average, repayment at end of 10 years. Rates beginning January 1973 not strictly comparable with prior rates.

Bank discount basis; prior to November 1979, data are for 4-6 months paper.

For monthly data, high and low for the period. Prime rate for 1929-33 and 1947-48 are ranges of the rate in effect during the period.</sup> 

period.

This 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.

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.

TABLE B-67.—Consumer credit outstanding, 1950-84 [Amount outstanding (end of month); millions of dollars, seasonally adjusted]

Year and month	Total consumer			nstallment credit	1		Noninstallmen
Year and month	credit	Total	Automobile	Revolving *	Mobile home <sup>3</sup>	Other	credit 4
December: 1950	48,224 51,136 51,595 59,432	15,166 15,859 20,121 23,870 24,470 29,809 32,660 34,914 34,736 40,421	6,035 5,981 7,651 9,702 9,755 13,485 14,499 15,493 14,267 16,641			9,131 9,878 12,470 14,168 14,715 16,324 18,161 19,421 20,469 23,780	9,855 10,717 11,700 12,055 12,821 14,510 15,566 16,252 16,855
1960	63,928 66,569 72,830 81,578 91,279 101,726 109,27 113,628 124,915 135,431	44,335 45,438 50,375 57,056 64,674 72,814 78,162 81,783 90,112 99,381				26,227 27,782 30,374 34,165 38,809 43,436 47,138 50,647 53,738 58,872	19,59: 21,131 22,455: 24,522 26,600 28,91: 30,065: 31,849: 34,803: 36,050
1970	141.010	103,905 116,434 131,258 152,910 162,203 169,387 190,725 226,646 269,392 307,115	36,348 40,522 47,835 53,740 54,241 57,279 67,798 82,890 101,863 116,523	4,900 8,252 9,391 11,318 13,232 14,467 16,505 36,427 45,004 53,174	2,433 7,171 9,468 13,505 14,582 14,382 14,530 14,897 15,199 16,843	60,224 60,489 64,564 74,347 80,148 83,259 91,892 92,432 107,326 120,575	37,105 39,103 44,026 47,984 48,431 50,385 54,207 57,953 63,457 70,371
1980 1981 1982 1983	383,246 409,598 433,480 484,263	309,694 330,218 348,944 388,718	116,808 125,323 129,799 141,876	54,900 60,309 <b>65,453</b> 75,564	17,302 17,879 <b>22,119</b> 23,460	120,684 126,707 131,573 147,818	73,552 79,380 <b>84,53</b> 6 95,545
1983: Jan	437,473 436,672 440,007 443,011 446,156 451,186	351,539 351,561 354,498 356,539 358,811 362,672	130,079 129,565 130,328 130,769 131,475 132,915	65,762 65,767 66,814 67,785 68,369 69,473	22,369 22,351 22,525 22,576 22,676 22,839	133,329 133,878 134,831 135,409 136,291 137,445	85,934 85,111 85,509 86,472 87,345 88,514
July	455,425 459,714 463,209 468,891 475,130 484,263	366,378 370,471 373,024 378,117 382,936 388,718	134,764 137,136 137,431 139,140 140,408 141,876	70,089 70,630 71,209 72,447 73,874 75,564	23,076 23,298 23,553 23,523 23,459 23,460	138,449 139,407 140,831 143,007 145,195 147,818	89,047 89,243 90,185 90,774 92,194 95,545
1984: Jan Feb Mar Apr May June	493,268 497,335 503,891 512,132 524,922 534,946	393,187 399,795 405,665 412,073 422,306 430,131	143,982 146,781 147,107 149,265 152,954 155,851	76,069 77,342 80,304 82,172 84,989 86,558	23,368 23,241 23,526 23,811 24,113 24,567	149,768 152,430 154,728 156,825 160,250 163,155	100,081 97,540 98,226 100,059 102,616 104,815
July Aug Sept Oct Nov	543,904 551,966 556,824 564,944 574,057	437,237 443,235 447,518 453,793 461,743	159,273 161,050 162,367 164,724 167,448	87,198 88,512 89,836 91,332 93,046	25,029 25,602 25,920 25,704 25,675	165,737 168,071 169,395 172,033 175,574	106,667 108,731 109,306 111,151 112,314

¹ Installment credit covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments. Credit secured by real estate is generally excluded. ² Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Prior to 1968, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes openend credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into consumer credit.

³ Not reported separately prior to July 1970.

⁴ Noninstallment credit is credit scheduled to be repaid in a lump sum, including single-payment loans, charge accounts, and service credit. Because of inconsistencies in the data and infrequent benchmarking, series is no longer published by the Federal Reserve Board on a regular basis. Data are shown here as a general indication of trends.

TABLE B-68.—Net change in consumer credit outstanding, 1950-84 [Change from preceding period; millions of dollars, seasonally adjusted]

	Total		Inst	allment cred	fit 1		Nonin-
Year and month	consumer credit	Total	Automo- bile	Revolv- ing <sup>2</sup>	Mobile home <sup>a</sup>	Other	stailment credit *
December:				ŀ			
1950	4,723 1,558 5,254 4,098	3,220	1,539	<b></b>		1,681	1,503
1951	1,558	693	_54	<b></b>		747	865
1952	5.254	4,262	1.670			2.592	992
1953	4,098	3,749	2,051	<b> </b>		1,698	349
1954	1.365	600	53	l		547	765
1955	7,026	5,339	3,730			1,609	1,687
1956	3,905	2,851	1,014			1,837	1,054
1957	2,912	2,851 2,254 —178	994			1,260	658
1958	459	-178	-1,226 2,374			1,048	637
1959	7,837	5,685	2,374			3,311	2,152
1960	4,496	3,914	1,467			2,447	582
1961	2,641	1,103	_452 2,345	ļ		1,555	1,538
1962	6,261 8,748	4,937	2,345			2,592	1,538 1,324
1963	8,748	6,681	2,890			3,791	2,067
1964	9,701	7,618	2,974		ļ	4,644	2,083
1965	10,447	8,140 5,348	3,513			4,627	2,307
1966	6,501	5,348	1,646			3,702	1,153
1967	5,401 11,287	3,621	112			3,509	1,780
1968	11,287	8,329	3,216	2,022 1,541		3,091	2,958
1969	10,516	9,269	2,594	1,541	1	5,134	1,247
1970	5,579 14,527 19,749	4,524	598	1.337	2,433 4,738 2,297	1,352	1,055
1971	14,527	12,529	4.174	1,337 3,352	4,738	265	1,998
1972	19,749	14,824	4,174 7,313	1,139	2.297	4.075	4,925
1973	25,608	21.652	5,905	1,927	4,037	9,783	3,956
1974	9,740	9,293 7,184 21,338	501	1.914	1,077	5,801	447
1975	9,138	7.184	3,038	1,914 1,235	-200	3,111	1.954
1976	25,160	21,338	10.519	2,038	148	8,633	3,822
1977	39,667	35,921	15.092	19,922	367	540	3,746
1978	48,250	35,921 42,746	18,973	8,577	302	14,894	5,504
1979	44,637	37,723	18,973 14,660	8,170	1,644	13,249	6,914
1980	5.760	2 579	285	1,726	459	109	3,181
1981	5,760 26,352	20,524	8,515	5,409	577	6.023	5,626
1982	23,882	18,726	4,476	5,144	4,240	4,866	5,828 5,156
1983	50,783	2,579 20,524 18,726 39,774	12,077	10,111	1,341	16,245	11,009
1983:	ì			1	Ì		
Jan	3,993	2 595	280	309	250	1.756	1,398
Feb	201	2,595 22	-514	55	-18	549	<b>-823</b>
Mar	3,335	2 937	763	1.047	174	953	398
Apr	3,004	2,041	441	971	51	578	963
May	3,145	2,272	706	584	100	882	873
June	5,030	2,041 2,272 3,861	1,440	1,104	163	1,154	1,169
			1.040			1 004	
July	4,239	3,706	1,849	616	237	1,004	533 196
Aug Sept	4,239 4,289 3,495	4,093 2,553	1,849 2,372 295	541 579	222 255	958 1,424	942
Oct	5,682	5.093	1,709	1,238	-30	2,176	589
Nov	6,230	4,819	1,268	1,236	-64	2,178	1 420
Dec	6,239 9,133	5,782	1,468	1,690	i	2,623	1,420 3,351
1984:							•
1984: Jan	9,005	4,469	2.106	505	_92	1,950	4.536
Feb	4 067 1	6,608	2,106 2,799	1,273	l —127 l	2.662	4,536 -2,541
Mar	6,556	5,870	326	2,962	i 285 l	2,298	686
Anr	6,556 8,241 12,790	6,408	2,158	1,868	285 302	2,298 2,097	1,833 2,557
May	12,790	10,233	3,689	2,817	302	3,425	2,557
	10.024	7,825	2,897	1,569	454	2,905	2,199
Jurie	10,024						
Jule	8.958	7,106	3,422	640	462	2,582	1.852
June	8,958 8,062	7,106 5,998	3,422 1,777	1.314	462 573	2,582 2,334	2,064
July	8,958 8,062 4,858	5,998 4,283	3,422 1,777 1,317	1,314 1,324	462 573 318	2,582 2,334 1,324	
July	8,958 8,062 4,858 8,120	5,998 4,283 6,275	1,317 2,357	1,314 1,324 1,496	573 318 -216	1,324 2,638	2,064
June July Aug Sept	8,958 8,062 4,858	5,998 4,283	1,317	1,314 1,324	573 318	2,582 2,334 1,324 2,638 3,541	2,064 575

¹ Installment credit covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments. Credit secured by real estate generally excluded. 
² Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Prior to 1958, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes openend credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into

Note.-See also Table B-67.

end credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into consumer credit.

3 Not reported separately prior to July 1970.

4 Noninstallment credit is credit scheduled to be repaid in a lump sum, including single-payment loans, charge accounts, and service credit. Because of inconsistencies in the data and infrequent benchmarking, series is no longer published by the Federal Reserve Board on a regular basis. Data are shown here as a general indication of trends.

TABLE B-69.—Mortgage debt outstanding by type of property and of financing, 1939-84 (Billions of dollars)

			I	ionfarm pr	operties			lonfarm p	roperties	by type o	f mortgag	ţe
		F					Gov	ernment u	nderwritt	en	Conve	ntional <sup>3</sup>
End of year or quarter	All proper-	Farm proper-		1- to 4-	Multi- family	Com- mercial		1- to 4	l-family h	ouses		
or quarter	ties	ties	Total	family houses	proper- ties	proper- ties 1	Total *	Total	FHA insured	VA guar- anteed	Total	1- to 4- family houses
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	34.1	18.9
1948	56.2	5.3	<b>50.9</b>	33.3	7.5	10.2	13.6	12.5	5.3	7.2	37.3	20.8
1949	62.7	5.6	<b>57.1</b>	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	18.8	8.5	10.3	44.7	26.3
1951	82.3	6.7	75.6	51.7	11.5	12.5	26.6	22.9	9.7	13.2	49.1	28.9
1952	91.4	7.2	84.2	58.5	12.3	13.4	29.3	25.4	10.8	14.6	54.9	33.2
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	69.3	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	55.2	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	154.6	23.0	36.5	65.6	59.1	29.5	29.6	148.5	95.5
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
	356.5	23.1	333.4	232.9	40.3	60.1	84.1	76.1	44.8	31.3	249.3	156.9
	381.2	25.1	356.1	247.3	43.9	64.8	88.2	79.9	47.4	32.5	267.9	167.4
	410.9	27.4	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
	441.4	29.2	412.2	283.2	52.2	76.9	100.2	90.2	54.5	35.7	312.0	193.0
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	681.6	41.3	640.3	415.5	93.1	131.7	135.0	116.2	66.2	50.0	505.3	299.2
1974	744.3	46.3	698.0	451.2	100.0	146.9	140.2	121.3	65.1	56.2	557.8	329.9
1975	806.1	51.1	755.0	495.0	100.6	159.3	147.0	127.7	66.1	61.6	608.0	367.3
1976	893.0	56.6	836.4	560.7	104.5	171.2	154.1	133.5	66.5	67.0	682.3	427.1
1977	1,022.7	63.7	959.1	657.8	111.5	189.7	161.7	141.6	68.0	73.6	797.3	516.2
1978	1,173.6	70.8	1,102.8	770.7	120.7	211.4	176.4	153.4	71.4	82.0	926.4	617.3
1979	1,337.4	82.6	1,254.8	891.0	128.4	235.4	199.0	172.9	81.0	92.0	1,055.7	718.1
1980	1,471.8	92.0	1,379.8	987.0	137.1	255.7	225.1	195.2	93.6	101.6	1,154.7	<b>791.8</b>
	1,583.3	101.7	1,481.5	1,065.3	136.4	279.9	238.9	207.6	101.3	106.2	1,242.6	<b>857.7</b>
	1,655.0	106.7	1,548.3	1,105.7	140.6	302.1	248.9	217.9	108.0	109.9	1,299.5	<b>887.9</b>
	1,826.4	109.6	1,716.8	1,214.6	151.0	351.3	279.8	248.8	127.4	121.4	1,437.0	<b>965.8</b>
1982:	1,603.4	103.9	1,499.5	1,078.2	138.1	283.3	240.5	209.0	102.0	107.0	1,259.0	869.2
	1,624.3	105.5	1,518.8	1,090.5	138.8	289.5	241.6	209.8	102.7	107.1	1,277.2	880.7
	1,632.2	106.5	1,525.7	1,091.7	138.2	295.8	246.8	214.8	106.2	108.6	1,278.9	876.9
	1,655.0	106.7	1,548.3	1,105.7	140.6	302.1	248.9	217.9	108.0	109.9	1,299.5	<b>887.9</b>
1983: I II III	1,681.9 1,723.1 1,775,1 1,826.4	106.9 108.0 109.0 109.6	1,574.9 1,615.1 1,666.1 1,716.8	1,122.1 1,146.9 1,182.1 1,214.6	141.5 144.7 147.1 151.0	311.3 323.4 337.0 351.3	252.5 261.1 273.7 279.8	222.1 230.0 241.7 248.8	110.8 115.8 123.8 127.4	111.3 114.3 117.9 121.4	1,322.5 1,354.0 1,392.4 1,437.0	900.0 916.9 940.4 965.8
1984:   	1,869.4 1,926.6 1,982.6	110.1 111.0 111.7	1,759.4 1,815.6 1,871.0	1,244.2 1,278.6 1,314.1	154.3 158.8 162.6	360.9 378.2 394.2	286.8 290.5	255.9 260.5	131.1 133.6	124.8 126.9	1,472.6 1,525.2	988.3 1,018.1

Includes negligible amount of farm loans held by savings and loan associations,
 Includes FKA insured multifamily properties, not shown separately.
 Derived figures. Total includes multifamily and commercial properties, not shown separately.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B-70.—Mortgage debt outstanding by holder, 1939-84 [Billions of dollars]

		·	Major	financial institu	utions		Other h	olders
End of year or quarter	Total	Total	Savings and loan associa- tions	Mutual savings banks	Commer- cial banks <sup>1</sup>	Life insur- ance com- panies	Federal and related agen- cies <sup>2</sup>	Individ- uals 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
	144.5	111.2	35.7	19.7	22.7	33.0	6.2	27.1
	156.5	119.7	40.0	21.2	23.3	35.2	7.7	29.1
	171.8	131.5	45.6	23.3	25.5	37.1	8.0	32.3
	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
	228.0	172.6	68.8	29.1	30.4	44.2	12.2	43.1
	251.4	192.5	78.8	32.3	34.5	46.9	12.6	46.3
	278.5	217.1	90.9	36.2	39.4	50.5	11.8	49.5
	305.9	241.0	101.3	40.6	44.0	55.2	12.2	52.7
1965 1966 1967 1968	333.3 356.5 381.2 410.9 441.4	264.6 280.8 298.8 319.9 339.1	110.3 114.4 121.8 130.8 140.2	44.6 47.3 50.5 53.5 56.1	49.7 54.4 59.0 65.7 70.7	60.0 64.6 67.5 70.0 72.0	13.5 17.5 20.9 25.1 31.1	55.2 58.2 61.4 65.9 71.2
1970 1971 1972 1973	474.2 526.5 603.4 681.6 744.3	355.9 394.2 450.0 505.4 542.6	150.3 174.3 206.2 231.7 249.3	57.9 62.0 67.6 73.2 74.9	73.3 82.5 99.3 119.1 132.1	74.4 75.5 76.9 81.4 86.2	38.3 46.4 54.6 64.8 82.1	79.9 85.9 98.9 111.4 119.7
1975	806.1	581.2	278.6	77.2	136.2	89.2	101.0	123.8
1976	893.0	647.5	323.0	81.6	151.3	91.6	116.6	128.9
1977	1,022.7	745.2	381.2	88.2	179.0	96.8	140.3	137.2
1978	1,173.6	848.2	432.8	95.2	214.0	106.2	170.4	155.0
1979	1,337.4	938.2	475.7	98.9	245.2	118.4	215.8	183.4
1980	1,471.8	997.2	503.2	99.9	263.0	131.1	256.5	218.1
	1,583.3	1,040.8	518.5	100.0	284.5	137.7	289.1	253.3
	1,655.0	1,023.6	483.6	97.8	300.2	142.0	354.8	276.6
	1,826.4	1,110.0	493.4	136.1	328.9	151.6	432.4	284.0
1982: 1 II IV	1,603.4 1,624.3 1,632.2 1,655.0	1,042.3 1,042.9 1,027.1 1,023.6	516.5 513.7 494.9 483.6	97.5 96.3 94.4 97.8	289.5 293.2 297.3 300.2	138.8 139.7 140.5 142.0	301.0 315.1 332.8 354.8	260.2 266.3 272.3 276.6
1983:	1,681.9	1,029.1	477.0	105.4	303.4	143.3	374.6	278.2
	1,723.1	1,048.7	474.5	119.2	310.2	144.7	394.8	279.6
	1,775.1	1,079.6	482.3	129.6	320.3	147.4	414.8	280.7
V	1,826.4	1,110.0	493.4	136.1	328.9	151.6	432.4	284.0
1984:	1,869.4	1,136.2	502.1	143.2	338.9	152.0	447.3	286.0
	1,926.6	1,179.6	526.7	147.5	351.5	153.8	457.7	289.3
	1,982.6	1,219.7	544.3	155.1	364.5	155.8	471.0	291.9

¹ Includes loans held by nondeposit trust companies, but not by bank trust departments.

² Includes former Federal National Mortgage Association (FNMA) and new Government National Mortgage Association (GNMA), as well as Federal Housing Administration, Yeterans 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.

TABLE B-71.—Federal budget receipts, outlays, and debt, fiscal years 1976-86 [Including outlays off-budget under current law 1; millions of dollars; fiscal years]

	T		Actual	·	
Description	1976	1977	1978	1979	1980
BUDGET RECEIPTS AND OUTLAYS:					
Total receipts	. 298,060	355,559	399,740	463,302	517,111
Federal funds	1	241.312	270,670	316.366	350.85
Trust funds	. 201,099 . 132,509 . —35,548	241,312 151,503 -37,256	270,670 166,467 —37,397	316,366 188,072 —41,136	350,85 212,10 —45,85
Total outlays	371,779	409,203	458,729	503,464	590,92
Federal funds	277,228 130,099 -35,548	304,459 142,000 -37,256	342,355 153,771 -37,397	374,867 169,733 —41,136	433,46 203,30
Trust fundsInterfund transactions	-35,548	-37,256	-37,397	-41,136	-45,85
Total surplus or deficit (-)	_73,719	53,644	-58,989	40,161	<b>-73,80</b>
Federal fundsTrust funds	76,129 2,410	-63,147 9,502	-71,685 12,696	58,501 18,340	-82,61 8,80
DUTSTANDING DEBT, END OF PERIOD:					'
Gross Federal debt	631,866	709,138	780,425	833,751	914,31
Held by Government agencies Held by the public	151,566 480,300	157,295 551,843	169,477 610,948	189,162 644,589	199,21 715,10
Federal Reserve SystemOther	94,714 385,586	105,004 446,839	115,480 495,468	115,594 528,995	120,84 594,25
BUDGET RECEIPTS	298,060	355,559	399,740	463,302	517,11
Individual income taxes	131,603	157,626 54,892 106,485 17,548 7,327	180,988 59,952 120,967	217,841	244,06
Corporation Income taxes	131,603 41,409 90,769	106,485	120,967	217,841 65,677 138,939	64,60 157,80 24,32
Print agint	16963	17,548	18.376	18,745 5,411	24,32 6,38
Estate and gift taxes Customs dulies Miscellaneous receipts:	5,216 4,074	5,150	5,285 6,753	7,439	7,17
Miscellaneous receipts:  Deposits of earnings by Federal Reserve SystemAlf other	5,451 2,576	5,908 623	6,641 778	8,327 925	11,76 98
BUDGET OUTLAYS		409,203	458,729	503,464	590,92
National defense	89,619	97,241 6,353 4,736	104,495 7,482	116,342 7,459 5,235	133,99 12,71 5,83 10,15
International affairs	6,433 4,373 4,204	6,353	7,482 4,926	7,459	12,71
Energy	4,204	1 5770	4,926 7,992	เ จาดก	10,15
Natural resources and environment		10,032 6,787 3,093	10,983	12,135 11,236 4,686	13.85
Agriculture	7.619	3.093	11,357 6,254	4.686	8,83 9,39
I ransportation	12720	14,829 7,021 21,104 17,302 104,414 85,068	1 15 521	17,532	21.32
Community and regional development Education, training, employment, and social services	5,442 18,910 15,734 89,736 73,903	7,021	11,841 26,710 18,524 116,629 93,861 22,768	10,480	11,25
Health	15,734	17,302	18 524	30,223 20,494	31,84 23,16
HealthSocial security and medicare	89,736	104,414	116,629	130,567 104,073	150,63 118,54
Social security	73,903	85,068	93,861	104,073	118,54
MedicareIncome security	£0.704	19,345 61,044	61,488	26,495 66,359	32,09 86,53
Income security	18,433	18,038	18 978	19,931	21,18
Administration of justice	3,324	3,602	3,810	4 169	l 4.58
General government General purpose fiscal assistance	2,519	3,267	3,576	3,928	4,44 8,58
Net interest	267111	18,038 3,602 3,267 9,569 29,878	3,810 3,576 8,442 35,441	3,928 8,369 42,615	52,51
Allowances					
Undistributed offsetting receipts	-14,386	14,879	-15,720	17,476	19,942
Allowances. Undistributed offsetting receipts Employer share, employee retirement: Military retired pay	7 A92	_7 957	Q A79	_6 03b	10,055
Rents and royalties on the Outer Continental Shelf	7,482 4,242 2,662	-7,957 -4,548 -2,374	8,478 4,983 2,259	8,938 5,271 3,267	10,055 5,787 4,101
Sale of Conráil					
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Outlays off-budget under current law are proposed to be on-budget. See next page for continuation of table.

TABLE B-71.—Federal budget receipts, outlays, and debt, fiscal years 1976-86—Continued
[Including outlays off-budget under current law 1; millions of dollars; fiscal years]

Description	_	Act	ual		Estimates		
Description	1981	1982	1983	1984	1985	1986	
BUDGET RECEIPTS AND OUTLAYS:							
Total receipts	599,272	617,766	600,562	666,457	736,859	793,72	
Federal funds	410,422	409,253	382,432	418,095	459,314	493,53	
Trust funds	410,422 240,601 —51,751	409,253 270,138 -61,625	382,432 319,363 101,233	418,095 338,103 89,740	459,314 396,495 118,950	493,53 421,30 -121,10	
Total outlays	678,209	745,706	808,327	851,781	959,085	973,72	
		· ·	l '		'		
Federal funds	496,182 233,778	543,437 263,894	613,277 296,282 101,233	636,324 305,198 89,740	731,630 346,405 —118,950	734,93 359,90	
Interfund transactions	-51,751	-61,625	-101,233	89,740	-118,950	-121,10	
Total surplus or deficit (—)		-127,940	-207,764	-185,324	-222,226	-179,99	
Federal fundsTrust funds	85,760 6,823	- 134,184 6,244	230,845 23,081	-218,229 32,905	-272,316 50,090	-241,39 61,40	
OUTSTANDING DEBT, END OF PERIOD:							
Gross Federal debt	1,003,941	1,146,987	1,381,886	1,576,748	1,841,077	2,074,23	
Held by Government agenciesHeld by the public	209,507 794,434	217,560 929,427	240,116 1,141,770	264,159 1,312,589	327,110 1,513,967	387,64 1,686,58	
						ľ	
Federal Reserve SystemOther	124,466 669,968	134,497 794,930	155,527 986,243	155,122 1,157,467	***************************************		
BUDGET RECEIPTS	599,272	617,766	600,562	666,457	736,859	793,72	
Individual income taxes	285,917	297.744	288 938	296 206	329 677	358,88	
Individual income taxes	61,137 182,720 40,839	297,744 49,207 201,498 36,311 7,991	288,938 37,022 208,994	296,206 56,893 241,651	329,677 66,403 268,367 36,995	74,08 289,43	
Social insurance taxes and contributions	182,720	201,498	208,994	241,651 37,361	268,367	289,43 34,99	
Excise taxes	6,787	7,991	35,300 6,053	37,361 6,010	3.003	5,34	
Customs duties	8,083	8,854	8,655	11,370	11,809	12,34	
Miscellaneous receipts: Deposits of earnings by Federal Reserve System							
SystemAll other	12,834 956	15,186 976	14,492 1,109	15,684 1,281	16,419 1,585	16,93 1,69	
BUDGET OUTLAYS	678,209	745,706	808,327	<b>851,7</b> 81	959,085	973,72	
National defense	157,513	185,309 12,300 7,200 13,527 12,998 15,944 6,256 20,625	209,903	227,413	253,830	285,66	
International affairs	13,104	12,300	11.848	227,413 15,876 8,317 7,086 12,591 13,613	253,830 19,583 8,740	18,34 9,28 4,67	
General science, space, and technology Energy	6,469 15,166	13.527	7,935 9,353	7.086	8.164	4.67	
41-4-W1	13,568 11,323	12,998	12,672 22,901	12,591	13,024 20,165	11.88 12,62	
Natural resources and environment Agriculture. Commerce and housing credit	11,323 8 206	15,944 6,256	22,901 6,681	13,613 6,917	20,165	12,62	
Transportation	8,206 23,379	20,625	6,681 21,334	23.669	5,987 26,994	2,20 25,86	
Community and regional development	10,568	8,347	7,560	7,673	8,553	7,32	
ices training, employment, and social serv-	33,709	27,029	26,606	27,579	30,434	29,28	
Health Social security and medicare	26,866	27,445	28,641 223,311 170,724 52,588	30,417	33,879	24 02	
Social security and medicare	178,733	202,532	223,311	235,764	257,363	269,40	
Social security	139,383	155,964	1/0,/24 52 588	1/8,223 57,540	191,107	202,24	
Income security	26,866 178,733 139,585 39,149 99,723	107.717	122,598 24,846	30,417 235,764 178,223 57,540 112,668	33,879 257,363 191,107 66,256 127,240	269,40 202,24 67,15 115,76	
Income security  Veterans benefits and services  Administration of justice	22,991 4,762	23,958	24,846	23.014		20,/0	
Administration of justice	4,/62	4,703	5,099	5,660 5,053	6,586	6,58 4,84	
General government General purpose fiscal assistance	4,582 6,854 68,734	6.390	6.452	5,053 6,770 111,058	6,686 5,782 6,552	2.79	
	68,734	27,029 27,445 202,532 155,964 46,567 107,717 23,958 4,703 4,532 6,390 84,995	5,099 4,789 6,452 89,774	111,058	130,426	142,55	
Allowances	29 041	- 26,099	-33,976	-31,957	130,426 1,131 32,296	— 37,47	
Employer share, employee retirement:	20,041		-33,370	,	I I	-	
Alfowances	-11,532 -6,371	-12,829 -7,020	15,362 8,122	-16,503 -8,760	17,017 9,977	18,23 10,73	
Rents and royalties on the Outer Continental	-10,138	-6,250	10,491	6,694	5,302	-7,31 -1,20	
Sale of Conrail						-1,20	

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 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter, not shown here.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1986" for additional information.

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

TABLE B-72.—Federal budget receipts, outlays, components, and debt, selected fiscal years 1929-86 (Billions of dollars)

		Budget totals		Corr	ponents of bu	dget	Gross Federa of pe		
	(Including	outlays off-but which are pro luded on-budge	lget under	Outlays	On-budget u		U1 pc		Adden-
	current law,	winch are pro luded on-budge	posed to be et)	Off-budget	ld.	W			dum:
Fiscal year or period	Receipts	Outlays	Surplus or deficit ()	under current law; proposed to be included on-budget	Outlays	Surplus or deficit (—)	Total	Held by the public	Gross national product
1929 1933	3.9 2.0 5.0	3.1 4.6	0.7 —2.6	••••••	***************************************		1 16.9 1 22.5 48.2		
1939	5.0	8.8	-3.9				48.2	41.4	<b>}</b>
1940	6.5 8.7 14.6 24.0 43.7	9.5 13.7 35.1 78.6 91.3	-2.9 -4.9 20.5 54.6 47.6		13.7 35.1 78.6	-2.9 -4.9 -20.5 -54.6 -47.6	50.7 57.5 79.2 142.6 204.1	42.8 48.2 67.8 127.8 184.8	95.0 109.0 139.0 177.0 202.0
1945	45.2 39.3 38.5 41.6 39.4	92.7 55.2 34.5 29.8 38.8	4.0 11.8		55.2 34.5 29.8	-47.6 -15.9 4.0 11.8 .6	260.1 271.0 257.1 252.0 252.6	235.2 241.9 224.3 216.3 214.3	217.0 202.0 221.3 245.5 261.8
1950 1951 1952 1953 1954	39.4 51.6 66.2 69.6 69.7	42.6 45.5 67.7 76.1 70.9	-3.1 6.1 -1.5 -6.5 -1.2		42.6 45.5 67.7 76.1 70.9	-3.1 6.1 -1.5 -6.5 -1.2	256.9 255.3 259.1 266.0 270.8	219.0 214.3 214.8 218.4 224.5	265.1 312.8 339.3 361.3 364.2
1955	65.5 74.6 80.0 79.6 79.2	68.4 70.6 76.6 82.4 92.1	-3.0 3.9 3.4 -2.8 -12.8			-3.0 3.9 3.4 -2.8 -12.8	274.4 272.8 272.4 279.7 287.8	226.6 222.2 219.4 226.4 235.0	380.6 411.8 433.9 443.1 474.4
1960	92.5 94.4 99.7 106.6 112.6	92.2 97.7 106.8 111.3 118.5	.3 -3.3 -7.1 -4.8 -5.9			.3 -3.3 -7.1 -4.8 -5.9	290.9 292.9 303.3 310.8 316.8	237.2 238.6 248.4 254.5 257.6	497.9 509.3 548.2 578.0 618.2
1965	116.8 130.8 148.8 153.0 186.9	118.2 134.5 157.5 178.1 183.6	-1.4 -3.7 -8.6 -25.2 3.2		118.2 134.5 157.5 178.1 183.6	-1.4 -3.7 -8.6 -25.2 3.2	323.2 329.5 341.3 369.8 367.1	261.6 264.7 267.5 290.6 279.5	659.5 724.1 777.3 831.3 910.6
1970 1971 1972 1973 1974	203.2	195.6 210.2 230.7 245.7 269.4	-2.8 -23.0 -23.4 -14.9 -6.1	0.1 1.4	195.6 210.2 230.7 245.6 267.9	-2.8 -23.0 -23.4 -14.8 -4.7	382.6 409.5 437.3 468.4 486.2	284.9 304.3 323.8 343.0 346.1	968.8 1,031.5 1,128.8 1,252.0 1,379.4
1975	279.1 298.1 81.2 355.6 399.7 463.3	332.3 371.8 96.0 409.2 458.7 503.5	53.2 73.7 14.7 53.6 59.0 40.2	8.1 7.3 1.8 8.7 10.4 12.5	324.2 364.5 94.2 400.5 448.4 491.0	45.2 66.4 13.0 44.9 48.6 27.7	544.1 631.9 646.4 709.1 780.4 833.8	396.9 480.3 498.3 551.8 610.9 644.6	1,479.9 1,640.1 432.2 1,862.8 2,091.3 2,357.7
1980 1981 1982 1983 1984	517.1 599.3 617.8 600.6 666.5	590.9 678.2 745.7 808.3 851.8	-73.8 -78.9 -127.9 -207.8 -185.3	14.2 21.0 17.3 12.4 10.0	576.7 657.2 728.4 796.0 841.8	-59.6 -57.9 -110.6 -195.4 -175.4	914.3 1,003.9 1,147.0 1,381.9 1,576.7	715.1 794.4 929.4 1,141.8 1,312.6	2,575.8 2,885.9 3,046.0 3,221.4 3,581.1
1985 <sup>2</sup>	736.9 793.7	959.1 973.7	-222.2 -180.0	12.5 1.5	946.6 972.2	209.8 178.5	1,841.1 2,074.2	1,514.0 1,686.6	3,868.5 4,198.5

<sup>&</sup>lt;sup>1</sup> Not strictly comparable with later data. <sup>2</sup> Estimates.

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 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 1986" for additional information.

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

TABLE B-73.—Relation of Federal Government receipts and expenditures in the national income and product accounts to the unified budget, fiscal years 1984-86

[Billions of dollars; fiscal years]

		Estir	mate
Receipts and expenditures	1984	1985	1986
RECEIPTS			
Total budget receipts	666.5	736.9	793.7
Government contributions for employee retirement (grossing)  Other netting and grossing  Timing adjustments  Geographic exclusions  Other  Federal sector, national income and product accounts, receipts.	13.1 12.3 -2.8 -1.8 .3	14.7 13.9 -5.3 -1.9 .2 758.5	15.1 16.1 3.4 2.1 .4
EXPENDITURES	007.0	700.0	020.0
Total budget outlays	851.8	959.1	973.7
Lending and financial transactions  Government contributions for employee retirement (grossing)	-18.2 13.1 12.3 2.2 3.5 -5.0 -1.8	-36.5 14.7 13.9 1.5 1.7 -5.2 7	-13.0 15.1 16.1 .9 4.0 -5.2
Federal sector, national income and product accounts, expenditures	857.9	948.5	992.7

Note.—See Note, Table B-72.

Data are revised to include the outlays of Federal entities that are off-budget under current law and proposed to be included onbudget.

See Special Analysis B, "Special Analyses, Budget of the United States Government, Fiscal Year 1986" 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-74.—Federal and State and local government receipts and expenditures, national income and product accounts, 1929-84

	To	tal governme	ent	Fed	eral Governm	ent	,	State and loca government	1
Calendar year or quarter	Receipts	Expendi- tures	Surplus or deficit (—), national income and product accounts	Receipts	Expendi- tures	Surplus or deficit (-), national income and product accounts	Receipts	Expendi- tures	Surplus or deficit (—), national income and product accounts
1929 1933 1939	11.3 9.3 15.4	10.3 10.7 17.6	1.0 -1.4 -2.2	3.8 2.7 6.7	2.6 4.0 8.9	1.2 -1.3 -2.2	7.6 7.2 9.6	7.8 7.2 9.6	-0.2 1 .0
1940	17.7 25.0 32.6 49.2 51.2 53.2 51.0 56.9 58.9 55.9	18.4 28.8 64.0 93.3 103.0 92.7 45.5 50.5 59.3	7 3.8 31.4 44.1 51.8 39.5 5.4 14.4 8.4 3.4	8.6 15.4 22.9 39.3 41.0 42.5 39.1 43.2 43.2 38.7	10.0 20.5 56.1 85.8 95.5 84.6 35.6 29.8 34.9 41.3	-1.3 -5.1 -33.1 -46.6 -42.1 3.5 13.4 8.3 -2.6	10.0 10.4 10.6 10.9 11.1 11.6 13.0 15.4 17.7	9.3 9.1 8.8 8.4 8.5 9.0 11.1 14.4 17.6 20.2	.6 1.3 1.8 2.5 2.7 2.6 1.9 1.0
1950	69.0 85.2 90.1 94.6 89.9 101.1 109.7 116.2 115.0 129.4	61.0 79.2 93.9 101.6 97.0 98.0 104.5 115.2 127.6 131.0	8.0 6.1 -3.8 -6.9 -7.1 3.1 5.2 .9 -12.6 -1.6	50.0 64.3 67.3 70.0 63.7 72.6 78.0 81.9 78.7 89.8	40.8 57.8 71.1 77.1 69.8 68.1 71.9 79.6 88.9 91.0	9.2 6.5 3.7 7.1 6.0 4.4 6.1 2.3 10.3	21.3 23.4 25.4 27.4 29.0 31.7 35.0 38.5 42.0 46.4	22.5 23.9 25.5 27.3 30.2 32.9 35.9 39.8 44.3 46.9	-1.2 4 0 .1 -1.1 -1.3 9 -1.4 -2.4
1960	139.5 144.8 156.7 168.5 174.0 188.3 212.3 228.2 263.1 296.7	136.4 149.1 160.5 167.8 176.3 187.8 213.6 242.4 269.1 286.8	3.1 -4.3 -3.8 .7 -2.3 -5 -1.3 -14.2 -6.0 9.9	96.1 98.1 106.2 114.4 114.9 124.3 141.8 150.5 174.4 196.9	93.1 101.9 110.4 114.2 118.2 123.8 143.6 163.7 180.5 188.4	3.0 3.9 4.2 .3 3.3 .5 1.8 13.2 6.0 8.4	49.9 54.0 58.5 63.2 69.5 75.1 84.8 93.6 107.3 120.2	49.8 54.4 58.0 62.8 68.5 75.1 84.3 94.7 107.2 118.7	.1 4 .5 .5 1.0 0 .5 1.1 1.5
1970	302.8 322.6 368.3 413.1 455.2 470.5 538.4 605.4 681.9 765.1	313.4 342.0 371.6 405.3 460.0 534.3 574.9 623.3 681.1 750.8	-10.6 -19.4 -3.3 7.8 -4.7 -63.8 -36.5 -17.8 14.3	191.9 198.6 227.5 258.6 287.8 287.3 331.8 375.2 431.6 493.6	204.3 220.6 244.3 264.2 299.3 356.6 384.8 421.1 461.0 509.7	-12.4 -22.0 -16.8 -5.6 -11.5 -69.3 -53.1 -45.9 -29.5 -16.1	135.4 153.0 178.3 195.0 211.4 237.7 267.8 297.7 327.6 352.0	133.5 150.4 164.8 181.6 204.6 232.2 251.2 269.7 297.3 321.5	1.9 2.6 13.5 13.4 6.8 5.5 16.6 28.0 30.3
1980	838.3 956.9 974.8 1,033.0 1,133.8	869.0 983.6 1,090.1 1,167.5 1,258.1	-30.7 -26.7 -115.3 -134.5 -124.4	540.9 624.8 616.7 641.1 703.5	602.1 689.1 764.9 819.7 879.9	-61.2 -64.3 -148.2 -178.6 -176.4	386.1 420.0 441.9 478.2 523.2	355.5 382.4 409.0 434.1 471.1	30.6 37.6 32.9 44.1 52.0
1982: 	970.4 980.8 972.8 975.3	1,044.2 1,058.5 1,103.1 1,154.5	-73.8 -77.6 -130.4 -179.2	622.9 625.9 609.9 608.3	729.3 737.9 773.6 818.9	-106.3 -112.0 -163.7 -210.6	430.1 440.1 445.9 451.6	397.6 405.7 412.6 420.2	32.5 34.4 33.3 31.5
1983: 	992.6 1,036.5 1,039.6 1,063.4	1,144.3 1,160.0 1,173.1 1,192.8	151.7 123.4 133.5 129.3	619.8 649.3 640.2 655.0	805.6 816.7 821.1 835.5	185.7 167.3 180.9 180.5	458.3 473.5 486.1 495.0	424.2 429.6 438.7 443.8	34.1 43.9 47.4 51.2
1984: 	1,105.4 1,131.6 1,138.7	1,212.8 1,240.8 1,271.7 1,307.3	-107.4 -109.2 -133.0	686.4 704.3 706.2	847.6 868.0 886.8 917.3	161.3 163.7 180.6	509.6 520.6 524.6	455.7 466.1 477.0 485.8	53.9 54.5 47.6

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-75.—Federal and State and local government receipts and expenditures, national income and product accounts, by major type, 1929-84

	Receipts Expenditures														
Year or quarter	Total	Per- sonal tax and nontax re- ceipts	Corpo- rate profits tax ac- cruals	In- direct busi- ness tax and non- tax ac- cruals	Contri- butions for social insur- ance	Total <sup>1</sup>	Pur- chases of goods and serv- ices	Trans- fer pay- ments	Net Total	interest Inter- est paid	Less: Interest received by govern- ment	Less: Dividends re- ceived by govern- ment	Subsidies less current surplus of government enterprises	Surplus or deficit (—), na- tional income and prod- uct ac- counts	Adden- dum: Grants- in-aid to State and local govern- ments
1929 1933 1939		2.6 1.4 2.4	1.4 .5 1.4	7.1 7.1 9.4	0.2 .3 2.1	10.3 10.7 17.6	8.8 8.2 13.5	1.0 1.5 2.6	0.7 1.0 1.1				-0.2 0 .4	1.0 -1.4 -2.2	0.1 .5 1.0
1940	17.7 25.0 32.6 49.2 51.2 53.2 51.0 56.9 58.9 55.9	2.6 3.3 5.9 17.8 18.9 20.8 18.7 21.4 21.0 18.5	2.8 7.6 11.4 14.1 12.9 10.7 9.1 11.3 12.4 10.2	10.1 11.3 11.8 12.8 14.2 15.5 17.1 18.4 20.1 21.3	2.3 2.8 3.5 4.5 5.2 6.1 5.8 5.4 5.9	18.4 28.8 64.0 93.3 103.0 92.7 45.6 42.5 50.5	14.2 24.9 59.8 88.9 97.0 82.8 27.5 25.5 32.0 38.4	2.7 2.6 2.7 2.4 3.0 6.0 13.1 13.1 14.5 16.8	1.2 1.4 1.9 2.4 3.2 4.1 4.2 4.3				.4 .1 .1 .6 .7 .9 2 1 3	-7 -3.8 -31.4 -44.1 -51.8 -39.5 5.4 14.4 8.4 -3.4	.9 .9 .9 .9 .9 .1.1 1.7 2.0 2.2
1950	85.2 90.1 94.6 89.9 101.1 109.7 115.0	20.6 28.9 34.0 35.5 32.5 35.4 39.7 42.4 42.1 46.0	17.9 22.6 19.4 20.3 17.6 22.0 22.0 21.4 19.0 23.6	23.4 25.3 27.7 29.7 29.6 32.2 35.1 37.5 38.7 41.8	7.1 8.5 9.0 9.1 10.1 11.5 12.9 14.9 15.2 18.0	61.0 79.2 93.9 101.6 97.0 98.0 104.5 115.2 127.6 131.0	38.5 60.1 75.6 82.5 75.8 75.0 79.4 87.1 95.0 97.6	18.0 14.8 14.2 14.9 16.9 18.3 19.2 21.9 26.1 27.1	4.4 4.5 4.5 4.6 4.7 4.7 5.2 5.6 5.3 6.3				1 3 5 0 7 7 1.1	8.0 6.1 -3.8 -6.9 -7.1 3.1 5.2 -9 -12.6 -1.6	2.3 2.5 2.8 2.9 3.1 3.3 4.2 5.6 6.8
1960 1961 1962 1963 1964 1965 1965 1967 1967	139.5 144.8 156.7 168.5 174.0 188.3 212.3 228.2 263.1	50.4 52.1 56.8 60.3 58.6 64.9 74.5 82.1 97.2 115.7	22.7 22.8 24.0 26.2 28.0 30.9 33.7 32.5 39.2 39.5	45.4 48.0 51.6 54.6 58.8 62.6 65.3 70.2 78.9 86.6	21.1 21.9 24.3 27.3 28.7 30.0 38.8 43.4 47.9 55.0	136.4 149.1 160.5 167.8 176.3 187.8 213.6 242.4 269.1 286.8	100.3 108.2 118.0 123.7 129.8 138.4 158.7 180.2 199.0 208.8	28.9 32.9 33.8 35.6 36.9 39.8 43.9 51.7 58.6 64.8	6.9 6.4 6.9 7.4 7.9 8.1 8.5 8.9 10.3 11.5	10.1 9.9 10.8 11.6 12.5 13.2 14.5 15.7 18.1 19.8	3.3 3.5 3.9 4.2 4.6 5.1 6.0 6.8 7.7 8.3	0.1	.4 1.7 1.8 1.1 1.7 1.6 2.5 1.6 1.4	3.1 -4.3 -3.8 .7 -2.3 -5 -1.3 -14.2 -6.0 9.9	6.5 7.2 8.0 9.1 10.4 11.1 14.4 15.9 18.6 20.3
1970 1971 1972 1973 1974 1975 1976 1977 1978	302.8 322.6 368.3 413.1 455.2 470.5 538.4 605.4 681.9 765.1	115.8 116.7 141.0 150.7 170.2 168.9 196.8 226.4 258.7 301.0	34.2 37.5 41.6 49.0 51.6 50.6 63.8 72.7 83.2 87.6	94.3 103.7 111.5 120.9 129.1 140.1 151.7 165.7 178.2 189.6	58.6 64.6 74.2 92.4 104.3 110.9 126.0 140.6 161.8 186.9	313.4 342.0 371.6 405.3 460.0 534.3 574.9 623.3 681.1 750.8	220.1 234.9 253.1 270.4 304.1 339.9 362.1 393.8 431.9 474.4	78.3 92.6 102.6 116.6 138.6 173.9 189.6 202.5 218.4 244.2	12.3 12.4 12.9 15.2 16.4 18.9 23.1 25.1 29.0 30.6	22.3 23.1 24.8 29.6 33.6 38.1 44.7 49.1 58.4 70.9	9.9 10.7 11.9 14.4 17.1 19.2 21.5 24.0 29.4 40.3	2.3.3.5.8.8.8.3.1.7.1.9	2.9 2.6 3.8 3.4 1.1 2.4 1.0 3.1 3.7 3.4	-10.6 -19.4 -3.3 7.8 -4.7 -63.8 -36.5 -17.8 .8 14.3	24.4 29.0 37.5 40.6 43.9 54.6 61.1 67.5 77.3 80.5
1980	838.3 956.9 974.8 1,033.0 1,133.8	336.5 387.7 404.1 404.2 435.1	84.8 81.1 60.7 75.8 88.4	213.4 251.3 258.8 280.4 304.3	203.7 236.8 251.3 272.7 305.9	869.0 983.6 1,090.1 1,167.5 1,258.1	537.8 596.5 650.5 <b>685.5</b> <b>748.0</b>	291.2 330.0 368.2 396.3 407.1	36.3 53.2 65.3 72.3 91.5	86.6 114.4 135.3 <b>151.9</b> 181.9	50.3 61.2 70.0 <b>79.5</b> <b>90.5</b>	1.8 2.1 2.8 2.6 2.8	5.5 6.1 8.8 15.6 14.4	-30.7 -26.7 -115.3 -134.5 -124.4	88.7 87.9 83.9 86.3 92.9
1982: 	970.4	404.4 411.4 398.5 402.0	62.9 62.9 61.9 55.0	254.7 256.0 260.1 264.2	248.3 250.4 252.3 254.1	1,044.2 1,058.5 1,103.1 1,154.5	630.9 633.7 656.3 681.0	348.3 357.8 374.2 392.7	60.9 64.1 68.5 67.7	128.3 133.1 139.2 140.6	67.4 69.0 <b>70.8</b> <b>72.9</b>	2.6 2.8 2.8 2.8	6.6 5.7 7.1 15.9	-73.8 -77.6 -130.4 -179.2	82.7 85.1 83.0 84.6
1983: 	992.6 1,036.5 1,039.6 1,063.4	401.4 411.6 395.8 407.9	59.1 74.8 84.7 84.5	266.9 279.9 284.7 290.1	265.3 270.2 274.3 281.0	1,144.3 1,160.0 1,173.1 1,192.8	678.8 682.2 689.8 691.4	390.1 398.1 394.5 402.6	67.3 68.4 74.8 78.7	142.6 146.9 156.0 162.0	75.3 78.5 81.1 83.2	2.7 2.6 2.6 2.6	10.8 12.7 16.2 22.6	151.7 123.4 133.5 129.3	85.5 86.3 86.7 86.5
1984: 		418.3 430.3 440.9 451.0	92.7 95.8 83.1 82.2	295.5 301.3 306.6 313.7	298.9 304.2 308.1 312.6	1,212.8 1,240.8 1,271.7 1,307.3	704.4 743.7 761.0 782.7	401.2 404.4 408.7 414.1	83.6 85.9 96.1 100.2	169.5 175.5 188.0 194.8	85.9 89.6 91.9 94.6	2.7 2.7 2.8 2.9	26.4 9.6 8.4 13.3	- 107.4 - 109.2 - 133.0 - 147.9	90.6 93.2 92.1 95.8

<sup>&</sup>lt;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-76.—Federal Government receipts and expenditures, national income and product accounts, 1960-86

			Receipts						Expendi	tures	_			
			Corno	Indirect	Contri-		Purcha good: serv	s and		nsfer nents	Grants- in-aid to		Subsi- dies less	Surplus or deficit
Year or quarter	Total	Personal tax and nontax receipts	Corpo- rate profits tax accruals	business tax and nontax accruals	butions for social insur- ance	Total 1	Total	National defense	To persons	To foreign- ers	State and local govern- ments	Net inter- est paid	current surplus of govern- ment enter- prises	(-), national income and product accounts
Fiscal: 2 1950 1951 1962 1963 1964 1965 1966 1967 1968 1969 1970 1972 1972 1973 1974 1975 1976 1977 1978 1979 1990 1981 1982 1983 1984 1985 Calendar:	134.0 159.9 189.8 192.4 213.4 2213.4 2213.4 240.3 365.9 609.2 627.1 687.6 627.1 687.6 627.1	43.6 47.3 49.6 50.7 51.4 57.5 64.4 771.4 90.5 100.5 137.2 166.3 122.7 127.5 222.6 250.4 289.4 311.4 303.6 368.8	23.3 225.7 27.1 30.8 33.3 33.1 36.8 32.9 31.9 31.9 34.2 43.4 41.8 558.9 67.3 76.1 69.9 53.8 70.1 75.7 93.1	15.5 15.8 17.1 18.6 19.2 20.0 19.9 20.7 21.4 22.2 24.5 27.2 24.5 55.3 50.3	28.9 35.5 38.3 44.2 48.8 52.6 58.9 71.5 84.2 91.9 101.0 116.2 133.3	91.3 98.1 106.2 111.7 118.5 132.7 154.9 132.7 278.2 232.7 278.2 328.8 496.6 576.8 576.9 948.5 948.5 948.5 948.5 948.5 948.5	52.9 55.8 61.0 63.7 65.6 64.6 72.4 86.0 95.0 98.0 97.1 101.1 1139.8 150.4 164.1 125.6 273.2 285.2 326.8 335.4 9	74.1 67.0 74.9 76.1 75.3 72.2 72.8 80.2 84.4 97.8 108.2 126.0 173.0 196.7 215.4 241.5 271.7	23.6 225.1 226.5 27.4 28.4 31.8 37.2 48.7 55.0 67.7 76.1 187.2 101.8 1153.8 1166.6 178.7 197.8 234.6 234.6 334.3 334.3	2.23 2.33 2.11 2.22 2.0 2.33 3.1 3.02 3.15 4.11 4.88 5.77 6.11 6.13	6.9 7.63 9.88 10.9 11.7 14.8 17.8 22.6 20.8 32.6 40.4 41.6 48.4 47.7 49.1 83.4 85.7 90.1 83.4	6.4 6.4 7.1 7.7 8.2 8.7 9.4 11.9 13.5 14.0 15.7 19.6 21.7 25.2 28.4 33.5 40.6	3.3 4.10 4.11 4.3 4.8 5.2 4.1 5.5 7.6 6.9 9.9 10.4 113.0 22.2 23.9	-1.7 -1.5 1.4 0.9 -12.3 5.2 -7.7 -20.5 -19.2 -1.6 -45.3 -36.1 -14.8 -50.7 -58.9 -113.6 -189.3 -170.3
1960	96.1 98.1 106.2 114.4 114.9 124.3 141.8 150.5 174.4 196.9 191.9 227.5 287.8 287.3 331.6 493.6 493.6 616.7 703.5	34.6 53.9 61.7 67.5 79.7 95.1 92.6 90.3 108.2 114.7 125.8 147.3 170.1 194.9 230.6 257.7 298.7 306.2	22.5 24.6 26.1 28.9 31.4 36.1 36.1 36.1 43.6 43.1 43.6 54.6 61.6 71.3 74.2 74.2 74.2 74.2 74.2 74.2	15.6 16.3 18.0 19.0 19.3 20.4 20.0 21.7 23.9 23.4 25.1 29.4 39.0 56.4	23.1 24.0 25.0 33.1 36.7 40.7 49.3 54.4 62.7 79.5 89.8 94.1 101.5 137.2 159.5	93.1 101.9 110.4 114.2 118.2 123.8 143.6 163.7 180.5 188.4 204.3 220.6 356.6 344.8 421.7 689.1 7689.1 7689.1 7689.1 7689.9	53.7 53.7 63.7 64.6 65.2 67.3 78.8 99.0 95.7 96.2 101.0 111.0 129.2 143.6 168.3 128.9 269.7 295.5	50.3 49.0 49.0 60.3 71.5 76.9 76.3 73.1 72.8 77.0 83.0 92.8 101.3	25.6 27.0 27.9 30.3 33.5 40.1 46.0 50.6 61.3 72.7 80.5 93.3 114.5 158.8 169.6 181.8 205.0 246.2 281.2 315.3 338.7	2.2 2.2 2.2 2.3 2.2 2.1 2.1 2.6 2.7 2.6 3.2 3.3 3.3 3.8	29.0 37.5 40.6 43.9 54.6 61.1 67.5 77.3 80.5	6.8 7.3 8.0 8.4 9.2 9.8 11.3 12.7 13.8 14.4 18.0 20.7 23.1 26.8 29.1 35.2 42.4 53.4	4.2 3.9 4.5 5.5 4.5 5.5 6.3 7.8 8.2 9.5 9.2	.5 -1.8 -13.2 -6.0 8.4 -12.4 -22.0 -16.8 -5.6 -11.5 -69.3 -53.1 -45.9 -29.5
1983: 	619.8 649.3 640.2 655.0	298.2 304.7 284.6 293.3	I 66.7	53.8 54.0	231.7 234.9	805.6 816.7 821.1 835.5	273.0 270.5 269.2 266.3	199.3 200.9	341.9 337.1	6.2 6.4	1 86.7	90.0	20.5	180.9
1984:            V P	686.4 704.3 706.2	301.6 310.7 319.7 327.3	73.0 75.6 65.3	54.1 55.9 56.1 56.5	257.6 262.0 265.2 268.8	847.6 868.0 886.8 917.3	267.6 296.4 302.0 316.1	213.4 220.8 220.3 231.4	341.1 343.7 346.2 347.8	6.6 6.4 7.7 9.8	90.6 93.2 92.1 95.8	107.6 110.9 122.0 126.6	34.4 17.7 16.5 21.5	-161.3 -163.7 -180.6

Includes an item for the difference between wage accruals and disbursements, not shown separately.
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 liscal 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.
3 Estimates.

Sources: Department of Commerce (Bureau of Economic Analysis) and Office of Management and Budget.

Table B-77.—State and local government receipts and expenditures, national income and product accounts,

			Re	ceipts			_	Еч	penditur	es		
Calendar year or quarter	Total	Personal tax and nontax receipts	Corpo- rate profits tax accruals	Indirect business tax and nontax accruals	Contribu- tions for social insurance	Federal grants-in- aid	Total <sup>1</sup>	Pur- chases of goods and services	Trans- fer pay- ments to per- sons	Net interest paid less divi- dends received	Subsidies less current surplus of government enterprises	Surplus or deficit (-), national income and product accounts
1946 1947 1948 1949	13.0 15.4 17.7 19.5	1.5 1.7 2.1 2.4	0.5 .6 .7 .6	9.3 10.7 12.2 13.3	0.6 .7 .8 .9	1.1 1.7 2.0 2.2	11.1 14.4 17.6 20.2	9.9 12.8 15.3 18.0	1.7 2.3 3.0 3.0	0.2 .1 .1 .1	-0.7 8 8 9	1.9 1.0 .1 7
1950	21.3 23.4 25.4 27.4 29.0	2.5 2.8 3.0 3.2 3.5	99.88.88	14.6 15.9 17.4 18.8 19.9	1.1 1.4 1.6 1.7 2.0	2.3 2.5 2.6 2.8 2.9	22.5 23.9 25.5 27.3 30.2	19.8 21.8 23.2 25.0 27.8	3.6 3.1 3.3 3.5 3.6	.1 .0 .0 .0	9 -1.0 -1.1 -1.2 -1.3	-1.2 4 0 .1 -1.1
1955	31.7 35.0 38.5 42.0 46.4	3.9 4.5 5.0 5.4 6.1	1.0 1.0 1.0 1.0	21.6 23.8 25.7 27.2 29.3	2.1 2.3 2.6 2.8 3.1	3.1 3.3 4.2 5.6 6.8	32.9 35.9 39.8 44.3 46.9	30.6 33.5 37.1 41.1 43.7	3.8 3.9 4.3 4.8 5.1	.1 .1 .1 .1	-1.5 -1.6 -1.7 -1.7 -2.0	-1.3 9 -1.4 -2.4 4
1960	49.9	6.7 7.4 8.2 8.8 10.0	1.2 1.3 1.5 1.7 1.8	32.0 34.4 37.0 39.4 42.6	3.4 3.7 3.9 4.2 4.7	6.5 7.2 8.0 9.1 10.4	49.8 54.4 58.0 62.8 68.5	46.5 50.8 54.3 59.0 64.6	5.4 5.8 6.0 6.4 6.9	.1 .1 .1 .1 1	-2.2 -2.3 -2.5 -2.8 -2.8	.1 4 .5 .5 1.0
1965	75.1 84.8	10.9 12.8 14.6 17.5 20.6	2.0 2.2 2.5 3.1 3.4	46.1 49.7 54.0 60.9 67.6	5.0 5.7 6.7 7.2 8.3	11.1 14.4 15.9 18.6 20.3	75.1 84.3 94.7 107.2 118.7	71.1 79.8 89.3 101.0 111.2	7.3 8.1 9.4 10.5 12.2	3 7 9 -1.1 -1.4	-3.0 -3.0 -3.1 -3.2 -3.3	0 .5 -1.1 .1 1.5
1970 1971 1972 1973 1974	135.4 153.0 178.3 195.0 211.4	23.2 26.4 32.8 36.0 39.0	3.5 4.1 5.0 5.8 6.5	75.0 83.3 91.5 99.7 107.4	9.2 10.2 11.5 13.0 14.6	24.4 29.0 37.5 40.6 43.9	133.5 150.4 164.8 181.6 204.6	124.4 138.7 151.4 168.5 193.1	14.7 17.3 19.3 20.7 20.9	-2.0 -1.7 -1.9 -3.3 -5.0	-3.6 -3.7 -4.2 -4.3 -4.4	1.9 2.6 13.5 13.4 6.8
1975 1976 1977 1978 1979		43.1 49.6 56.3 63.8 70.4	7.1 9.3 11.1 11.9 13.4	116.2 128.3 140.7 150.0 160.2	16.8 19.5 22.1 24.7 27.4	54.6 61.1 67.5 77.3 80.5	232.2 251.2 269.7 297.3 321.5	217.2 232.9 250.4 278.3 306.0	24.6 27.6 29.7 32.8 35.0	-5.1 -4.5 -5.3 -7.9 -13.8	-4.5 -4.8 -5.1 -5.7 -5.9	5.5 16.6 28.0 30.3 30.4
1980		78.8 89.0 97.8 109.0 120.3	14.5 15.4 14.0 16.0 18.8	174.4 194.9 210.3 228.0 248.6	29.7 32.7 35.8 39.0 42.6	88.7 87.9 83.9 86.3 92.9	355.5 382.4 409.0 434.1 471.1	340.8 367.6 391.5 415.8 452.4	39.7 43.2 46.7 50.7 54.8	-18.9 -22.2 -21.9 -24.5 -28.1	-6.1 -6.2 -7.3 -7.8 -8.1	30.6 37.6 32.9 44.1 52.0
1982: 	430.1 440.1 445.9 451.6	94.4 96.2 99.7 101.1	14.4 14.5 14.4 12.9	204.1 208.7 212.5 216.0	34.6 35.5 36.3 37.0	82.7 85.1 83.0 84.6	397.6 405.7 412.6 420.2	381.1 388.7 394.7 401.6	45.2 46.0 47.1 48.3	-21.9 -21.7 -21.8 -22.1	-6.9 -7.2 -7.4 -7.6	32.5 34.4 33.3 31.5
1983: 	458.3 473.5 486.1 495.0	103.1 106.9 111.3 114.6	12.2 15.6 18.0 18.0	219.7 226.1 230.7 235.6	37.7 38.5 39.4 40.3	85.5 86.3 86.7 86.5	424.2 429.6 438.7 443.8	405.8 411.6 420.6 425.1	49.2 50.0 51.0 52.5	-23.1 -24.2 -25.0 -25.9	-7.7 -7.8 -7.9 -7.9	34.1 43.9 47.4 51.2
1984: 	509.6 520.6 524.6	116.7 119.6 121.2 123.7	19.7 20.2 17.8	241.4 245.4 250.5 257.2	41.3 42.1 43.0 43.8	90.6 93.2 92.1 95.8	455.7 466.1 477.0 485.8	436.8 447.4 458.9 466.6	53.6 54.4 54.8 56.5	-26.7 -27.7 -28.7 -29.2	-8.0 -8.0 -8.1 -8.2	53.9 54.5 47.6

¹ Includes an item for the difference between wage accruals and disbursements, not shown separately. Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-78.—State and local government revenues and expenditures, selected fiscal years, 1927-83 [Millions of dollars]

		(	General re	venues by	source 2				General expe	nditures b	y function <sup>s</sup>	
Fiscal year <sup>1</sup>	Total	Property taxes	Sales and gross re- ceipts taxes	Individ- ual Income taxes	Corpo- ration net income taxes	Revenue from Federal Govern- ment	All other <sup>3</sup>	Total	Education	High- ways	Public welfare	All other 4
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 1942 1944 1946	10,908 12,356	4,430 4,537 4,604 4,986 6,126	1,982 2,351 2,289 2,986 4,442	224 276 342 422 543	156 272 451 447 592	945 858 954 855 1,861	1,872 2,123 2,269 2,661 3,685	9,229 9,190 8,863 11,028 17,684	2,638 2,586 2,793 3,356 5,379	1,573 1,490 1,200 1,672 3,036	1,156 1,225 1,133 1,409 2,099	3,862 3,889 3,737 4,591 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	9,252	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		16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,325
1961		18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,063
1962		19,054	13,494	3,037	1,308	7,871	13,489	60,206	22,216	10,357	5,084	22,549
1963		20,089	14,456	3,269	1,505	8,722	14,850	64,816	23,776	11,136	5,481	24,423
1962-63	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	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	74,000	22,583	17,118	4,090	1,929	11,029	17,250	74,678	28,563	12,221	6,315	27,579
1965-66	91,197	24,670	19,085	4,760	2,038	13,214	19,269	82,843	33,287	12,770	6,757	30,029
1966-67		26,047	20,530	5,825	2,227	15,370	21,197	93,350	37,919	13,932	8,218	33,281
1967-68		27,747	22,911	7,308	2,518	17,181	23,598	102,411	41,158	14,481	9,857	36,915
1968-69		30,673	26,519	8,908	3,180	19,153	26,118	116,728	47,238	15,417	12,110	41,963
1969-70		34,054	30,322	10,812	3,738	21,857	29,971	131,332	52,718	16,427	14,679	47,508
1970-71 1971-72 1972-73 1973-74 1974-75	167,541 190,214	37,852 42,877 45,283 47,705 51,491	33,233 37,518 42,047 46,098 49,815	11,900 15,227 17,994 19,491 21,454	3,424 4,416 5,425 6,015 6,642	26,146 31,342 39,256 41,820 47,034	32,374 36,162 40,210 46,541 51,735	150,674 168,550 181,357 198,959 230,721	59,413 65,814 69,714 75,833 87,858	18,095 19,021 18,615 19,946 22,528	18,226 21,117 23,582 25,085 28,155	54,940 62,597 69,446 78,096 92,180
1975-76	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	285,157	62,527	60,641	29,246	9,174	62,444	61,124	274,215	102,780	23,058	35,906	112,472
1977-78	315,960	66,422	67,596	33,176	10,738	69,592	68,436	296,983	110,758	24,609	39,140	122,476
1978-79	343,278	64,944	74,247	36,932	12,128	75,164	79,864	327,517	119,448	28,440	41,898	137,731
1979-80	382,322	68,499	79,927	42,080	13,321	83,029	95,466	369,086	133,211	33,311	47,288	155,277
1980-81 1981-82 1982-83	423,404 457,654 486,878	74,969 82,067 89,253	85,971 93,613 100,247	46,426 50,738 55,129	14,143 15,028 14,258	90,294 87,282	111,599 128,926 138,009	407,449 436,896 466,421	145,784 154,282 163,876	34,603 34,520 36,655	54,121 57,996 60,484	172,941 190,098 205,406

Source: Department of Commerce, Bureau of the Census.

<sup>1</sup> Fiscal years not the same for all governments. See Note.
2 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.
3 Includes licenses and other taxes and charges and miscellaneous revenues.
4 Includes expenditures for hospitals, health, social insurance administration, veterans' services, air transportation, water transport and terminals, parking facilities, police protection, fire protection, correction, protective inspection and regulation, sewerage, natural resources, parks and recreation, community development, sanitation other than sewerage, general control, financial administration, general public buildings, interest on general debt and unallocable items.
Note.—Data for fiscal years listed from 1962–63 to 1982–83 are the aggregations of data for government fiscal years which ended in the 12-month period from July 1 to June 30 of those years. Data are not available for intervening years.
Data are not available for intervening years.
Source: Denartment of Commerce. Bureau of the Census.

TABLE B-79.—Interest-bearing public debt securities by kind of obligation, 1967-84 [Millions of dollars]

			Market	able			No	onmarketab	e	
End of year or month	Total interest- bearing public debt securities	Total	Treasury bills	Treasury notes	Treasury bonds <sup>1</sup>	Total	U.S. savings bonds	Foreign govern- ment and public series <sup>2</sup>	Govern- ment account series	Other <sup>3</sup>
Fiscal year: 1967 1968 1969	344,401	4210,672 226,592 226,107	58,535 64,440 68,356	49,108 71,073 78,946	97,418 91,079 78,805	111,614 117,808 125,623	51,213 51,712 51,711	1,514 3,741 4,070	56,155 59,526 66,790	2,731 2,828 3,051
1970 1971 1972 1973 1974	369,026 396,289 425,360 456,353 473,238	232,599 245,473 257,202 262,971 266,575	76,154 86,677 94,648 100,061 105,019	93,489 104,807 113,419 117,840 128,419	62,956 53,989 49,135 45,071 33,137	136,426 150,816 168,158 193,382 206,663	51,281 53,003 55,921 59,418 61,921	4,755 9,270 18,985 28,524 25,011	76,323 82,784 89,598 101,738 115,442	4,068 5,759 3,654 3,701 4,289
1975 1976 1977 1978	532,122 619,254 697,629 766,971 819,007	315,606 392,581 443,508 485,155 506,693	128,569 161,198 156,091 160,936 161,378	150,257 191,758 241,692 267,865 274,242	36,779 39,626 45,724 56,355 71,073	216,516 226,673 254,121 281,816 312,314	65,482 69,733 75,411 79,798 80,440	23,216 21,500 21,799 21,680 28,115	124,173 130,557 140,113 153,271 176,360	3,644 4,883 16,797 27,067 27,400
1980 1981 1982 1983 1984	906,402	594,506 683,209 824,422 1,024,000 1,176,556	199,832 223,388 277,900 340,733 356,798	310,903 363,643 442,890 557,525 661,887	83,772 96,178 103,631 125,742 158,070	311,896 313,286 316,461 351,751 383,015	72,727 68,017 67,274 70,024 72,832	25,158 20,499 14,641 11,450 8,806	189,848 201,052 210,462 234,684 259,534	24,164 23,718 24,085 35,593 41,843
1983: Jan	1,199,599 1,213,742 1,242,993 1,242,067 1,289,897 1,318,111	888,659 907,652 937,751 935,478 957,347 978,929	308,099 314,882 331,884 325,939 325,213 334,299	472,986 481,300 494,431 494,904 513,626 527,142	107,574 111,471 111,436 114,635 118,508 117,488	310,940 306,090 305,243 306,589 332,550 339,182	67,814 68,042 68,241 68,533 68,919 69,140	14,018 12,685 12,392 11,963 11,144 11,405	203,031 199,125 196,970 197,593 222,446 225,041	26,077 26,239 27,640 28,500 30,041 33,596
July	1,320,671 1,346,915 1,375,751 1,383,265 1,387,860 1,400,906	985,709 1,010,371 1,024,000 1,035,330 1,044,313 1,050,892	337,581 340,413 340,733 339,969 335,310 343,815	527,183 544,158 557,525 566,159 575,252 573,376	120,946 125,800 125,742 129,202 133,751 133,701	334,961 336,544 351,751 347,935 343,547 350,015	69,466 69,747 70,024 70,351 70,619 70,466	11,193 11,052 11,450 11,500 10,512 10,448	220,607 221,357 234,684 230,324 226,214 231,887	33,696 34,389 35,593 35,760 36,202 37,214
1984: Jan	1,435,612	1,081,880 1,100,064 1,097,732 1,123,344 1,131,252 1,126,634	346,888 349,461 350,230 347,259 344,209 343,282	597,581 607,975 604,915 629,787 635,781 632,120	137,411 142,628 142,586 146,299 151,262 151,233	353,732 355,697 354,368 361,047 364,141 374,496	70,715 70,981 71,318 71,537 71,780 72,042	10,804 9,802 9,916 9,861 9,009 8,847	235,045 236,988 234,640 240,864 243,217 253,182	37,168 37,926 38,494 38,785 40,135 40,425
July	1,536,894 1,558,969 1,559,570 1,609,870 1,629,384	1,159,824 1,184,698 1,176,556 1,207,639 1,225,037 1,247,403	347,431 360,447 356,798 359,066 365,208 374,369	657,216 666,141 661,887 686,531 691,858 <b>705,092</b>	155,177 158,109 158,070 162,042 167,971 167,942	377,070 374,271 383,015 402,231 404,347 413,230	72,259 72,494 72,832 72,980 73,339 73,058	9,363 8,560 8,806 8,453 8,710 9,114	254,915 252,197 259,534 278,187 278,407 286,199	40,533 41,020 41,843 42,611 43,891 44,859

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.

Includes Treasury bonds and minor amounts of Panama Canal and postal savings bonds.
 Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency denominated issues.
 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.

Table B-80.—Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1967-84

	Amount			Maturity clas	<u> </u>			***************************************	
End of year or month	out- stending, privately held	Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over	Average	Average length	
			Millions	of dollars			Years	Months	
Fiscal year: 1967	150,321 159,671 156,008	56,561 66,746 69,311	53,584 52,295 50,182	21,057 21,850 18,078	6,153 6,110 6,097	12,968 12,670 12,337	5 4 4	1 5 2	
1970 1971 1972 1973 1974	161,863 165,978 167,869	76,443 74,803 79,509 84,041 87,150	57,035 58,557 57,157 54,139 50,103	8,286 14,503 16,033 16,385 14,197	7,876 6,357 6,358 8,741 9,930	8,272 7,645 6,922 4,564 3,481	3 3 3 3 2	8 6 3 1 11	
1975	279,782 326,674 356,501	115,677 151,723 161,329 163,819 181,883	65,852 89,151 113,319 132,993 127,574	15,385 24,169 33,067 33,500 32,279	8,857 8,087 8,428 11,383 18,489	4,611 6,652 10,531 14,805 20,304	2 2 2 3 3	8 7 11 3 7	
1980	549,863 682,043 862,631	220,084 256,187 314,436 379,579 437,941	156,244 182,237 221,783 294,955 332,808	38,809 48,743 75,749 99,174 130,417	25,901 32,569 33,017 40,826 49,664	22,679 30,127 37,058 48,097 66,658	3 4 3 4 4	9 0 11 1 6	
1983: Jan	750,274 766,075 795,087 789,629 810,150 831,309	348,444 351,150 367,383 360,536 363,465 373,669	245,990 256,133 262,985 259,420 276,825 282,444	79,758 81,077 87,013 88,958 85,314 90,979	35,708 36,846 36,837 36,797 39,975 39,949	40,374 40,869 40,869 43,918 44,571 44,268	4 4 3 3 4 4	0 0 10 11 1 1	
July Aug Sept Oct Nov Dec	835,893 857,935 862,631 883,287 888,932 893,991	375,845 380,424 379,579 384,406 383,761 394,088	279,730 294,000 294,955 303,810 309,516 298,262	92,420 93,974 99,174 101,941 99,893 106,043	39,850 41,086 40,826 41,073 43,082 43,058	48,048 48,451 48,097 52,057 52,680 52,540	4 4 4 4 4	0 1 1 3 3	
1984: Jan Feb Mar Apr Mar June June June Mar June May June June May May May May May May May May May May	925,683 953,274 942,372 955,267 970,488 969,341	399,857 418,060 413,070 408,445 413,316 415,474	317,869 323,520 311,574 325,657 332,509 322,719	108,471 110,595 116,643 117,644 115,773 122,146	46,806 43,882 43,868 43,588 47,109 47,141	52,680 57,217 57,217 59,933 61,781 61,861	4 4 4 4 4	3 3 4 4 5 5	
July	1,003,260 1,026,497 1,017,488 1,054,403 1,062,251 1,081,548	424,193 444,361 437,941 447,809 447,330 455,801	343,145 342,249 332,808 354,372 362,598 365,794	122,928 123,641 130,417 131,895 128,376 136,121	47,133 49,667 49,664 49,655 52,090 52,068	65,861 66,579 66,658 70,672 71,857 71,765	4 4 4 4 4	5665777	

Source: Department of the Treasury.

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.

TABLE B-81.—Estimated ownership of public debt securities, 1976-84 [Par values; 1 billions of dollars]

	,	[ our rations of sources]													
								He	ld by pri	vate inve	stors				
	Total	Held by	Held							Nonban	k investo	rs			
End of month	public debt securi-	Govern- ment	by Federal Reserve	Total	Com- mercial		In	dividuals <sup>s</sup>		Insur-	Money	O	State and	Foreign	Other
	ties	accounts	Banks		banks <sup>2</sup>	Total	Total	Sav- ings bonds 4	Other secur- rities	ance com- panies	mar- ket tunds	Corpora- tions <sup>8</sup>	local govern- ments <sup>6</sup>	and interna- tional ?	inves- tors <sup>8</sup>
1976: June Dec	653.5	149.6 147.1	94.4 97.0	376.4 409.5	91.4 103.5	285.0 306.0	96.1 101.6	69.6 72.0	26.5 29.6	14.4 16.2	0.8 1.1	23.3 23.5	33.8 39.8	69.8 78.1	46.8 45.7
1977: June Dec	674.4 718.9	151.2 154.8	102.2 102.8	421.0 461.3	102.7 98.9	318.3 362.4	104.9 107.8	74.4 76.7	30.5 31.1	18.1 19.9	.8 .9	22.1 18.2	46.8 51.9	87.9 109.6	37.7 54.1
1978: June Dec	749.0 789.2	161.1 170.0	110.1 110.6	477.8 508.6	97.8 95.0	380.0 413.6	109.0 114.0	79.1 80.7	29.9 33.3	19.7 20.0	1.3 1.5	17.3 17.3	59.5 64.5	119.5 133.1	53.7 63.2
1979: June Dec	804.9 845.1	178.5 187.1	109.7 117.5	516.6 540.5	86.1 88.1	430.5 452.4	115.5 118.0	80.6 79.9	34.9 38.1	20.9 21.4	3.8 5.6	18.6 17.0	71.2 74.1	114.9 119.0	85.6 97.3
1980: June Dec	877.6 930.2	194.9 192.5	124.5 121.3	558.2 616.4	97.4 112.1	460.8 504.3	116.5 117.1	73.4 72.5	43.1 44.6	22.3 24.0	5.3 3.5	14.0 19.3	78.9 87.9	118.2 129.7	105.6 122.8
1981: Mar June Sept Dec	971.2 997.9	190.9 199.9 208.1 203.3	119.0 120.0 124.3 131.0	654.6 651.2 665.4 694.5	117.0 119.7 112.7 111.4	537.6 531.5 552.7 583.1	105.2 107.4 109.7 110.8	70.4 69.2 68.3 68.1	34.8 38.2 41.4 42.7	25.6 26.4 27.6 29.0	14.5 9.0 11.4 21.5	17.0 19.9 18.0 17.9	91.8 96.9 99.8 104.3	138.2 136.6 130.7 136.6	145.3 135.3 155.5 163.0
1982: Mar June Sept Dec	1,061.3 1,079.6 1,142.0 1,197.1	202.5 211.7 216.4 209.4	125.6 127.0 134.4 139.3	733.3 740.9 791.2 848.4	116.1 116.1 117.8 131.4	617.2 624.8 673.4 717.0	112.5 114.1 115.6 116.5	67.5 67.4 67.6 68.3	45.0 46.7 48.0 48.2	32.1 32.5 34.8 39.1	25.7 22.4 38.6 42.6	16.9 17.6 21.6 24.5	108.4 113.6 122.4 127.8	136.1 137.2 140.6 149.5	185.5 187.4 199.8 217.0
1983: Mar June Sept Dec	1,244.5 1,319.6 1,377.2	201.2 229.3 239.0 236.3	136.7 141.7 155.4 151.9	906.6 948.6 982.7 1,022.6	153.2 171.6 176.3 188.8	753.4 777.0 806.4 833.7	116.7 121.3 128.9 133.4	68.8 69.7 70.6 71.5	47.9 51.6 58.4 61.9	43.7 47.4 51.2 56.7	44.8 28.3 22.1 22.8	27.2 32.8 35.9 39.7	137.1 144.9 149.9 155.1	156.2 160.1 160.1 166.3	227.7 242.2 258.3 259.8
1984: Mar June Sept	1,463.7 1,512.7 1,572.3	239.8 257.6 263.1	150.8 152.9 155.0	1,073.0 1,102.2 1,154.1	189.8 182.3 183.0	883.2 919.9 971.1	136.2 142.2 147.5	72.2 72.9 73.7	64.0 69.3 73.8	57.1 61.6 58.6	19.4 14.9 13.6	42.6 45.3 47.7	162.9 165.0	166.3 171.5 175.5	298.7 319.4

Source: Department of the Treasury.

<sup>1</sup> U.S. savings bonds, series A-F and J, are included at current redemption value.
2 Includes domestically chartered banks, U.S. branches and agencies of foreign banks, New York investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.
3 Includes partnerships and personal trust accounts.
4 Includes U.S. savings notes. Sales began May J, 1967, and were discontinued June 30, 1970.
5 Exclusive of banks and insurance companies.
6 Includes State and local pension funds.
7 Consists of the investment of foreign balances and international accounts in the United States.
8 Includes savings and local pension funds.
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TABLE B-82.—Corporate profits with inventory valuation and capital consumption adjustments, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Corporate			profits after tax v d capital consumpt	
Year or quarter	Corporate profits with inventory valuation and capital consumption adjustments	Corporate profits tax liability	Total	Dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1929	9.0	1.4	7.7	5.8	1.9
	-1.7	.5	-2.3	2.0	-4.3
	5.3	1.4	3.9	3.8	.1
1940	8.6	2.8	5.8	4.0	1.8
1941	14.1	7.6	6.5	4.4	2.1
1942	19.3	11.4	7.9	4.3	3.6
1943	23.5	14.1	9.5	4.4	5.0
1943	23.6	12.9	10.7	4.6	6.1
1945	19.0	10.7	8.4	4.6	3.8
	16.6	9.1	7.5	5.6	1.9
	22.3	11.3	11.0	6.3	4.7
	29.4	12.4	17.0	7.0	10.0
	27.1	10.2	16.9	7.2	9.7
1950 1951 1952 1953 1954	33.9 38.7 36.1 36.3 35.2	17.9 22.6 19.4 20.3 17.6	16.0 16.1 16.7 16.0 17.5	8.8 8.5 8.8 9.1	7.2 7.6 8.2 7.2 8.4
1955 1956 1957 1958	45.5 43.7 43.3 38.5 49.6	22.0 22.0 21.4 19.0 23.6	23.4 21.8 21.8 19.5 26.0	10.3 11.1 11.5 11.3 12.2	13.1 10.7 10.3 8.2 13.8
1960	47.6	22.7	24.9	12.9	12.1
1961	48.6	22.8	25.8	13.3	12.5
1962	56.6	24.0	32.6	14.4	18.2
1963	62.1	26.2	35.9	15.5	20.4
1964	69.2	28.0	41.2	17.3	23.9
1965	80.0	30.9	49.1	19.1	30.0
	85.1	33.7	51.4	19.4	32.0
	82.4	32.5	49.9	20.2	29.7
	89.1	39.2	50.0	22.0	27.9
	85.1	39.5	45.6	22.5	23.1
1970	71.4	34.2	37.2	22.5	14.8
1971	83.2	37.5	45.7	22.9	22.8
1972	96.6	41.6	55.0	24.4	30.5
1973	108.3	49.0	59.3	27.0	32.3
1973	94.9	51.6	43.3	29.9	13.4
1975	110.5	50.6	59.9	30.8	29.1
	138.1	63.8	74.3	37.4	36.9
	167.3	72.7	94.6	40.8	53.7
	192.4	83.2	109.1	47.0	62.2
	194.8	87.6	107.2	52.7	54.5
1980	175.4	84.8	90.6	58.6	32.1
1981	189.9	81.1	108.8	66.5	42.3
1982	159.1	60.7	98.4	69.2	29.2
1983	225.2	75.8	149.4	72.9	76.5
1984 P.	284.5	88.4	196.1	80.5	115.6
1982: 	159.9 161.7 163.3 151.6	62.9 62.9 61.9 55.0	97.0 98.8 101.4 96.6	69.2 68.6 69.0 70.2	27.9 30.1 32.4 26.4
1983: 	179.1 216.7 245.0 260.0	59.1 74.8 84.7 84.5	120.0 141.9 160.2 175.5	71.1 71.7 73.3 75.4	48.8 70.2 86.9 100.0
1984: 	277.4 291.1 282.8	92.7 95.8 83.1	184.7 195.2 199.8	77.7 79.9 81.3	107.0 115.3 118.4

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-83.—Corporate profits by industry, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

						omestic in	dustries				
Year or				Financial <sup>1</sup>			N	onfinancial			Ones
quarter	Total	Total	Total	Federal Re- serve banks	Other	Total	Manufac- turing <sup>2</sup>	Trans- portation and public utilities	Whole- sale and retail trade	Other	Rest of the world
1929 1933 1939	10.5 -1.2 6.5	10.2 -1.2 6.1	1.3 .3 .8	0.0 .0 .0	1.3 .3 .8	8.9 -1.5 5.3	5.2 4 3.3	1.8 .0 1.0	1.0 5 .7	0.9 7 .3	0.2 .0 .3
1933	1.25 9.8 4 15.4 5 120.5 24.5 0 19.3 19.9 19.3 19.9 19.5 19.3 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5	-1.2 9.6 15.0 12.1 18.9 18.9 24.9 24.9 24.9 36.7 41.5 45.1 44.5 55.8 61.5 76.7 77.7 74.6 62.4 980.4 1859.6 107.6	38 1.0 1.12 1.36 1.71 2.3.1 2.3.1 3.4.5 4.5 5.5.7 8.9 9.5 10.4 11.1 14.1 15.9 11.8 11.1 11.1 11.1 11.1 11.1 11.1 11	90 00001111122 23443356667 089011470251 63345770276667.6	.3 9 10 2 3 1 1 1 6 6 1 1 2 2 9 3 3 3 7 4 1 3 5 5 6 6 7 7 9 0 8 6 7 7 9 9 6 1 1 1 9 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-1.5.3 8.6 14.9 18.9 22.8 21.9 22.8 21.7.3 16.8 22.6 8 33.5 22.6 8 33.5 33.9 8 40.3 33.5 9 39.5 84.0 2 54.0 2 64.0 664.8 76.0 4 95.8 120.3 4 140.3 148.6	-43.3 5.55-91.8 13.8 13.2 9.7 9.3.6 17.6.2 20.9 24.6 22.0 19.9 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0		7 1.24.23.0 2.3.3.3.8.6.5.5 5.0.8.8.8.3.5.5.5.5.8.8.2.1 10.4.5.5.5.5.8.8.2.1 10.4.5.5.5.5.8.8.2.1 10.5.5.7.8.1.2.2.6.9.1 11.3.9.5.3.1 22.6.6.9.1		3.3 4.4 4.4 4.4 4.4 4.4 4.4 4.4 4.4 4.4
1980 1981 1982 1983 1984 P	191.7 197.6 156.0 192.0 228.6	161.9 173.2 133.6 167.2 204.4	26.9 19.5 19.6 29.6 27.3	11.9 14.5 15.4 14.8 16.7	15.0 4.9 4.2 14.8 10.6	134.9 153.7 114.0 137.6 177.0	72.9 84.9 54.5 65.2 84.3	17.1 18.8 17.6 22.5 27.6	23.6 31.8 25.9 33.4 45.3	21.3 18.2 15.9 16.4 19.9	29.5 24.4 22.4 24.8 24.8
1982: 	161.3 160.9 158.8 143.2	139.8 138.6 136.5 119.7	13.6 19.0 21.0 24.9	15.4 15.9 15.6 14.8	-1.8 3.2 5.4 10.1	126.2 119.6 115.5 94.8	58.0 57.4 60.4 42.4	20.2 20.6 16.5 13.3	30.2 25.3 24.0 24.1	17.7 16.3 14.6 15.1	21.5 22.3 22.3 23.5
1983: 	157.3 186.1 208.1 216.3	134.9 162.4 180.6 190.8	28.4 32.0 29.5 28.5	14.4 14.5 14.9 15.5	14.0 17.5 14.6 13.1	106.5 130.4 151.1 162.3	44.9 59.3 73.8 82.9	18.9 22.7 25.0 23.5	25.3 33.0 35.9 39.5	17.4 15.3 16.5 16.4	22.4 23.7 27.5 25.6
1984:      	229.8 238.7 224.5	204.1 217.5 200.2	28.7 28.9 26.6	16.0 16.4 17.1	12.7 12.5 9.5	175.4 188.6 173.6	89.8 92.3 78.3	27.3 28.3 27.1	40.6 47.0 46.8	17.9 21.0 21.5	25.7 21.3 24.3

<sup>&</sup>lt;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-84 for industry detail.

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-84.—Corporate profits of manufacturing industries, 1929-84
[Billions of dollars; quarterly data at seasonally adjusted annual rates]

		Corporate	profits v	vith inve	ntory valu	ation adj	ustment a	and witho	ut capita	consum	ption adju	stment	
				Di	ırable god	ods				None	iurable g	oods	
Year or quarter	Total manufac- turing	Total	Pri- mary metal indus- tries	Fabri- cated metal prod- ucts	Machin- ery, except electri- cal	Electric and elec- tronic equip- ment	Motor vehicles and equip- ment	Other	Total	Food and kindred prod- ucts	Chemi- cals and allied prod- ucts	Petro- leum and coal prod- ucts	Other
1929	5.2	2.6							2.6				
1933	4	4							.0		***************************************		
1939	3.3	1.7			<b></b>				1.7				
1940	5.5 9.5	3.1			[				2.4 3.1				••••
1941	9.5 11.8	6.4 7.2 8.1							4.6				
1942	11.8 13.8 13.2 9.7	8.1					***********		5.7				
1944 1945	13.2	7.4 4.5							5.9 5.2				
1946	9.0	2.4		************					6.6	· · · · · · · · · · · · · · · · · · ·			*************
1946 1947	13.6 17.6	2.4 5.8 7.5				<u>.</u>			7.8 10.0		1.7	2.8	3.7
1948 1949	16.2	8.1	1.6 1.5	.8 .7	1.2 1.3	8.	1.4 2.1	1.8 1.7	8.1	1.9 1.6	1.8	1.9	2.8
1950	19.9 26.0 24.7 24.0	12.0 13.2 11.7 11.9 10.5 14.3 12.8 13.3 9.3 13.7	2.3 3.1 1.9 2.5 1.7 2.9 3.0	1.1 1.3 1.0 1.0 1.0 1.0 1.1	1.6 2.3 2.3 1.9 1.7 1.7 2.1 2.0 1.4 2.1	1.2 1.3 1.5 1.4 1.2 1.1 1.2 1.5 1.3 1.7	3.1 2.4 2.4 2.6 2.1 4.1 2.2 2.6 .9	2.6 2.6 2.6 2.9 3.5 3.1 2.5 3.5	8.9 11.4 9.9 10.1 9.4 11.8 11.9	1.6 1.4 1.7 1.8 1.6 2.2 1.8 1.8	3832208855	2.3 2.7 2.8 2.7 3.0 2.6 2.1	2.7 4.4 3.6 3.3 2.9 3.6 4.1 3.6
1958 1959	19.4 26.4	9.3 13.7	1.9 2.3	.9 1.1	1.4 2.1	1.3 1.7	.9 3.0	2.9 3.5	10.0 12.7	1.8 2.1 2.4	2.5 3.5	2.5	3.6 3.3 4.3
1960 1961 1962 1963 1964 1965 1966 1966 1967 1968	23.6 23.3 26.0 29.3 32.3 39.3 41.9 38.5 41.2 36.6	11.6 11.4 14.0 16.3 17.9 23.0 23.8 20.9 22.2 18.9	2.0 1.6 2.0 2.5 3.1 3.6 2.7 1.9	.8 1.0 1.1 1.3 1.4 2.0 2.4 2.4 2.3 2.0	1.8 1.9 2.3 2.5 3.3 3.9 4.5 4.1 4.1 3.7	1.3 1.3 1.5 1.6 1.7 2.7 3.0 2.9 2.8 2.3	3.0 2.5 4.0 4.9 4.7 6.2 5.1 3.9 5.5 4.7	2.7 3.1 3.5 4.0 4.4 5.1 5.2 4.9 5.7 4.9	12.0 11.9 12.0 13.1 14.4 16.3 18.1 17.6 19.1 17.7	223372237223333333333333333333333333333	3.1 3.2 3.6 4.6 4.9 4.3 5.2 4.5	2.5 2.2 2.1 2.4 2.9 3.9 3.7 3.7	4.2 4.3 4.6 5.3 6.0 6.8 7.0 6.9
1970 1971 1972 1973 1974 1974 1976 1976 1977 1978	26.6 34.1 40.7 45.5 39.0 52.6 69.2 78.3 86.9 85.6	10.2 16.3 22.4 24.3 13.2 18.9 30.4 38.1 44.3 37.1	.8 .7 1.6 2.2 5.4 2.9 2.1 1.1 3.5 3.5	1.1 1.5 2.1 2.5 1.6 3.0 3.8 4.4 4.9 5.2	2.9 4.3 4.6 2.9 4.7 6.3 8.8 9.4 8.9	1.2 1.9 2.8 3.0 .4 2.1 3.4 5.6 6.5 5.1	1.2 5.0 5.9 5.7 .1 1.9 7.2 9.4 8.9 4.7	2.9 4.3 5.7 6.2 2.9 4.3 7.6 8.8 11.0 9.8	16.5 17.8 18.3 21.2 25.8 33.6 38.8 40.2 42.6 48.4	3.2 3.5 2.9 2.4 2.8 6.9 6.8 6.0 5.7	3.9 4.4 5.2 6.0 5.6 6.5 7.9 8.3 7.1	3.5 3.0 5.0 10.5 9.6 12.6 11.6 13.8 20.7	5.9 6.4 7.2 7.8 6.8 8.9 11.0 13.8 14.5 14.8
1980	72.9 84.9 54.5 65.2 84.3	20.4 23.0 2.6 11.9 27.6	2.7 2.9 -5.0 -2.3 .3	4.2 4.4 2.6 3.5 5.6	7.4 8.2 3.5 2.0 5.0	5.2 4.6 1.8 .9 2.6	-3.8 .8 7.4 9.8	4.7 2.6 -1.1 .4 4.4	52.5 61.9 51.9 53.4 56.7	6.0 8.6 7.1 6.6 7.1	6.0 8.0 5.5 6.8 8.5	28.2 31.8 27.6 23.5 22.6	12.3 13.6 11.8 16.5 18.5
1982:													
11	58.0 57.4 60.4 42.4	4.4 7.1 5.4 6.3	-3.3 -6.2 -5.1 -5.3	3.7 3.0 2.6 1.4	7.3 3.5 2.4 .6	1.8 2.9 2.5 .1	-3.2 3.9 3.6 1.0	1.9 .1 7 2.0	53.6 50.2 55.1 48.7	6.6 7.2 7.6 6.8	6.9 6.8 5.2 3.1	30.4 24.8 29.5 25.6	9.8 11.4 12.8 13.1
1983: 	44.9 59.3 73.8 82.9	1.7 8.7 14.3 22.7	2.7 2.6 2.3 1.4	1.8 3.2 3.7 5.3	.4 2.6 2.0 2.9	.8 .6 .2 1.9	2.7 5.0 10.1 11.7	-1.3 .1 .7 2.3	43.2 50.6 59.4 60.2	6.5 6.6 6.1 7.1	5.2 6.0 7.8 8.1	16.6 22.0 28.0 27.6	15.0 16.1 17.5 17.3
1984: 	89.8 92.3 78.3	30.3 27.6 26.4	.1 .6 .3	5.2 6.0 5.7	4.0 6.2 4.8	2.8 1.9 3.1	14.6 7.9 7.6	3.6 5.2 4.9	59.4 64.7 51.9	7.7 7.8 6.7	9.0 9.5 7.8	23.6 27.9 19.3	19.1 19.5 18.2

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-85.—Sales, profits, and stockholders' equity, all manufacturing corporations, 1950-84 [Billions of dollars]

	All m	anufactur	ing corpo	rations	D	urable go	ods indust	tries	Non	durable g	oods indu	stries
Year or		Pro	fits			Pro	fits	••••		Pro	fits	•
quarter	Sales (net)	Before income taxes 1	After income taxes	Stock- holders' equity <sup>2</sup>	Sales (net)	Before income taxes 1	After income taxes	Stock- holders' equity 2	Sales (net)	Before income taxes 1	After income taxes	Stock- holders' equity 2
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	<b>5.8</b>	52.4	128.0	10.4	5.5	55.7
1954	248.5	20.9	11.2	113.1	122.8	11.4	<b>5.6</b>	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	<b>5.8</b>	72.8	156.7	11.3	6.9	<b>74.</b> 6
1959	338.0	29.7	16.3	157.1	169.4	15.8	8.1	77.9	168.5	13.9	8.3	<b>79.</b> 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	389.4	31.9	17.7	181.4	195.3	16.8	8.6	89.1	194.1	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	751.1	52.9	31.0	320.8	381.8	26.5	14.5	160.4	369.3	26.5	16.5	160.5
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: 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	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
1978	1,496.4	132.5	81.1	540.5	760.7	69.6	41.8	262.6	735.7	62.9	39.3	277.9
1979	1,741.8	154.2	98.7	600.5	865.7	72.4	45.2	292.5	876.1	81.8	53.5	308.0
1980	1,912.8	145.8	92.6	668.1	889.1	57.4	35.6	317.7	1,023.7	88.4	56.9	350.4
1981	2,144.7	158.6	101.3	743.4	979.5	67.2	41.6	350.4	1,165.2	91.3	59.6	393.0
1982	2,039.4	108.2	70.9	770.2	913.1	34.7	21.7	355.5	1,126.4	73.6	49.3	414.7
1983	2,114.3	133.1	85.8	812.8	973.5	48.7	30.0	372.4	1,140.8	84.4	55.8	440.4
1981: 	520.8 549.6 539.9 534.4	39.0 45.6 40.0 34.0	24.4 28.9 25.2 22.9	718.4 739.4 753.5 762.3	234.1 257.2 245.1 243.0	16.7 20.7 16.4 13.4	10.1 12.7 10.3 8.5	339.4 349.7 354.2 358.3	286.7 292.4 294.8 291.3	22.3 24.9 23.5 20.6	14.2 16.2 14.9 14.3	379.1 389.7 399.4 404.0
1982: 	502.9 521.9 508.0 506.6	29.0 30.9 27.8 20.5	19.0 20.0 17.8 14.1	757.5 765.0 775.2 783.0	225.3 239.4 224.4 224.0	10.7 12.6 8.5 2.9	6.8 8.1 5.3 1.5	351.2 354.5 358.3 358.1	277.6 282.6 283.6 282.6	18.3 18.3 19.4 17.6	12.3 11.9 12.5 12.6	406.3 410.5 416.8 425.0
1983:	490.8	24.1	15.5	787.7	220.6	7.6	4.6	359.6	270.3	16.5	11.0	428.1
. i	527.1	34.6	22.1	804.1	243.6	13.2	8.3	368.1	283.5	21.3	13.8	436.0
. ii	534.7	36.2	23.2	821.9	243.9	12.7	8.0	376.7	290.8	23.5	15.2	445.2
. iii	561.6	38.2	25.0	837.6	265.4	15.2	9.2	385.1	296.2	23.0	15.8	452.5
1984:	565.9	42.3	26.5	852.1	270.4	19.0	11.7	392.4	295.5	23.3	14.7	459.7
	597.4	48.4	31.0	858.2	290.9	23.0	14.8	398.5	306.4	25.4	16.2	459.7
	576.4	38.5	25.7	865.2	276.7	16.9	11.4	404.9	299.7	21.7	14.3	460.3

Source: Department of Commerce, Bureau of the Census.

¹ 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.
² 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," Department of Commerce, Bureau of the Census.

TABLE B-86.—Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947-84

	Ratio of profits rate) to stock	after income to cholders' equity-	axes (annual —percent 1	Profits after i	ncome taxes po sales—cents	er dollar of
Year or quarter	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
947 948 949	15.6 16.0 11.6	14.4 15.7 12.1	16.6 16.2 11.2	6.7 7.0 5.8	6.7 7.1 6.4	6.3 6.8 5.4
950 951 952 953 953	15.4 12.1 10.3 10.5 9.9	16.9 13.0 11.1 11.1 10.3	14.1 11.2 9.7 9.9 9.6	7.1 4.9 4.3 4.3 4.5	7.7 5.3 4.5 4.2 4.6	6.9 4.5 4.3 4.4
955	12.6 12.3 10.9 8.6 10.4	13.8 12.8 11.3 8.0 10.4	11.4 11.8 10.6 9.2 10.4	5.4 5.3 4.8 4.2 4.8	5.7 5.2 4.8 3.9 4.8	5.1 5.3 4.9 4.4 4.9
960 961 962 963 964	9.2 8.9 9.8 10.3 11.6	8.5 8.1 9.6 10.1 11.7	9.8 9.6 9.9 10.4 11.5	4.4 4.3 4.5 4.7 5.2	4.0 3.9 4.4 4.5 5.1	4.1 4.1 4.1 5.4
965	13.0 13.4 11.7 12.1 11.5	13.8 14.2 11.7 12.2 11.4	12.2 12.7 11.8 11.9 11.5	5.6 5.6 5.0 5.1 4.8	5.7 5.6 4.8 4.9 4.6	5.5 5.0 5.2 5.2 5.0
970 971 972 973	9.3 9.7 10.6 12.8	8.3 9.0 10.8 13.1	10.3 10.3 10.5 12.6	4.0 4.1 4.3 4.7	3.5 3.8 4.2 4.7	4.5 4.5 4.6
973: IV	13.4	12.9	14.0	4.7	4.5	5.0
973: IV	14.3	13.3	15.3	5.6	5.0	6.3
974	14.9	12.6	17.1	5.5	4.7	6.4
975 976 977 977 978	11.6 13.9 14.2 15.0 16.4	10.3 13.7 14.5 16.0 15.4	12.9 14.2 13.8 14.2 17.4	4.6 5.4 5.3 5.4 5.7	4.1 5.2 5.3 5.5 5.2	5.1 5.5 5.3 5.3 6.1
980	13.9 13.6 9.2 10.6	11.2 11.9 6.1 8.1	16.3 15.2 11.9 12.7	4.8 4.7 3.5 4.1	4.0 4.2 2.4 3.1	5.6 5.1 4.4 4.9
981:	13.6 15.6 13.4 12.0	12.0 14.6 11.6 9.5	15.0 16.6 14.9 14.2	4.7 5.3 4.7 4.3	4.3 4.9 4.2 3.5	5.0 5.5 5.1 4.9
982: 	10.1 10.5 9.2 7.2	7.7 9.2 5.9 1.7	12.1 11.6 12.0 11.9	3.8 3.8 3.5 2.8	3.0 3.4 2.4 .7	4.4 4.2 4.4 4.5
983: 	7.9 11.0 11.3 11.9	5.1 9.0 8.5 9.5	10.2 12.7 13.7 14.0	3.2 4.2 4.3 4.5	2.1 3.4 3.3 3.5	4.1 4.9 5.2 5.3
984: 	12.4 14.5 11.9	12.0 14.8 11.3	12.8 14.1 12.4	4.7 5.2 4.5	4.3 5.1 4.1	5.0 5.3 4.8

<sup>&</sup>lt;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-85.

Source: Department of Commerce, Bureau of the Census.

TABLE B-87.—Sources and uses of funds, nonfarm nonfinancial corporate business, 1946-84 (Billions of dollars; quarterly data at seasonally adjusted annual rates)

					S	ources							Uses		
				Internal				r	External						
Year or quar- ter	Total	Total	Domes- tic undis- tributed profits	Inven- tory valuation and capital con- sumption adjust- ments	Capital con- sumption allow- ances	Foreign earn- ings <sup>1</sup>	Total	Credit Total	Securi- ties and mort- gages	Loans and short- term paper	Other <sup>2</sup>	Total	Capital expendi- tures <sup>3</sup>	Increase in financial assets	Discrep- ancy (sources less uses)
1946 1947 1948 1949	18.7 27.0 28.9 19.9	8.1 12.9 19.1 19.5	8.1 12.1 13.2 8.7	8.2 9.4 6.1 2.0	7.6 9.2 10.8 11.7	0.7 1.0 1.3 1.1	10.6 14.1 9.7 .4	6.9 8.4 6.5 3.1	3.6 5.4 6.7 4.9	3.3 3.0 2 -1.8	3.7 5.8 3.3 2.7	16.8 25.6 25.3 18.3	18.1 17.3 20.3 14.8	-1.4 8.4 5.0 3.5	1.9 1.4 3.6 1.6
1950 1951 1952 1953 1954	42.1 36.4 29.9 27.8 29.6	18.0 20.2 21.9 21.7 23.9	13.1 9.6 7.8 8.0 7.6	-8.9 -5.7 -3.5 -4.8 -3.5	12.6 14.6 15.7 16.7 17.8	1.3 1.7 1.9 1.8 2.0	24.0 16.2 8.0 6.1 5.7	8.1 10.5 9.5 5.7 6.5	4.2 6.4 8.0 6.0 6.7	3.9 4.1 1.4 4 2	15.9 5.7 -1.5 .5 8	40.4 37.6 29.2 28.0 27.8	24.0 30.2 24.6 25.7 22.9	4.6 2.3	1.7 -1.2 .6 1 1.8
1955 1956 1957 1958 1959	52.7 44.9 43.4 41.9 56.3	29.5 29.5 31.5 30.3 36.0	11.8 10.9 9.6 6.5 10.7	-3.7 -5.9 -4.9 -3.4 -3.0	19.0 21.7 23.7 24.7 25.7	2.4 2.8 3.1 2.5 2.7	23.2 15.4 11.9 11.7 20.2	10.2 12.8 12.3 10.5 12.3	6.4 7.5 10.4 10.5 8.1	3.7 5.3 1.9 0 4.2	13.1 2.5 4 1.2 7.9	49.1 40.8 39.1 38.5 51.2	34.9 27.7	4.2 10.8	3.5 4.1 4.3 3.4 5.0
1960 1961 1962 1963 1964	48.6 56.3 60.1 68.4 73.9	35.4 36.5 42.8 46.5 51.8	8.0 7.2 9.6 11.1 14.6	-2.3 -1.2 1.4 2.3 2.4	26.6 27.4 28.2 29.2 30.6	3.0 3.2 3.6 3.9 4.2	13.2 19.8 17.3 22.0 22.1	12.1 12.9 12.8 12.5 14.1	7.5 10.7 9.4 8.4 7.8	4.6 2.2 3.4 4.0 6.2	1.2 6.9 4.6 9.5 8.0	41.4 51.0 55.5 60.4 64.9	43.2 44.7	14.2	7.2 5.3 4.6 8.0 9.0
1965 1966 1967 1968 1969	91.8 97.6 94.7 113.5 115.5	58.5 62.6 63.6 65.0 64.4	19.1 21.2 18.1 17.1 13.4	2.5 1.8 2.5 .4 -1.8	32.5 35.4 38.6 42.3 46.7	4.5 4.2 4.4 5.2 6.1	33.3 35.0 31.1 48.5 51.1	18.5 23.8 27.8 27.7 32.3	7.6 14.3 19.1 15.0 14.6	11.0 9.5 8.7 12.6 17.7	14.8 11.2 3.3 20.9 18.8	82.7 91.3 88.5 106.0 115.3	61.0 74.7 72.2 75.4 83.7	166	9.1 6.4 6.2 7.5 .2
1970 1971 1972 1973 1974	102.3 125.3 151.6 192.5 190.3	61.8 73.5 85.0 91.7 85.6	7.6 12.7 18.1 28.1 32.4	-4.1 -3.2 -3.8 -17.3 -41.7	51.8 56.8 62.0 67.2 78.7	6.5 7.1 8.6 13.7 16.3	40.5 51.8 66.6 100.7 104.7	35.3 37.2 43.4 56.7 70.2	26.3 32.8 26.4 20.7 26.3	9.0 4.4 16.9 36.0 43.9	5.3 14.6 23.2 44.0 34.5	98.7 122.7 149.1 191.9 190.1	80.0 86.0 99.0 121.5 137.9	50.1	3.6 2.6 2.4 .5
1975 1976 1977 1978 1979	157.0 211.0 254.1 317.5 345.2	119.7 134.2 157.4 175.7 188.8	34.0 43.9 54.7 62.8 67.3	-21.1 -27.5 -26.8 -36.1 -56.8	93.8 103.6 114.3 129.2 147.7	13.0 14.3 15.1 19.7 30.6	37.3 76.8 96.7 141.8 156.4	30.8 54.7 72.4 80.5 88.2	38.7 38.2 35.8 32.8 20.9	-7.9 16.5 36.6 47.7 67.3	6.5 22.1 24.3 61.3 68.2	150.9 201.8 237.6 293.6 343.7	109.7 148.3 175.1 201.6 219.4	41.2 53.5 62.5 92.0 124.3	6.0 9.2 16.5 23.8 1.5
1980 1981 1982 1983	335.2 364.2 309.4 436.3	189.5 230.4 234.3 280.5	49.0 46.0 10.4 18.6	57.2 29.6 5.5 21.8	167.8 189.5 207.1 215.2	29.9 24.4 22.4 24.8	145.7 133.8 75.0 155.9	90.9 91.5 81.4 87.8	52.4 21.8 43.9 56.4	38.5 69.7 37.5 31.4	54.8 42.3 —6.4 68.1	317.6 334.2 258.0 384.3	221.2 271.3 229.6 256.2	96.5 62.9 28.4 128.1	17.6 30.0 51.3 52.1
1982:    /       V	309.4 324.4 328.8 274.8	229.9 234.6 238.8 234.0	13.8 13.9 12.0 1.6	6.6 7.0 4.7 3.4	201.2 205.4 209.2 212.4	21.5 22.3 22.3 23.5	79.5 89.8 90.0 <b>40</b> .8	98.0 94.0 89.1 <b>44</b> .6	24.4 38.0 38.6 74.6	73.7 56.0 50.5 -30.1	-18.5 -4.1 .9 -3.8	249.9 281.2 274.3 226.8	252.1 238.0 229.4 199.1	2.2 43.2 44.9 27.7	59.6 43.3 54.5 <b>48.0</b>
1983:           V	333.9 449.2 443.3 519.1	250.4 269.7 292.5 309.3	-1.3 15.1 30.6 30.2	17.9 18.4 17.2 33.9	211.4 212.5 217.3 219.7	22.4 23.7 27.5 25.6	83.5 179.5 150.7 209.8	68.7 86.5 66.6 129.4	67.0 85.9 37.0 35.7	1.7 .6 29.6 93.6	14.8 93.1 84.1 80.4	282.3 390.5 395.4 468.8	206.9 255.3 270.6 291.9	75.4 135.1 124.8 177.0	51.5 58.7 47.8 50.3
1984:      	516.1 500.6 448.8	319.6 331.7 337.5	37.6 39.8 29.9	33.4 44.1 56.7	222.8 226.5 230.2	25.7 21.3 20.7	196.6 168.9 111.3	112.6 81.3 65.0	-23.7 -76.9 -7.4	136.3 158.2 72.4	83.9 87.6 46.3	483.5 458.3 443.0	354.5 364.3 386.8	129.0 94.0 56.2	32.7 42.2 5.8

Source: Board of Governors of the Federal Reserve System.

Foreign branch profits, dividends, and subsidiaries' earnings retained abroad.
 Consists of tax liabilities, trade debt, and direct foreign investment in the United States.
 Plant and equipment, residential structures, inventory investment, and mineral rights from U.S. Government.

TABLE B-88.—Current assets and liabilities of U.S. corporations, 1940-84 [Billions of dollars, except as noted]

			Current a	ssets			Cui	rrent liabilit	ies		
End of period	Total	Cash <sup>1</sup>	U.S. Govern- ment securities *	Notes and accounts receiv- able	Inven- tories	Other current assets	Total	Notes and accounts payable	Other current liabil- ities	Net working capital	Current ratio <sup>a</sup>
					All co	rporations	4				
SEC series: 5			T								
1940 1941	60.3	13.1	2.0	24.0	19.8	1.5	32.8	23.2	9.6 14.3 21.3 25.3 24.9 20.1	27.5 32.3 36.3	1.838
1942	72.9 83.6	13.9 17.6	10.1	28.0 27.3 26.9	25.6 27.3 27.6	1.4 1.3	40.7 47.3 51.6	26.4 26.0	21.3	36.3	1.79 1.76 1.81 1.88 2.12 2.08 2.01
1943	93.8 97.2	21.6 21.6 21.7 22.8 25.0 25.3	16.4 20.9	26.9 26.5	27.6 26.8	1.3	51.6 51.7	26.3 26.8	25.3	42.1 45.6	1.81
1944 1945	97.2 97.4	21.7	20.9	25.9	26.3	2.4	45.8	25.7	20.1	61.6	2.12
1946	108.1	22.8	21.1 15.3	30.7	37.6	2.4 1.7 1.6 1.6	51.9	31.6	20.3 23.9	56.2 62.1 68.6 72.4	2.08
1947 1948	123.6 133.0	25.0 25.3	14.1 14.8	38.3 42.4	44.6 48.9	1.6	61.5 64.4	37.6 39.3	23.9 25.0	62.1 68.6	2.06
1949	133.1	26.5	16.8	43.0	45.3	1.4	64.4 60.7	37.5	23.3	72.4	2.19
1950	161.5	28.1	19.7	56.8	55.1	1.7	79.8	48.3	31.6	81.6	2.024
1951	179.1 186.2	30.0 30.8	20.7 19.9	61.5 67.4	64.9 65.8 67.2	1.7 2.1 2.4 2.4 3.1	92.6 96.1	54.9 59.3	37.8 36.8	86.5 90.1	1.93 1.93
1952 1953	186.2 190.6 194.6 224.0 237.9	31.1	21.5	68.5	67.2	2.4	98.9	59.5	I 39.4	91.8	1.92
1954 1955	194.6	33.4 34.6	19.2 23.5	73.6 88.9	65.3 72.8 80.4	3.1 4.2	99.7 121.0	61.7 76.1	38.0 45.0	94.9 103.0	1.927 1.957 1.851
1330	237.9	34.8	19.1	97.7	80.4	l 5.9	130.5	83.9	46.6	107.4	1.823
1957 1958	244./	34.9 37.4	18.6 18.8	102.2 109.7	82.2 81.9	6.7 7.5	133.1 136.6	86.6 90.4	46.5 46.2	111.6 118.7	1.838 1.869
1959	255.3 277.3	36.3	22.8	120.6	88.4	9.1	153.1	101.0	52.0	124.2	1.81
1960	289.0	37.2 41.1	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
į				٨	lonfinanci	al corpora	tions 6				
SEC series: 5											
1961 1962	254.7 269.7	34.8 37.1	16.5 16.8	97.9	95.0 100.5	10.5	123.7 132.4	84.4 88.7	39.3 43.7 48.5 51.7	131.0	2.059 2.037
1963	288.2	39.8	16.7	103.2 110.5	106.8	12.1 14.4	145.5	97.0	43.7 48.5	137.3 142.7	1.981
1964 1965	305.6	40.5	15.8	119.9	113.1	16.3	156.6	104.9	51.7	149.0	1.951
1966	336.0 364.0	42.8 41.9	14.4 13.0	134.1 146.6	126.6 142.8	18.1 19.7	178.8 199.4	121.5 137.5	57.3 61.9	157.2 164.6	1.879
130/	386.2	45.5	10.3	155.3	153.1	19.7 22.0	211.3	147.1	64.2 75.3	174.9	1.825 1.828 1.747
1968 1969	426.5 473.6	48.2 47.9	11.5 10.6	173.9 197.0	166.0 186.4	26.9 31.6	244.1 287.8	168.8 199.2	75.3 88.6	182.4 185.7	1.747 1.646
1970	492.3		7.7	206.1	193.3	35.0	304.9	211.3	93.6	187.4	1.615
1971 1972	529.6	50.2 53.3 59.0	11.0	221.1	200 A	43.8	326.0	220.5	105.5 92.7	203.6 223.7	1.625 1.595
1973	599.3 697.8	59.0   66.3	10.6 12.8	248.2 288.5	225.7	55.8 66.4	375.6 450.9	282.9 340.3	92.7 110.7	223.7 246.9	1.595
1974	790.7	66.3 71.1	12.3	322.1	225.7 263.9 313.6	66.4 71.7	530.4	402.3	128.1	260.3	1.548 1.491
QFR-FRB series: 7				Ì	i						
1974	735.4 759.0	73.2	11.1	265.8	319.5	65.9	453.4	269.8	183.6	282.0	1.622
1975 1976	827.4 1	82.1 88.2 97.2 105.5	19.0 23.5	272.1 292.9	315.9 342.5 376.9	69.9 80.3	451.6 495.1	264.2 282.1	187.4 213.0	307.4 332.4	1.681 1.671
1977	912.7 1,043.7	97.2	18.2 17.2	330.3	376.9	90.1	557.1	317.6	239.6	332.4 355.5 374.3 407.5	1.638 1.559
1979	1,043.7	105.5 118.0	17.2 16.7	388.0 459.0	431.8 505.1	101.1 116.0	669.5 807.3	383.0 460.8	286.5 346.5	374.3	1.559 1.505
1980	1,327.0	126.9	197	506.8	542.8	131.8	889.3	513.6	375.7	437.8	1.492
1981	1.418.4	135.5 147.0	17.6	532.0	583.7 578.6	149.5	970.0 976.8	546.3 543.0	423.7	448.4	1.462
1982 1983	1,432.7 1,557.3	165.8	17.6 22.8 30.6	519.2 577.8	578.6 599.3	149.5 165.2 183.7	1,043.0	543.0 577.9	433.8 465.2	455.9 514.3	1.467 1.493
1983:			ŀ			- 1	·	i	į		
l	1,444.2 1,468.0	143.1	26.0	525.3 539.3	577.6 576.2 597.3	172.1 176.4 183.0	983.4 990.2 1,026.6	530.9 536.6	452.6	460.8	1.469
iii	1,522.8	147.9 150.5 165.8	28.2 27.0	565.0	597.3	183.0	1,026.6	559.4 I	453.6 467.2	477.8 496.3 514.3	1.483 1.483 1.493
	1 567 2	165.8	30.6	577.8	599.3	183.7	1,043.0	577.9	465.2	514.3	1.493
IV	1,557.3										
IV	1,600.6	159.3 155.5	35.1	596.9	623.1 633.3	186.3 192.5	1,079.0 1,111.5	584.1	495.0	521.6	1.483

<sup>1</sup> Includes time certificates of deposit.

<sup>Includes time certificates of deposit.
Includes Federal agency issues.
Total current assets divided by total current liabilities.
Total current assets divided by total current liabilities.
Excludes banks, savings and loan associations, and insurance companies.
Based on data from "Statistics of Income," Department of the Treasury.
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.

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. Effective mid-1982, responsibility for the Quarterly Financial Report was transferred to the Department of Commerce, Bureau of the Census.</sup> 

Note.—SEC series not available after 1974.

Sources: Board of Governors of the Federal Reserve System, Federal Trade Commission, Department of Commerce (Bureau of the Census), and Securities and Exchange Commission.

TABLE B-89.—State and municipal and business securities offered, 1934-84 [Millions of dollars]

	State				Business :	securities offe	red for ca	sh 1	· · · · · · · · · · · · · · · · · · ·	
	and municipal		Ty	pe of securi	ty		In	dustry of issue	er	
Year or quarter	securities offered for cash (princi- pal amounts)	Total offerings	Common stock <sup>2</sup>	Preferred stock	Bonds and notes	Manufac- turing <sup>3</sup>	Electric, gas, and water *	Transpor- tation <sup>6</sup>	Communi- cation	Other
1934 1939	939 1,128	397 2,164	19 87	6 98	372 1,979	67 604	133 1,271	176 186		21 103
1940 1941 1942 1943 1944 1944 1945 1946 1947 1948	956 524 435 661 795 1,157 2,324 2,690	2,677 2,667 1,062 1,170 3,202 6,011 6,900 6,577 7,078 6,052	108 110 34 56 163 397 891 779 614 736	183 167 112 124 369 758 1,127 762 492 425	2,386 2,389 917 990 2,670 4,855 4,882 5,036 5,973 4,890	992 848 539 510 1,061 2,026 3,701 2,742 2,226 1,414	1,203 1,357 472 477 1,422 2,319 2,158 3,257 2,187 2,320	324 366 48 161 609 1,454 711 286 755 800	902 571	159 96 4 21 109 211 329 293 1,008 946
1950	3,189 4,401 5,558 6,969 5,977 5,446 6,958 7,449	6,362 7,741 9,534 8,898 9,516 10,240 10,939 12,884 11,558 9,748	811 1,212 1,369 1,326 1,213 2,185 2,301 2,516 1,334 2,027	631 838 564 489 816 635 636 411 571 531	4,920 5,691 7,601 7,083 7,488 7,420 8,002 9,957 9,653 7,190	1,200 3,122 4,039 2,254 2,268 2,994 3,647 4,234 3,515 2,073	2,649 2,675 2,675 3,029 3,713 2,464 2,529 3,938 3,804 3,258	813 494 992 595 778 893 724 824 824	399 612 760 882 720 1,132 1,419 1,462 1,424 717	1,300 1,058 1,068 2,138 2,037 2,757 2,619 2,426 1,991 2,733
1960	8,360 8,558 10,107 10,544 11,148 11,089 14,288 16,374	10,154 13,165 10,705 12,211 13,957 14,782 17,385 24,014 21,261 25,997	1,664 3,294 1,314 1,011 2,679 1,473 1,901 1,927 3,885 7,640	409 450 422 343 412 724 580 881 636 691	8,081 9,420 8,969 10,856 10,865 12,585 14,904 21,206 16,740 17,666	2,152 4,077 3,249 3,514 3,046 5,414 7,056 11,069 6,958 6,346	2,851 3,032 2,825 2,677 2,760 2,934 3,666 4,935 5,293 6,715	718 694 567 957 982 702 1,494 1,639 1,564	1,050 1,834 1,303 1,105 2,189 945 2,003 1,975 1,775 2,172	3,383 3,527 2,761 3,957 4,980 4,787 3,167 4,396 5,671 8,985
1970 1971 1972 1973 1974 1975 1976 1977 1977	24,370 22,941 22,953 22,824 29,326 33,845	37,451 43,229 39,705 31,680 37,820 53,632 53,314 54,229 29,949 37,248	7,037 9,485 10,707 7,642 4,050 7,414 8,305 8,047 7,724 8,816	1,390 3,683 3,371 3,341 2,273 3,459 2,803 3,916 1,757 1,964	29,023 30,061 25,628 20,700 31,497 42,759 42,206 42,266 20,468 26,468	10,647 11,651 6,398 4,832 10,511 18,652 15,496 13,757 4,483 6,643	11,009 11,721 11,314 10,269 12,836 15,893 14,418 13,704 9,138 9,937	1,253 1,148 860 811 1,005 3,637 4,649 3,218 1,251 1,640	5,291 5,840 4,836 4,872 3,932 4,466 3,562 4,443 2,959 4,482	9,252 12,867 16,298 10,897 9,632 10,983 15,194 19,113 12,120 14,547
1980 1981 1982 1983	47,133 46,134 77,179 83,348	67,126 65,888 72,152 102,620	19,282 25,226 23,197 45,153	3,194 1,696 4,948 7,615	44,650 38,966 44,007 49,852	20,857 15,287 13,239 22,814	13,746 13,245 16,408 12,594	2,306 1,883 2,093 4,161	6,865 5,867 3,895 5,528	23,356 29,608 36,520 57,523
1984: First three quarters	57,689	61,767	16,237	2,916	42,614	9,095	4,982	1,350	975	45,365
1983: 	17,329 27,342 16,973 21,703	28,266 33,212 19,996 21,146	11,751 13,274 9,924 10,204	3,470 1,717 1,407 1,021	13,045 18,221 8,665 9,921	6,321 8,872 4,583 3,038	3,620 3,833 2,167 2,974	1,286 864 895 1,116	2,088 1,872 1,467 <b>101</b>	14,951 17,771 10,884 13,917
1984:     I	14,532 18,619 24,538	24,381 15,449 21,937	6,286 4,823 5,128	1,122 1,117 677	16,973 9,509 16,132	1,788 2,785 4,522	1,491 1,382 2,109	432 379 539	476 270 229	20,194 10,633 14,538

<sup>Business securities offered include securities offered by corporate and non-corporate business enterprises such as limited partnerships. Beginning 1978 excludes private placements.

Common stock combines the conventional ownership shares of corporate business and securities issued by non-corporate business, e.g., limited partnership interests, voting trust certificates and condominium securities.

Prior to 1948, also includes extractive, radio broadcasting, airline companies, commercial, and miscellaneous company issues.

Prior to 1948, lato includes telephone, street railway, and bus company issues.

Prior to 1948, includes railroad issues only.

Beginning 1978, business security offerings exclude private placements.</sup> 

Sources: Securities and Exchange Commission, "The Commercial and Financial Chronicle," and "The Bond Buyer."

Note.—Covers substantially all new issues of State, municipal, and business securities offered for cash sale in the United States in amounts over \$100,000 and with terms to maturity of more than I 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.

TABLE B-90.—Common stock prices and yields, 1949-84

			Con	nmon stock	prices 1			Common s (perc	tock yield: ent) *
Year or month	New York	Stock Exchan	ge indexes (De	:. 31, 1965	=50) <sup>2</sup>	Dow	Standard & Poor's		
rear or month	Composite	Industrial	Transpor- tation	Utility	Finance	Jones industrial average <sup>3</sup>	composite index (1941- 43=10) 4	Dividend- price ratio •	Earnings price ratio?
1949	9.02				<b>,,,,,</b> ,,,,,,	179.48	15.23	6.59	15.4
1950	10.87				l	216.31	18.40	6.57	13 04
1951	13.08				<u> </u>	257.64	22.34	6.57 6.13	13.9 11.8
1952	13.81					270.76	24.50	5.80	9.4
1953	13.67	<b></b>				275.97	24.73	5.80	10 2
1954	16.19					333.94	29.69	4.95	8.5 7.9
1955	21.54					442.72 493.01	40.49	4.08	7.9
1956	24.40			• • • • • • • • • • • • • • • • • • • •		493.01	46.62	4.09	7.5 7.8 6.2 5.7
1957	23.67 24.56	• • • • • • • • • • • • • • • • • • • •				475.71	44.38 46.24	4.35 3.97	/.8
1958 1959	24.5 <b>6</b> 30.7 <b>3</b>		<b></b>	*************		491.66 632.12	57.38	3.97	0.2
1959	30./3	******************	•			032.12	37.36	3.23	5.7
1960	30.01		l			618.04	55.85	3.47	5.9
1961 1962 1963	35.37				ļ	691.55	66.27 62.38 69.87 81.37	2.98 3.37 3.17	4.6
1962	33.49 37.51	<b></b>			ļ	639.76 714.81	62.38	3.37	5.8
1963	37.51	<b></b>				714.81	69.87	3.17	5.5
1964	43.76	<b></b>				834.05	81.37	3.01	5.3
1965	47.33		L	************		1 310.00	88.17	3.00	5.5 5.3 5.5
1966	46.15	46.18	50.26	45.41	44.45	873.60 879.12	85.26	3.40	6.6 5.7 5.6
1967	50.77	51.97 58.00 57.44	53.51	45.43 44.19	44.45 49.82 65.85	8/9.12	91.93	3.20	5.7
1967 1968 1969	55.37	58.00	50.58	44.19	65.85	906.00	98.70	3.07	5.6
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	6.4
1971	54.22	57.92	44.35	39.53	70.38	884.76	98.29	3.14	5.4
1972 i	60.29	65.73	50.17	38.48	78.35	950.71	109.20	2.84	6.45 5.41 5.50 7.12
1973	54.22 60.29 57.42	63.08	37.74	37.69	7012	923.88	107.43	3.06	7.12
1974 1975	43.84	48.08	31.89	29.79	49.67	759.37	82.85	4.47	1 11 50
1975	45.73	50.52	31.10 39.57	31.50 36.97	47.14	802.49	86.16 102.01	4.31 3.77	9.15
1976	54.46	60.44	39.57	36.97	52.94	974.92	102.01	3.77	9.1 8.90 10.79
1977 1978	53.69	57.86	41.09	40.92	55.25	894.63	98.20	4.62	10.79
1978	53.70	58.23 64.76	43.50	39.22	49.67 47.14 52.94 55.25 56.65	820.23	96.02	5.28	12.03
1979	58.32	64.76	47.34	38.20	61.42	844.40	103.01	5.47	13.46
1980	68.10	78.70	60.61	27.25	64.05	001 41	110 70	500	1000
1981	74.02	85.44	72.61	37.35 38.91	72.52	031.41	118.78 128.05	2.20	12.66 11.96
1982	68.93	78.18	60.61 72.61 60.41	39.75	64.25 73.52 71.99	35.32	119.71	5.26 5.20 5.81	11.60
1983	92.63	107.45	89.36	47.00	95 34	891.41 932.92 884.36 1,190.34 1,178.48	160.41	4.40	8.03
1984	92.46	108.01	89.36 85.63	46.44	95.34 89.28	1,178.48	160.46	4.64	0.00
i i		555.52				2,270.10	200,10	1.04	************
1983:	00.05	05.07	4-						
Jan Feb	83.23	95.37 97.26	/5.65	45.59	85.66	1,064.29	144.27	4.79	
Mar	83.25 84.74 87.50	100.61	75.65 79.44 83.28	45.92 45.89	85.66 86.57 93.22	1,087.43	146.80	4.74	
Apr	90.61	100.01	85.26	45.69	99.07	1,129,38	151.88 157.71	4.59	8.12
May	94.61	104.46 109.43	89.07	46.22 47.62	102.45	1,100.43	164.10	4.44	•••••
June	96.43	112.52	92.22	46.76	102.45 101.22	1,084.29 1,087.43 1,129,58 1,168.43 1,212.86 1,221.47	166.39	4.59 4.44 4.27 4.26	7.49
									7.7.
July	96.74	113.21 109.50 112.76 112.87 110.77	92.91	46.61	99.60	1,213.93	166.96	4.21	
Aug	93.96	109.50	88.06 94.56	46.94	95.76	1,189.21	162.42	4.35	
Sept	96.70	112./6	94.56	48.16	97.00	1,189.21 1,237.04 1,252.20 1,250.01	167.16 167.65 165.23	4.35 4.24 4.25 4.31	8.01
Nov	96.78 95.36	112.87	95.41	48./3	94.79	1.252.20	167.65	4.25	
Dec	94.92	110.65	97.68 98.79	48.16 48.73 48.50 47.00	95.76 97.00 94.79 94.48 94.25	1,250.01	164.36	4.31 4.32	8.51
1	34.32	110.03	30.73	47.00	34.23	1,237.04	104.30	4.32	8.51
1984:			[						
JanFeb	96.16	112.16	97.98	47.43	95.79	1,258.89	166.39	4.27 4.59	
Mo-	90.60	105.44 105.92	86.33 86.10	45.67 44.83	95.79 89.95 89.50 88.22	1,258.89 1,164.46 1,161.97 1,152.71 1,143.42	166.39 157.25 157.44 157.60	4.59	
Mar	90.66 90.67	100.92	01.00	44.83	89.50	1,161.97	157.44	4.63	9.57
May	90.07	106.56 105.94	83.61 81.62	43.86 44.22	88.22 85.06	1,122./1	157.50	4.64 4.72	•••••••
Apr May June	88.28	104.04	79.29	43.65	80.75	1,143.42	156.55 153.12	4.72	10.56
	- 1								10.36
July	87.08	102.29 111.20 112.18	76.72	44.17	79.03	1,113.27	151.08	4.93	
Aug	94.49	111.20	86.86 86.88	46.49 47.47	87.92 91.59	1,212.82	164.42	4.62	
AugSept	95.68	112.18	86.88	47.47	91.59	1,213.51	166.11	454	9.96
Nov	95.09	110.44 110.91	86.82 87.37	49.02	92.94 95.28 95.29	1,212.82 1,213.51 1,199.30 1,211.30	166.11 164.82 166.27	4.62	
and	95.85	110.91	87.37	49.93	93.28	1,211.30	166.27	4.61	************
Dec	94.85	109.05	88.00	50.58		1.188.96	164.48		•••••

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.

<sup>Averages of daily closing prices, except New York Stock Exchange data through May 1964 are averages of weekly closing prices.
Includes 30 stocks.
Includes 30 stocks.
Includes 500 stocks.
Includes 500 stocks.
Standard & Poor's series, based on 500 stocks in the composite index.
Standard & Poor's series, 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.

Quarterly data are ratio of earnings (after taxes) for 4 quarters ending with particular quarter to price index for last day of that quarter. Annual ratios are averages of quarterly ratios.</sup> 

TABLE B-91.—Business formation and business failures, 1940-84

Year or month	Index of net business	New		1				ad aug===4 !!	
Year or month	business business	<b>D</b>	NI NI	ımber of failu	res		of current lia Hions of dolla		
		rations	Business failure		Liability s	ize class		Liability s	ize class
		(number)	rate 2	Total	Under \$100,000	\$100,000 and over	Total	Under \$100,000	\$100,000 and over
940			63.0 54.4 44.6	13,619 11,848 9,405 3,221	13,400 11,685 9,282 3,155	219 163 123	166.7 136.1 100.8	119.9 100.7 80.3	46. 35. 20. 15.
943 944 945.			16.4 6.5 4.2	3,221 1,222 809	3,155 1,176 759	66 46 50	45.3 31.7 30.2	30.2 14.5 11.4	15. 17. 18.
946 947 948	101.9	132,916 112,897 96,346 85,640	5.2 14.3 20.4	1,129 3,474 5,250	1,003 3,103 4,853	126 371 397	67.3 204.6 234.6	15.7 63.7 93.9	51. 140. 140.
950	90.6		34.3	9,246 9,162	8,708 8,746 7,626	538 416	308.1 248.3	161.4 151.2	146. 97.
951 952 953 954 955	93.3 91.7 91.0	93,092 83,778 92,946 102,706 117,411 139,915	30.7 28.7 33.2 42.0 41.6	8,058 7,611 8,862 11,086 10,969	7,626 7,081 8,075 10,226 10,113	432 530 787 860 856	259.5 283.3 394.2 462.6 449.4	131.6 131.9 167.5 211.4 206.4	128. 151. 226. 251. 243.
956	96.6 92.4 92.2	141,163 137,112 150,781 193,067	48.0 51.7 55.9 51.8	12,686 13,739 14,964 14,053	11,615 12,547 13,499 12,707	1,071 1,192 1,465 1,346	562.7 615.3 728.3 692.8	239.8 267.1 297.6 278.9	322. 348. 430. 413.
960 1961 1962	92.1 93.7	182,713 181,535 182,057	57.0 64.4 60.8	15,445 17,075 15,782	13,650 15,006 13,772	1,795 2,069 2,010	938.6 1,090.1 1,213.6	327.2 370.1 346.5	611. 720. 867.
963	98.6 100.2 99.4 100.0	186,404 197,724 203,897 200,010 206,569 233,635	56.3 53.2 53.3 51.6 49.0 38.6	15,782 14,374 13,501 13,514 13,061 12,364 9,636	12,192 11,346 11,340 10,833 10,144 7,829	2,182 2,155 2,174 2,228 2,220 1,807	1,352.6 1,329.2 1,321.7 1,385.7 1,265.2 941.0	321.0 313.6 321.7 321.5 297.9 241.1	1,031. 1,015. 1,000. 1,064. 967. 699.
1969	112.9	2/4,26/	37.3	9,154	7,192	1,962	1,142.1	231.3	910
970 971 972 973 974 975	108.5 115.9 114.9 109.2 107.0 115.6	264,209 287,577 316,601 329,358 319,149 326,345 375,766	43.8 41.7 38.3 36.4 38.4 42.6 34.8	10,748 10,326 9,566 9,345 9,915 11,432 9,628	8,019 7,611 7,040 6,627 6,733 7,504 6,176	2,729 2,715 2,526 2,718 3,182 3,928 3,452	1,887.8 1,916.9 2,000.2 2,298.6 3,053.1 4,380.2 3,011.3 3,095.3	269.3 271.3 258.8 235.6 256.9 298.6 257.8	1,618. 1,645. 1,741. 2,063. 2,796. 4,081. 2,753.
1977 1978 1979	128.2	436,170 478,019 524,565	28.4 23.9 27.8	7,919 6,619 7,564	4,861 3,712 3,930	3,058 2,907 3,634	2,656.0 2,667.4	208.3 164.7 179.9	2,887. 2,491. 2,487.
980 981 982 983 *	122.4 118.6 113.2 114.8	533,520 581,242 566,942 600,400	42.1 61.3 89.0 109.7	11,742 16,794 24,908 31,334	5,682 8,233 11,509	6,060 8,561 13,399	4,635.1 6,955.2 15,610.8 16,072.9	272.5 405.8 541.7	4,362 6,549 15,069
	Sea	asonally adjus	ted						
1983: Jan	113.3 112.7 112.0 114.8	49,999 48,296 48,032 48,903 50,211 50,992	103.1 96.9 105.5 94.8 93.7 110.2	2,455 2,397 2,881 2,471 2,292 2,641			2,158.1 1,086.4 1,154.7 1,125.6 920.0 2,188.6		
July Aug Sept Oct	115.2 114.4 115.8	48,601 52,828 50,445 50,441 51,642	106.5 135.8 111.8 108.1	2,313 3,218 2,384		***************************************	829.2 1,353.1 947.2		•••••••
Nov Dec	117.8 116.3	51,642 51,557	144.0 110.0			***************************************	1,624.5 868.5		
984: Jan Feb Mar	115.9 119.1 117.6	53,044 53,591 53,424							
Apr May June	118.5	53,933 51,166 54,729							
July Aug Sept Oct Nov	115.5 118.2 119.6 119.9 120.6	52,092 51,723 51,892							·····

¹ 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.
² Failure rate per 10,000 listed enterprises.

Sources: Department of Commerce (Bureau of Economic Analysis) and Dun & Bradstreet, Inc.

TABLE B-92.-Farm income, 1929-84 [Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Income	of farm ope	rators from	farming		
		Gro	ss farm inco	me			Net farm	nincome
Year or quarter		Cash	marketing re	ceipts		Produc-		
	Total 1	Total	Livestock and products	Crops	Value of inventory changes 2	tion expenses	Current dollars	1967 dollars <sup>s</sup>
929933939	13.8 6.9 10.7	11.3 5.3 7.9	6.2 2.8 4.5	5.1 2.5 3.3	0.1 2 .1	7.7 4.4 6.3	6.2 2.6 4.4	12.0 6.6 10.6
940 941	11.3 14.3 19.9 23.3 24.0 25.4 29.6 32.4 36.5	8.4 11.1 15.6 19.6 20.5 21.7 24.8 29.6 30.2	4.9 6.5 9.0 11.5 11.4 12.0 13.8 16.5 17.1	3.5 4.6 6.5 8.1 9.2 9.7 11.0 13.1	.3 .4 1.1 1 4 4 0 -1.8	6.9 7.8 10.0 11.6 12.3 13.1 14.5 17.0 18.8	4.5 6.5 9.9 11.7 12.3 15.1 15.4	10.7 14.7 20.2 22.7 22.8 23.0 24.5 17.5
149	30.8 33.1 38.3 37.8 34.4 34.2 33.5 34.0 34.9	27.8 28.5 32.9 32.5 31.0 29.8 29.5 30.4 29.5 33.5	15.4 16.1 19.6 18.2 16.9 16.3 16.0 16.4 17.4 19.2 18.9	12.4 13.2 14.3 14.1 13.6 13.5 14.0 12.3 14.2	9 8 12 9 6 5 2 5 8 8	18.0 19.5 22.3 22.8 21.5 21.8 22.2 22.7 23.7 25.8 27.2	12.8 13.6 15.9 15.0 12.4 11.3 11.3 11.3 10.7	17.5 18.5 20.5 18.6 16.2 15.4 14.1 13.1 15.2 12.3
60	38.9 40.5 42.3 43.4 42.3 46.5 50.5 50.5 51.8 56.4	34.2 35.2 36.5 37.5 37.3 39.4 43.4 42.8 44.2 48.2	19.0 19.5 20.2 20.0 19.9 21.9 25.0 24.4 25.5 28.6	15.3 15.7 16.3 17.4 17.4 17.5 18.4 18.4 18.7	.4 .3 .6 .6 8 1.0 1 .7	27.4 28.6 30.3 31.6 31.8 33.7 36.5 38.2 39.5	11.5 12.0 12.1 11.8 10.5 12.9 14.0 12.3 12.3 14.3	13.0 13.3 12.8 11.3 13.7 14.4 12.3 11.8 13.0
70	58.8 62.1 71.2 99.0 98.3 100.6 102.9 108.7 127.2 150.4	50.5 52.7 61.1 86.9 92.4 88.9 95.4 96.2 112.9 131.8	29.5 30.5 35.6 45.8 41.3 43.1 46.3 47.6 59.2 68.6	21.0 22.3 25.5 41.1 51.1 45.8 49.0 48.6 53.7 63.2	.0 1.4 .9 3.4 -1.6 3.4 -1.5 1.1 .8 4.9	44.5 47.1 51.7 64.6 71.0 75.0 82.7 88.9 99.5 118.1	14.4 15.0 19.5 34.4 27.3 25.6 20.1 19.8 27.7 32.3	12.4 12.4 15.6 25.9 18.5 15.9 11.8 14.2 14.9
80	150.2 167.9 161.8 151.4	140.5 142.6 144.8 138.7	67.8 69.2 70.1 69.2	72.7 73.3 74.6 69.5	-5.5 7.9 -2.6 -11.7	128.9 136.9 1; ).5 135.3	21.2 31.0 22.3 16.1	8.6 11.4 7.7 5.4
82:	169.9 160.9 153.3 163.2	146.7 143.0 141.2 148.1	69.8 70.8 70.7 69.2	76.9 72.2 70.5 78.9	4.0 7 -5.2 -8.3	140.0 141.4 140.1 136.4	29.9 19.5 13.2 26.8	10.6 6.8 4.5 9.1
93: 	153.3 147.3 148.5 156.6	144.6 138.3 143.7 128.3	70.4 68.7 67.6 70.1	74.2 69.6 76.1 58.2	-11.4 -14.4 -16.8 -4.4	135.6 135.2 134.7 135.8	17.7 12.1 13.8 20.8	6.0 4.1 4.6 6.9
84: 	169.8 165.8 176.4	134.2 138.9 147.5	73.0 70.4 69.1	61.2 68.5 78.4	2.2 8.1 10.6	139.2 141.5 143.2	30.6 24.3 33.2	10.0 7.8 10.6

Note.—Data include net Commodity Credit Corporation loans and farm households.

Source: Department of Agriculture, except as noted.

<sup>&</sup>lt;sup>1</sup> Cash marketing receipts and inventory changes plus Government payments, other farm cash income, and nonmoney income furnished by farms.

<sup>2</sup> Physical changes in end-of-period inventory of crop and livestock commodities valued at average prices during the period.

<sup>3</sup> Income in current dollars divided by the consumer price index (Department of Labor).

TABLE B-93.—Farm output and productivity indexes, 1929-84 [1977 = 100]

			Farm	output				Produc	tivity indi	cators	
			Cro	ps <sup>2</sup>		Live-	Farm	Crop	Farm o	utput per farm work	hour of
Year	Total <sup>2</sup>	Total <sup>3</sup>	Feed grains	Food grains	Oil crops	stock and prod- ucts <sup>2</sup>	output per unit of total input	produc- tion per acre 4	Total	Crops	Live- stock and prod- ucts
1929	44	48	38	39	6	50	45	48	9	10	14
1933	42	43	35	27	5	54	46	43	9	10	13
1939	48	49	40	36	14	56	51	51	11	12	14
1940	50	51	41	40	16	57	52	53	12	13	14
1941	52	52	44	45	16	60	54	54	13	14	15
1942	58	58	51	48	23	67	58	59	14	15	16
1943	57	55	47	41	23	72	57	55	14	15	16
1944	59	58	49	51	20	69	58	58	14	16	16
1945	58	56	47	53	20	68	58	<b>57</b>	15	16	16
1946	60	59	51	55	19	66	60	<b>60</b>	16	18	17
1947	58	56	39	64	22	65	58	57	16	18	17
1948	63	64	57	62	27	64	63	64	18	20	18
1949	62	61	50	53	26	67	61	60	19	20	18
1950 1951 1952 1953 1954	61 63 66 66 66	59 60 62 62 61	51 47 <b>50</b> <b>49</b> 51	49 49 63 57 51	26 26 26 26 28	70 73 74 74 77	61 63 64 65	59 59 <b>62</b> <b>62</b> <b>61</b>	19 20 22 23 24	22 22 24 25 26	19 20 21 22 23
1955	69	63	54	48	30	79	67	63	26	28	24
1956	69	63	54	50	34	79	68	64	28	30	25
1957	67	62	58	47	33	78	69	65	29	33	26
1958	73	69	64	69	39	79	74	73	33	38	28
1959	74	68	66	55	36	83	74	72	35	37	31
1960 1961 1962 1963 1964	76 76 77 80 79	72 70 71 74 72	69 62 68 59	66 60 56 59 65	38 43 44 46 46	82 86 86 89 91	77 78 79 82 81	77 78 81 83 81	37 39 41 45 47	41 42 45 47 49	32 35 37 40 43
1965	82	<b>76</b>	<b>70</b>	67	53	89	86	85	52	56	45
	79	73	70	67	55	91	83	83	53	59	49
	83	77	79	76	56	94	86	86	58	63	53
	85	79	75	80	64	94	87	89	62	66	55
	85	80	78	74	65	95	88	91	63	68	59
1970	84	77	71	69	66	99	87	88	66	70	64
1971	92	86	92	81	68	100	94	96	74	79	68
1972	91	87	88	77	74	101	94	99	78	84	73
1973	93	92	91	86	87	99	95	99	81	87	76
1974	88	84	74	91	71	100	90	88	79	80	82
1975 1976 1977 1978 1979	95 97 100 104 111	93 92 100 102 113	91 96 100 108 116	108 107 100 93 108	86 74 100 105 129	95 99 100 101 104	99 98 100 102 105	96 94 100 105 113	89 94 100 108 119	89 91 100 105 118	93 100 109 117
1980	103	101	97	121	99	108	100	99	112	104	129
1981	118	116	121	144	114	109	116	113	131	120	136
1982	114	118	124	140	124	107	114	116	131	126	143
1983	93	87	67	116	91	109	98	99	118	105	154
1984 <sup>p</sup>	109	110	113	128	108	108	109	112	130	126	150

Farm output measures the annual volume of net farm production available for eventual human use through sales from farms or consumption in farm households.
 Gross production.
 Includes items not included in groups shown.
 Computed from variable weights for individual crops produced each year.

TABLE B-94.—Farm input use, selected inputs, 1929-84

	Farm p	opulation oril <sup>1</sup>	Farm (th	employn	nent		Se	lected in	dexes of	input use	(1977=1	00)
Year	Num- ber (thou- sands)	As per-cent of total population*	Total	Fami- ly work- ers	Hired work- ers	Crops har- vested (mil- lions of acres) 4	Total	Farm labor	Farm real estate	Me- chanical power and machin- ery	Agri- cultural chemi- cals <sup>6</sup>	Feed, seed, and live- stock pur- chases <sup>6</sup>
1929 1933 1939	32,393	25.1 25.8 23.5	12,763 12,739 11,338	9,360 9,874 8,611	3,403 2,865 2,727	365 340 331	99 93 96	468 456 418	107 100 105	33 27 34	6 4 7	28 26 37
1940	30,118 28,914 26,186	23.1 22.6 21.4 19.2 17.9	10,979 10,669 10,504 10,446 10,219	8,300 8,017 7,949 8,010 7,988	2,679 2,652 2,555 2,436 2,231	341 344 348 357 362	97 97 100 102 103	416 410 420 414 411	107 105 103 102 101	36 37 44 47 49	9 9 10 11 13	39 42 44 48 48
1945 1946 1947 1948 1949	24,420 25,403 25,829 24,383 24,194	17.5 18.0 17.9 16.6 16.2	10,000 10,295 10,382 10,363 9,964	7,881 8,106 8,115 8,026 7,712	2,119 2,189 2,267 2,337 2,252	354 352 355 356 360	100 99 99 100 102	385 369 350 340 328	102 106 106 107 108	50 49 54 62 68	13 14 15 16 18	50 49 51 52 56
1950 1951 1952 1953 1954	23,048 21,890 21,748 19,874 19,019	15.2- 14.2 13.9 12.5 11.7	9,926 9,546 9,149 8,864 8,651	7,597 7,310 7,005 6,775 6,570	2,329 2,236 2,144 2,089 2,081	345 344 349 348 346	101 104 104 103 102	309 309 295 284 273	109 109 108 108 108	72 77 81 82 82	19 21 23 24 24	58 62 63 63 65
1955 1956 1957 1958 1959	19,078 18,712 17,656 17,128	11.5 11.1 10.3 9.8 9.3	8,381 7,852 7,600 7,503 7,342	6,345 5,900 5,660 5,521 5,390	2,036 1,952 1,940 1,982 1,952	340 324 324 324 324	102 101 98 98 99	263 248 231 221 221 215	108 106 105 104 105	83 84 83 83 84	26 27 27 28 32	66 69 68 73 77
1960	15,635 14,803 14,313 13,367 12,954	8.7 8.1 7.7 7.1 6.7	7,057 6,919 6,700 6,518 6,110	5,172 5,029 4,873 4,738 4,506	1,885 1,890 1,827 1,780 1,604	324 302 295 298 298	98 97 97 97 97	206 198 189 183 173	103 103 104 104 104	83 80 80 79 80	32 35 38 43 46	77 81 83 83 85
1965 1966 1967 1968 1969	11,595 10,875	6.4 5.9 5.5 5.2 5.1	5,610 5,214 4,903 4,749 4,596	4,128 3,854 3,650 3,535 3,419	1,482 1,360 1,253 1,213 1,176	298 294 306 300 290	96 96 98 97 97	156 146 142 137 132	103 102 104 102 102	80 82 85 86 86	49 56 66 69 73	86 89 92 89 93
1970	9,712 9,425 9,610 9,472 9,264	4.7 4.5 4.6 4.5 4.3	4,523 4,436 4,373 4,337 4,389	3,348 3,275 3,228 3,169 3,075	1,175 1,161 1,146 1,168 1,314	293 305 294 321 328	97 98 97 98 98	126 123 116 114 111	105 103 102 100 99	85 87 86 90 92	75 81 86 90 92	96. 102 104 107 99
1975	8,253 76,194 76,501	4.1 3.8 7 2.8 7 2.9 7 2.8	4,342 4,374 4,155 3,957 3,774	3,026 2,997 2,859 2,689 2,501	1,317 1,377 1,296 1,268 1,273	336 337 345 338 349	96 99 100 102 105	107 103 100 96 93	97 98 100 100 101	96 98 100 104 107	83 96 100 107 118	93 101 100 104 111
1980	7 5,787	7 2.7 7 2.5 7 2.4 7 2.5	3,705 *3,641 3,578 3,518 3,461	2,402 * 2,324 2,248 2,174 2,103	1,303 1,317 1,330 1,344 1,358	352 366 363 305 347	103 102 100 95 100	92 90 87 79	101 101 101 100	104 102 99 93	120 121 110 98	109 105 104 101

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

<sup>1</sup> Farm population as defined by Department of Agriculture and Department of Commerce, i.e., civilian population living on farms in rural areas, regardless of occupation. See also footnote 7.

3 Total population of United States including Armed Forces overseas, as of July 1.

3 Includes persons doing farmwork on all farms. These data, published by the Department of Agriculture, 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.

4 Acreage harvested plus acreages in fruits, tree nuts, and farm gardens.

5 Fertilizer, lime, and pesticides.

Nonfarm constant dollar value of feed, seed, and livestock purchases.

7 Based on new definition of a farm. Under old definition of a farm, farm population (in thousands and as percent of total population) for 1977, 1978, 1979, 1980, 1981, 1982, and 1983 is 7,806 and 3.6; 8,005 and 3.6; 7,553 and 3.4; 7,241 and 3.2; 6,942 and 3.0; 6,870 and 3.0; and 7,029 and 3.0, respectively.

8 Previous basis for farm employment series has been discontinued. Employment after 1980 is estimated.

Note — Population includes alasks and Havesii beginning 1980.

Note.—Population includes Alaska and Hawaii beginning 1960.

TABLE B-95.—Indexes of prices received and prices paid by farmers, 1946-84

	Prices r	eceived by	farmers			Prices paid t	v farmers			T
+	111003 1	cocirca by	Tarinors	All	<u>`</u>	Productio				Adden- dum:
Year or month	All farm prod- ucts	Crops	Live- stock and prod- ucts	commod- ities, services, interest, taxes, and wage rates 1	Total <sup>2</sup>	Tractors and self- pro- pelled machin- ery	Fertil- izer	Fuels and energy	Wage rates	Aver- age farm real estate value per acre s
1946	52 60 63 55	53 61 59 52	50 60 65 56	30 35 38 36	33 39 43 41		45 50 55 56		20 22 23 22	11 13 14 14
1950 1951 1952 1953 1954 1955 1955 1956 1957	56 66 55 55 51 55 55 55	54 61 62 55 56 53 54 52 52	58 70 64 56 52 49 47 51 57	37 41 42 40 40 40 40 42 43	42 47 47 44 44 43 43		54 57 59 59 58 57 58 58		22 25 26 27 27 27 28 29 30 32	14 16 18 18 18 19 19 21 22 23
1957 1958 1959 1960 1961 1962 1963 1963 1964 1965	55 52 53 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	52 51 52 55 55 55 55 55 55 55 55 55 55 55 55	57 53 53 52 53 51 49 54	43 43 44 44 45 45 45	46 46 46 47 47 47	39	58 57 57 58 58 57 57 57 57 56 55 55	49	30 32 33 34 35 36 38	22 23 24 25 26 27 29 31 33 35 38 40
1965	58 55 55 59 60 62 69	52 56 60	60 57 60 67 67 77	49 49 51 53	48 50 50 50 52 54 57 61	40 42 44 47 49	48 48 50 52	49 50 50 51 52 53	41 44 48 53 57 59 63	
1973 1974 1975 1976 1977 1977 1978	98 105 101 102 100 115 132	91 117 105 102 100 105 116	104 94 98 101 100 124 147	55 58 62 71 81 89 95 100 108 123	57 61 73 83 91 97 100 108 125	51 54 58 68 82 91 100 109	56 92 120 102 100 100 108	54 57 79 88 93 100 105 137	69 79 85 93 100 107 117	42 43 47 53 66 75 86 100 109 125
1980 1981 1982 1983 1984 P	134 139 133 134 142	125 134 121 127 139	144 143 145 141 146	138 150 157 160 164	138 148 150 153 155	136 152 165 174 181	134 144 144 137 143	188 213 210 202 202 202	126 137 144 148 150	145 158 157 148 146
JanFeb	128 132 133 136 136 133	113 117 120 . 126 127 124	142 146 146 145 <b>144</b> <b>141</b>	158 159 159 160 160 161	150 151 152 153 153 153	168 168 172 172 172 172 176	139 139 138 138 138 138	205 199 191 198 203 204	148 148 148 148 148 148	148
July	131 136 136 134 136 140	123 134 135 133 136 136	138 139 137 135 136 -143	160 161 161 161 162 162	152 153 154 153 154 154	176 176 177 177 177 177	138 138 138 134 134 136	205 206 206 206 206 203 201	148 148 148 148 148 148	
Jan Feb Mar Apr May June	145 144 145 146 145 144	139 137 139 140 145 145	150 151 151 151 151 145 143	163 164 165 165 165 165	155 156 <b>157</b> <b>158</b> 157 <b>157</b>	177 177 180 180 180 180	136 136 146 146 147 147	202 204 203 203 204 203	150 150 150 150 150 150	146
July	145 143 139 138 137 135	144 144 136 138 130 125	145 143 141 139 143 145	164 164 164 164 164 164	156 155 154 153 153 153	182 182 182 182 182 182 182	147 147 147 141 141 139	201 199 200 201 200 198	150 150 150 150 150 150	

Includes items used for family living, not shown separately.
 Includes other items not shown separately.
 Average for 48 States. Annual data are for March 1 of each year through 1975, for February 1 for 1976 through 1981, and for April 1 for 1982 through 1984. Monthly data are for first of month.

TABLE B-96.—U.S. exports and imports of agricultural commodities, 1940-84 [Billions of dollars]

				Exports						mports			
Year	Total 1	Feed grains	Food grains <sup>2</sup>	Oil- seeds and prod- ucts	Cot- ton	To- bacco	Ani- mals and prod- ucts	Total 1	Crops, fruits, and vege- tables	Ani- mals and prod- ucts	Cof- fee	Cocoa beans and prod- ucts	Agri- cultural trade balance
1940	0.5 .7 1.2 2.1 2.1	******	(*) (*) :1	333311	0.2 .1 .1 .2 .1	6.1 .1 .2 .1	0.1 .3 .8 1.2 1.3	1.3 1.7 1.3 1.5 1.8	(*) (*)	0.2 3.5 5.4 3.3	0.1 .2 .2 .3 .3		-0.8 -1.0 1 .6
1945	2.3 3.1 4.0 3.5 3.6	0.1 0.4 .1 .3	.4 .7 1.4 1.5 1.1	(4) (4) 12 23	.3 .5 .4 .5	.2 .4 .3 .2 .3	,9 ,9 ,7 ,5	1.7 2.3 2.8 3.1 2.9	.1 .2 .1 .2 .2	.4 .4 .6 .4	.3 .5 .6 .7 .8	(*) 0.1 .2 .2 .1	.5 .8 1.2 .7
1950 1951 1952 1953 1954	2.9 4.0 3.4 2.8 3.1	.2 .3 .3 .3	.6 1.1 1.1 .7 .5	? ? ? ? ? ?	1.0 1.1 .9 .5	33233	3534 5	4.0 5.2 4.5 4.2 4.0	.2 .2 .2 .2 .2	.7 1.1 .7 .6 .5	1.1 1.4 1.4 1.5 1.5	.2 .2 .2 .2 .2 .3	-1.1 -1.1 -1.1 -1.3 9
1955 1956 1957 1958 1959	4.2 4.5 3.9	.3 .4 .3 .5	.6 1.0 1.0 .8 .9	.4 .5 .5 .4 .6	.5 .7 1.0 .7 .4	.4 .3 .4 .4	.6 .7 .7 .5	4.0 4.0 4.0 3.9 4.1	.2 .2 .2 .2 .2	.5 .4 .5 .7	1.4 1.4 1.4 1.2 1.1	.2 .2 .2 .2 .2	8 .2 .6 (*)
1960 1961 1962 1963 1964	4.8 5.0 5.0 5.6 6.3	.5 .8 .8 .9	1.2 1.4 1.3 1.5 1.7	.6 .6 .7 .8 1.0	1.0 .9 .5 .6 .7	.4 .4 .4 .4	.6 .6 .7 .8	3.8 3.7 3.9 4.0 4.1	.2 .2 .3 .3	.6 .7 .9 .9	1.0 1.0 1.0 1.0	33333	1.0 1.3 1.2 1.6 2.3
1965 1966 1967 1968 1969	6.2 6.9 6.4 6.3 6.0	1.1 1.3 1.1 .9	1.4 1.8 1.5 1.4 1.2	1.2 1.3 1.3 1.3	.5 .5 .5 .3	.4 .5 .5 .5 .6	.8 .7 .7 .7	4.1 4.5 4.5 5.0 5.0	.3 .4 .4 .5 .5	.9 1.2 1.1 1.3 1.4	1.1 1.1 1.0 1.2	.1 .1 .2 .2	2.1 2.4 1.9 1.3 1.1
1970 1971 1972 1973 1974	7.3 7.7 9.4 17.7 21.9	1.1 1.0 1.5 3.5 4.6	1.4 1.3 1.8 4.7 5.4	1.9 2.2 2.4 4.3 5.7	.4 .6 .5 .9	.5 .5 .7 .7 .8	.9 1.0 1.1 1.6 1.8	5.8 5.8 6.5 8.4 10.2	.5 .6 .7 .8	1.6 1.5 1.8 2.6 2.2	1.2 1.2 1.3 1.7 1.6	32235	1.5 1.9 2.9 9.3 11.7
1975	21.9 23.0 23.6 29.4 34.7	5.2 6.0 4.9 5.9 7.7	6.2 4.7 3.6 5.5 6.3	4.5 5.1 6.6 8.2 8.9	1.0 1.0 1.5 1.7 2.2	.9 1.1 1.4 1.2	1.7 2.4 2.7 3.0 3.8	9.3 11.0 13.4 14.8 16.7	.8 .9 1.2 1.5 1.7	1.8 2.3 2.3 3.1 3.9	1.7 2.9 4.2 4.0 4.2	.5 .6 1.0 1.4 1.2	12.6 12.0 10.2 14.6 18.0
1980	41.2 43.3 36.6 36.1	9.8 9.4 6.4 7.3	7.9 9.6 7.9 7.4	9.4 9.6 9.1 8.7	2.9 2.3 2.0 1.8	1.3 1.5 1.5 1.5	3.8 4.2 3.9 3.8	17.4 16.8 15.4 16.6	1.7 2.0 2.3 2.4	3.8 3.5 3.7 3.8	4.2 2.9 2.9 2.8	.9 .9 .7 .8	23.9 26.6 21.2 19.5
Jan-Nov: 19831984	32.6 34.3	6.5 7.3	6.8 6.9	7.8 7.5	1.6 2.2	1.3 1.3	3.5 3.9	15.2 17.9	2.2 2.9	3.5 3.7	2.6 3.1	.8 1.0	17.4 16.4

<sup>&</sup>lt;sup>1</sup> Total includes items not shown separately.

<sup>a</sup> Rice, wheat, and wheat flour.

<sup>a</sup> Includes nuts, fruits, and vegetable preparations.

<sup>b</sup> Less than \$50 million.

Note.—Data derived from official estimates released by the Bureau of the Census, Department of Commerce. Agricultural commodities are defined as (1) nonmarine food products and (2) other products of agriculture which have not passed through complex processes of manufacture. Export value, at U.S. port of exportation, is based on the selling price and includes inland freight, insurance, and other charges to the port. Import value, defined generally as the market value in the foreign country, excludes import duties, ocean freight, and marine insurance.

TABLE B-97.—Balance sheet of the farming sector, 1929-85 [Billions of dollars]

					Assets						Cla	ims	
				Other	physical	assets	Fi	inanci <b>al</b> a	ssets				
Beginning of year	year Total Real Live estate stock	Live- stock <sup>1</sup>	Machin- ery and motor vehicles	Crops <sup>2</sup>	House- hold equip- ment and furnish- ings	Deposits and cur- rency	U.S. savings bonds	Invest- ments in cooper- atives	Total	Real estate debt	Other debt	Propri- etors' equities	
1929 1933 1939		48.0 30.8 34.1	6.6 3.0 5.1	3.2 2.5 3.2							9.8 8.5 6.8		
1940	53.0	33.6	5.1	3.1	2.7	4.2	3.2	0.2	0.8	53.0	6.6	3.4	43.0
1941		34.4	5.3	3.3	3.0	4.1	3.5	.4	.9	54.8	6.5	4.0	44.3
1942		37.5	7.1	4.0	3.8	4.8	4.2	.5	.9	62.9	6.4	4.1	52.5
1943		41.6	9.6	4.9	<b>5.1</b>	4.8	5.4	1.1	1.0	73.6	<b>6.0</b>	3.9	63.8
1944		48.2	9.7	5.4	<b>6.1</b>	4.7	6.6	2.2	1.1	84.0	<b>5.4</b>	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	85.4
1946	102.9	61.0	9.7	5.4	6.3	5.6	9.4	4.2	1.4	102.9	4.8	3.1	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	3.5	107.5
1948	127.4	73.7	13.3	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	8.6	8.9	9.6	4.6	1.9	134.6	5.3	6.1	123.3
1950	134.5	77.6	12.9	12.2	7.6	8.4	9.1	4.7	2.1	134.5	5.6	6.9	122.1
	154.3	89.5	17.1	14.1	7.9	9.6	9.1	4.7	2.3	154.3	6.1	7.0	141.3
	170.1	98.5	19.5	16.7	8.8	10.1	9.4	4.7	2.5	170.1	6.7	8.0	155.5
	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
	164.5	98.7	11.7	18.4	9.1	9.5	9.4	4.7	2.9	164.5	7.7	9.2	147.6
1955	168.9	102.2	11.2	18.7	9.6	9.7	9.4	5.0	3.0	168.9	8.2	9.4	151.2
	173.6	107.5	10.6	19.3	8.3	10.0	9.5	5.2	3.2	173.6	9.0	9.8	154.9
	182.8	115.7	11.0	20.2	8.3	9.6	9.4	5.1	3.5	182.8	9.8	9.5	163.4
	191.3	121.8	13.9	20.1	7.6	9.6	9.5	5.1	3.7	191.3	10.4	10.0	170.8
	207.6	131.1	17.7	21.8	9.3	9.4	10.0	5.2	3.9	207.6	11.1	12.6	183.9
1960	210.2	137.2	15.2	22.7	7.7	9.2	9.2	4.7	4.2	210.2	12.1	12.7	185.4
	210.9	138.5	15.6	22.2	8.0	8.7	8.7	4.6	4.5	210.9	12.8	13.4	184.7
	219.3	144.5	16.4	22.5	8.8	<b>8.9</b>	8.8	4.5	4.8	219.3	13.9	14.6	190.9
	227.6	150.2	17.3	23.5	9.3	<b>8.8</b>	9.2	4.4	5.0	227.6	15.2	16.2	196.2
	235.8	158.6	15.9	23.9	9.8	<b>8.8</b>	9.2	4.2	5.4	235.8	16.8	17.6	201.4
1965	243.8 260.8 274.3 288.0 302.8	167.5 179.2 189.1 199.7 209.2	14.5 17.6 19.0 18.8 20.2	24.8 26.0 27.4 29.8 31.3	9.2 9.7 10.0 9.6 10.6	8.4 8.3 8.8 9.4	9.6 10.0 10.3 10.9 11.5	4.2 4.1 3.9 3.8 3.8	5.6 5.9 6.2 6.5 6.8	243.8 260.8 274.3 288.0 302.8	18.9 21.2 <b>23.1</b> 25.1 27.4	17.9 19.5 20.9 22.3 23.1	207.0 220.1 230.2 240.6 252.3
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	24.1	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	27.4	292.2
1973	394.8	267.3	34.1	39.3	14.5	11.9	14.0	4.0	9.8	394.8	35.1	29.8	330.0
1974	478.5	327.7	42.4	44.2	22.0	12.3	14.9	4.2	10.9	478.5	39.5	33.8	405.2
1975 3	502.6	359.7	24.5	54.7	23.3	11.2	14.0	3.8	11.4	502.6	44.6	37.0	421.0
1976	576.3	418.1	29.4	64.0	21.3	11.7	14.5	3.9	13.4	576.3	49.6	42.0	484.8
1977	664.2	496.4	29.0	71.0	22.1	12.1	14.8	3.8	14.9	664.2	55.2	48.7	560.4
1978	736.5	554.7	31.9	77.0	24.8	13.8	15.2	3.9	15.4	736.5	63.3	59.4	613.8
1979	873.4	655.0	51.3	85.1	28.0	16.0	15.5	4.2	18.3	873.4	71.4	69.4	732.6
1980	1,005.5	755.9	61.4	96.8	33.5	17.2	15.9	4.0	20.8	1,005.5	85.4	80.4	839.7
1981	1,089.8	828.4	60.8	102.5	35.9	19.4	16.2	3.8	22.8	1,089.8	95.5	86.5	907.8
1982	1,083.5	818.9	53.6	108.8	36.3	20.8	16.7	3.6	24.8	1,083.5	105.5	96.2	881.8
1983	1,045.2	769.2	53.0	111.0	41.3	23.0	17.4	3.5	26.9	1,045.2	109.5	106.8	828.8
1984	1,031.1	764.5	49.8	108.2	33.7	24.8	18.2	3.6	28.3	1,031.1	111.6	103.1	816.4
1985 4	1,022.4	749.2	50.4	106.5	38.2	26.0	18.7	3.7	29.7	1,022.4	110.9	101.3	810.2

Note.—Data include farm households. Beginning 1960, data include Alaska and Hawaii.

<sup>&</sup>lt;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.
<sup>8</sup> Beginning 1975, data are for farms included in the new farm definition, that is, places with sales of \$1,000 or more annually.
<sup>8</sup> Forecast.

## INTERNATIONAL STATISTICS

TABLE B-98.-U.S. international transactions, 1946-84

[Millions of dollars; quarterly data seasonally adjusted, except as noted. Credits (+), debits (-)]

Year or	M	erchandise <sup>1</sup>	2	Inve	stment inco	me <sup>3</sup>	Net military	Net travel and	Other serv-	Balance on goods	Remit- tances, pensions,	Balance on current
quarter	Exports	Imports	Net	Receipts	Payments	Net	transac- tions	transpor- tation receipts	ices, net <sup>s</sup>	and services <sup>1 4</sup>	and other unilateral transfers <sup>1</sup>	ac- count 1 4
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	2611	2,068	559	1,509	-576	120	242	2,177	-4,017	1,840
1951	14,243	11,176		2,633	583	2,050	-1,270	298	254	4,399	-3,515	884
1952	13,449	10,838		2,751	555	2,196	-2,054	83	309	3,145	-2,531	614
1953	12,412	10,975		2,736	624	2,112	-2,423	238	307	1,195	-2,481	1,286
1954	12,929	10,353		2,929	582	2,347	-2,460	269	305	2,499	-2,280	219
1955 1956 1957 1958 1959	19,562 16,414	-11,527 -12,803 -13,291 -12,952 -15,310	2,897 4,753 6,271 3,462 1,148	3,406 3,837 4,180 3,790 4,132	-676 -735 -796 -825 -1,061	2,730 3,102 3,384 2,965 3,071	-2,701 -2,788 -2,841 -3,135 -2,805	-297 -361 -189 -633 -821	299 447 482 486 573	2,928 5,153 7,107 3,145 1,166	2,498 2,423 2,345 2,361 2,448	430 2,730 4,762 784 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	-14,537	5,571	4,999	-1,245	3,754	-2,596	-978	594	6,346	-2,524	3,822
1962	20,781	-16,260	4,521	5,618	-1,324	4,294	-2,449	-1,152	809	6,025	-2,638	3,387
1963	22,272	-17,048	5,224	6,157	-1,561	4,596	-2,304	-1,309	960	7,167	-2,754	4,414
1964	25,501	-18,700	6,801	6,824	-1,784	5,040	-2,133	-1,146	1,041	9,604	-2,781	6,823
1965 1966 1967 1968 1969	26,461 29,310 30,666 33,626 36,414	-21,510 -25,493 -26,866 -32,991 -35,807	4,951 3,817 3,800 635 607	7,437 7,528 8,020 9,368 10,912	-2,088 -2,481 -2,747 -3,378 -4,869	5,349 5,047 5,273 5,990 6,043	-2,122 -2,935 -3,226 -3,143 -3,328	-1,280 -1,331 -1,750 -1,548 -1,763	1,387 1,365 1,612 1,630 1,833	8,285 5,963 5,708 3,563 3,393	-2,854 -2,932 -3,125	E 422
1970 1971 1972 1973 1974	42,469 43,319 49,381 71,410 98,306	-39,866 -45,579 -55,797 -70,499 -103,811	2,603 2,260 6,416 911 5,505	11,747 12,707 14,764 21,808 27,587	5,516 5,436 6,572 9,655 12,084	6,231 7,271 8,192 12,153 15,503	-3,354 -2,893 -3,420 -2,070 -1,653	-2,038 -2,345 -3,063 -3,158 -3,184	2,180 2,495 2,766 3,184 3,986	5,625 2,269 1,941 11,021 9,147	ŀ	
1975	107,088	-98,185	8,903	25,351	-12,564	12,787	-746	-2,812	4,598	22,729	4,613	18,116
1976	114,745	-124,228	9,483	29,286	-13,311	15,975	559	-2,558	4,711	9,205	4,998	4,207
1977	120,816	-151,907	31,091	32,179	-14,217	17,962	1,528	-3,565	5,272	9,894	4,617	-14,511
1978	142,054	-176,020	33,966	42,245	-21,680	20,565	621	-3,573	6,013	10,340	5,106	-15,446
1979	184,473	-212,028	27,555	64,132	-32,914	31,218	-1,778	-2,935	5,735	4,686	5,649	-964
1980	224,269	249,781	-25,512	72,506	42,063	30,443	-2,237	-997	7,277	8,975	7,077	1,898
1981	237,085	265,086	-28,001	86,411	52,359	34,052	-1,115	144	8,048	13,128	6,833	6,294
1982	211,198	247,667	-36,469	83,862	56,059	27,803	195	-1,008	8,339	1,141	8,058	-9,199
1983	200,257	261,312	-61,055	77,003	53,495	23,508	515	-4,584	8,704	32,912	8,651	-41,563
1982:	55,482	62,546	-7,064	20,889	13,653	7,236	52	-114	2,160	2,270	2,105	165
	55,118	60,921	-5,803	22,307	14,772	7,535	239	-247	2,005	3,729	1,802	1,927
	52,079	64,442	-12,363	21,505	14,390	7,115	2	-99	2,118	3,231	1,745	4,976
V	48,519	59,758	-11,239	19,162	13,243	5,919	94	-548	2,054	3,908	2,406	6,314
1983:	49,246	- 58,523	-9,277	17,618	12,380	5,238	790	-263	2,142	-1,370	1,573	-2,943
	48,745	- 63,615	-14,870	18,973	12,995	5,978	53	-1,131	2,258	-7,712	1,848	-9,560
	50,437	- 67,938	-17,501	20,802	13,630	7,172	– 55	-1,426	2,107	-9,703	2,143	-11,846
	51,829	- 71,236	-19,407	19,609	14,490	5,119	– 273	-1,764	2,198	-14,127	3,086	-17,213
1984:	53,935	79,790	25,855	23,300	15,552	7,748	370	-1,400	2,351	-17,526	-2,147	19,673
	54,563	80,408	25,845	20,822	17,363	3,459	404	-2,112	2,355	-22,547	-2,157	24,704
	55,497	88,631	33,134	22,501	18,823	3,678	241	-2,590	2,205	-30,082	-2,818	32,900

See next page for continuation of table.

<sup>2</sup> Adjusted from Census data for differences in valuation, coverage, and timing.
3 Fees and royalities 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.
4 In concept, balance on goods and services is equal to net exports and imports in the national income and product accounts (and the sum of balance on current account and allocations of special drawing rights is equal to net foreign investment in the accounts), although the series differ because of different handling of certain items (gold, extraordinary military shipments, etc.), revisions, etc.

TABLE B-98.—U.S. international transactions, 1946-84—Continued [Millions of dollars; quarterly data seasonally adjusted, except as noted]

	(inc	U.S. assets crease/capit	abroad, net al outflow (-	-)]	Foreign a (increase	ssets in the capital infi	U.S., net ow (+)]	Alloca-		stical pancy
Year or quarter	Total	U.S. official reserve assets •	Other U.S. Govern- ment assets	U.S. private assets	Total	Foreign official assets	Other foreign assets	tions of special drawing rights (SDRs)	Total (sum of the items with sign reversed)	Of which: Seasonal adjust- ment discrep- ancy
1946 1947 1948 1949		-623 -3,315 -1,736 -266			***************************************				***************************************	
1950 1951 1952 1953	•									
1955 1956 1957 1958	***************************************	182 -869 -1,165 2,292	***************************************					***************************************		
1960	-4,099 -5,538 -4,174 -7,270	2,145 607 1,535 378 171	-1,100 -910 -1,085 -1,662 -1,680	-5,144 -5,235 -4,623 -5,986 -8,050	2,294 2,705 1,911 3,217 3,643	1,473 765 1,270 1,986 1,660	821 1,939 641 1,231		-1,019 -989 -1,124	
1965	-5,716 -7,321 -9,757 -10,977	1,225 570 53 -870 -1,179	-1,605 -1,543 -2,423 -2,274 -2,200	-5,336 -6,347 -7,386 -7,833 -8,206	742 3,661 7,379 9,928 12,702	134 -672 3,451 -774 -1,301	607 4,333 <b>3,928</b> <b>10,703</b>		458 629 205 438	
1970 1971 1972 1973 1974	-9,337 -12,475 -14,497 -22,874	2,481 2,349 -4 158 -1,467	-1,589 -1,884 -1,568 -2,644 5 366	-10,229 -12,940 -12,925 -20,388 -33,643	6,359 22,970 21,461 18,388 34,241	6,908 26,879 10,475 6,026 10,546	-550 -3,909 10,986 12,362	867 717 710	-219 -9,779 -1,879 -2,654	
1975 1976 1977 1978 1979	-39,703 -51,269 -34,785 -61,130	849 2,558 375 732 1,133	-3,474 -4,214 -3,693 -4,660 -3,746	-35,380 -44,498 -30,717 -57,202 -59,453	15,670 36,518 51,319 64,036 38,752	7,027 17,693 36,816 33,678 —13,665	8,643 18,826 14,503	1,139	5,917 10,544 2,023 12,540 25,404	
1980 1981 1982 1983		8,155 5,175 4,965 1,196	-5,162 -5,107 -6,143 -5,013	-72,802 -100,694 -107,790 -43,281	58,086 81,313 95,181 81,722	15,497 5,003 3,318 5,339	42,589 76,310 91,863 76,383	1,152 1,093	24,982 22,275 32,916 9,331	
1982: 	41,409	-1,089 -1,132 -794 -1,950	-803 -1,700 -2,555 -1,086	-30,068 -38,577 -22,867 -16,279	28,344 33,772 18,384 14,680	-3,221 1,399 2,477 2,664	31,565 32,373 15,907 12,017		3,450 5,710 12,808 10,947	964 487 2,276 2,752
1983: 	-24,364 -1,060 -9,223 -14,843	-787 16 529 -953	-1,130 -1,251 -1,204 -1,429	-22,447 175 -8,548 -12,461	15,888 12,452 19,578 33,804	-252 1,739 -2,703 6,555	10,714		11,420 -1,833 1,491 -1,748	-579 439 -2,518 2,657
1984:      	-1,989 -19,037 16,024	657 566 799	-2,037 -1,235 -1,474	705 -17,237 18,297	15,660 40,405 6,234	-2,784 -345 -1,022		***************************************	6,002 3,336 10,642	- 154 - 104 - 2,386

Includes extraordinary U.S. Government transactions with India.
 Consists of gold, special drawing rights, convertible currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

Note.—Quarterly data for U.S. official reserve assets and foreign assets in the United States are not seasonally adjusted. Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-99.—U.S. merchandise exports and imports by principal end-use category, 1965-84
[Millions of dollars; quarterly data seasonally adjusted]

			Exports					Imports		
			No	nagricultur	al			N	onpetroleum	1
Year or quarter	Total	Agricul- tural	Total	Capital goods except auto- motive	Other goods	Total	Petro- leum and products	Total	Indus- trial supplies and materi- als	Other goods
1965	26,461 29,310 30,666 33,626 36,414	6,305 6,949 6,453 6,297 6,098	20,156 22,361 24,213 27,329 30,316	8,052 8,907 9,934 11,111 12,422	12,104 13,454 14,279 16,218 17,894	21,510 25,493 26,866 32,991 35,807	2,034 2,078 2,091 2,384 2,649	19,476 23,415 24,775 30,607 33,158	9,123 10,235 9,956 12,027 11,662	10,353 13,180 14,819 18,580 21,496
1970 1971 1972 1973 1974	42,469 43,319 49,381 71,410 98,306	7,381 7,836 9,514 17,977 22,410	35,088 35,482 39,868 53,433 75,896	14,659 15,372 16,914 21,999 30,878	20,429 20,110 22,954 31,434 45,018	39,866 45,579 55,797 70,499 103,811	2,929 3,641 4,650 8,415 26,608	36,939 41,937 51,147 62,085 77,204	12,250 13,595 16,002 19,188 27,421	24,689 28,342 35,145 42,897 49,783
1975 1976 1977 1978 1979	114 745	22,243 23,380 24,332 29,902 35,595	84,846 91,365 96,484 112,152 148,879	36,639 39,113 39,766 46,471 58,843	48,207 52,252 56,718 65,681 90,036	98,185 124,228 151,907 176,020 212,028	27,018 34,572 44,982 42,312 60,482	71,167 89,656 106,925 133,708 151,546	23,619 29,145 34,951 41,301 48,494	47,548 60,511 71,974 92,407 103,052
1980	224,269 237,085 211,198 200,257	42,156 44,035 37,230 36,639	182,113 193,050 173,968 163,618	74,210 81,614 73,675 68,279	107,903 111,436 100,293 95,339	249,781 265,086 247,667 261,312	79,263 77,794 61,270 53,804	170,518 187,292 186,397 207,508	54,027 57,428 50,041 53,588	116,491 129,864 136,356 153,920
1982: 	55,482 55,118 52,079 48,519	10,017 10,423 8,408 8,382	45,465 44,695 43,671 40,137	19,336 19,153 18,459 16,727	26,129 25,542 25,212 23,410	62,546 60,921 64,442 59,758	15,828 13,334 16,798 15,310	46,718 47,587 47,644 44,448	13,049 12,374 12,433 12,186	33,669 35,213 35,211 32,262
1983: 	49,246 48,745 50,437 51,829	8,823 8,706 9,306 9,804	40,423 40,039 41,131 42,026	17,324 16,916 16,857 17,182	23,099 23,123 24,274 24,844	58,523 63,615 67,938 71,236	10,770 12,827 15,922 14,284	47,753 50,789 52,016 56,951	12,430 13,493 13,643 14,023	35,323 37,296 38,373 42,928
1984: 	53,935 54,563 55,497	10,304 9,275 9,031	43,631 45,288 46,466	17,900 18,169 18,432	25,731 27,119 28,034	79,790 80,408 88,631	13,852 14,903 14,463	65,938 65,505 74,168	16,404 16,352 17,699	49,534 49,153 56,469

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-100.—U.S. merchandise exports and imports by area, 1975-84 [Millions of dollars]

Item	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984 first 3 quarters at annual rate 1
Exports	107,088	114,745	120,816	142,054	184,473	224,269	237,085	211,198	200,257	218,660
Industrial countries	66,496	72,335	76,970	87,948	115,930	137,152	141,918	127,254	126,951	141,129
Canada	9.567	26,336 10,196 31,883	28,533 10,566 34,094	31,229 12,960 39,546	38,690 17,629 54,177	41,626 20,806 67,603	46,016 21,796 65,108	39,203 20,694 59,701	43,812 21,677 54,878	53,761 23,151 56,291
Australia, New Zealand, and South Africa	3,508	3,920	3,777	4,213	5,434	7,117	8,998	7,656	6,584	7,927
Other countries, except Eastern Europe	37,343	38,287	40,951	50,213	62,630	82,941	90,639	80,130	70,323	73,667
OPEC <sup>2</sup> Other <sup>3</sup>		11,561 26,726	12,877 28,074	14,846 35,367	14,556 48,074	17,368 65,573	21,097 69,542	20,651 59,479	15,149 55,174	13,788 59,879
Eastern Europe	1	4,123	2,895	3,893	5,913	4,143	4,440	3,749	2,918	3,820
International organizations and unallocated	ļ 					33	88	65	66	44
Imports	98,185	124,228	151,907	176,020	212,028	249,781	265,086	247,667	261,312	331,772
Industrial countries	56,117	67,665	79,447	99,357	112,809	127,908	144,339	144,152	154,880	204,013
Canada Japan Western Europe	11,257	26,652 15,531 23,003	29,864 18,565 28,226	33,758 24,541 36,618	39,229 26,261 41,826	42,903 31,217 47,255	48,258 37,598 52,873	48,526 37,685 52,908	54,360 41,307 53,896	68,165 58,156 72,096
Australia, New Zealand, and South Africa	2,242	2,479	2,792	4,440	5,493	6,533	5,610	5,033	5,317	5,596
Other countries, except Eastern Europe	41,334	55,379	70,679	74,403	96,137	119,142	119,194	102,425	105,061	125,682
OPEC <sup>2</sup> Other <sup>3</sup>	18,897 22,437	27,409 27,970	35,778 34,901	33,286 41,117	45,039 51,098	55,602 63,540	49,934 69,260	31,517 70,908	25,185 79,876	27,403 98,279
Eastern Europe	734	875	1,127	1,508	1,896	1,444	1,553	1,067	1,371	2,077
International organizations and unallocated		309	654	752	1,186	1,287		23	***************************************	

Note.—Data are on an international transactions basis and exclude military.

Preliminary; seasonally adjusted.
 Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.
 Latin American Republics, other Western Hemisphere; and other countries in Asia and Africa, less members of OPEC.

TABLE B-101.—U.S. merchandise exports and imports by commodity groups, 1965-84 [Millions of dollars; monthly data seasonally adjusted]

WEDGER ALL THE		Merch	andise ex	ports			Merci	handise in	nports		Mercha	ndise trade	balance
		***************************************	Domestic	exports			Gen	eral impo	rts*				
Year or month	Total domes- tic and foreign exports <sup>1</sup>	Total <sup>1</sup> <sup>2</sup>	Food, bever- ages, and tobacco	Crude materi- als and fuels <sup>8</sup>	Manu- factured goods 4	Total <sup>2</sup>	Food, bever- ages, and tobacco	Crude materi- als and fuels*	Manu- factured goods*	Total, c.i.f. values	Exports less imports, customs value	Exports less imports, f.a.s.	Exports less imports, c.i.f.
		F.	a.s. value	7			Custon	ns value					
1965 1966 1967 1968 1969	29,490 31,030 34,063 37,332	26,399 29,054 30,646 33,626 36,788	4,519 5,186 4,710 4,592 4,446	4,273 4,404 4,726 4,865 5,006	17,433 19,218 20,844 23,818 26,785	21,427 25,618 26,889 33,226 36,043	4,013 4,590 4,701 5,365 5,308	5,440 5,718 5,367 6,031 6,391	14.446	28,745 35,320 38,241	5,315 3,872 4,141 837 1,289		2,283 -1,257 -909 230 -4,793 -9,663 2,752 -10,395
1970 1971 1972 1973 1974	42,659 43,549 49,199 70,823 97,998	42,025 42,911 48,399 69,730 96,634	5,058 5,076 6,569 12,938 15,233	6,692 6,441 7,091 10,735 15,802	29,344 30,443 33,740 44,731 63,523	39,951 45,563 55,583 69,476 101,394	6,230 6,404 7,379	6,542 7,268 8,838 13,446 31,842	25,907 30,414 37,767 45,001 56,202	42,429 48,342 58,862 73,573 108,392	2,708 -2,014 -6,384 1,348 -3,396		230 4,793 9,663 2,752 10,395
							F.a.s. v	/alue 7					
1974* 1975* 1976* 1977* 1978*	98,092 107,652 115,223 121,232 143,681 181,860	96,679 106,161 113,549 119,024 141,142 178,633	15,233 16,793 17,234 15,963 20,604 24,587	15,802 15,197 16,095 18,579 20,957 28,222	94,473	102,559 98,503 123,477 150,390 174,757 209,458	10,709 9,923 11,891 14,227 15,743 17,735	32,064 32,596 41,474 53,554 51,901 71,390	100.317	110,875 105,880 132,498 160,411 186,045 222,228		-4,467 9,149 -8,254 -29,158 -31,076 -27,599	-12,783 1,772 -17,274 -39,179 -42,364 -40,368
1980			30,407	33,719	143,891	244,871	18,551	93,973	125,122	256,984	ļ	-24,241	36,354
							Custom	ns value					
1981 1982 1983 1984	233,677 212,193 200,486 217,865	228,899 207,076 195,917 <b>212,034</b>	33,206 26,977 26,979 27,312	33,022 33,518 29,555 31,482	154,283 139,716 132,409 143,142	260,982 243,952 258,048 325,726	18,350 17,817 18,819 21,626	92,873 74,404 68,037 72,758	144.022	273,352 254,885 269,878 341,177	27,305 31,759 57,562 107,861		39,675 42,691 69,392 123,312
1983: Jan Feb Mar Apr May June	16,690 16,095 15,655	16,846 15,970 16,273 15,743 15,275 16,602	2,291 2,203 2,336 2,079 2,003 2,142	2,744 2,406 2,373 2,483 2,332 2,425	11,139 10,787 10,973 10,632 10,375 11,515	20,127 18,804 19,528 19,914 21,446 20,916	1,700 1,433 1,558 1,593 1,712 1,490	5,902 4,422 4,648 4,517 5,829 5,567	12/138	21,075	-2,895 -2,493 -2,837 -3,819 -5,791		-3,843 -3,371 -3,696 -4,726 -6,751
July Aug Sept Oct Nov Dec	16,486 16,582 17,257 17,033 17,063		2,063 2,046 2,314 2,452 2,605 2,449	2,388 2,745 2,691 2,345 2,270 2,532	11,028 10,882 11,147 11,241 11,277 11,407	21,828 22,714 22,451 24,333 23,115 22,976	1,486 1,480 1,466 1,747 1,565 1,591	6,011 6,581 6,465 6,855 5,891 5,360	13,796 13,912 13,754	22,858 23,746 23,477 25,465 24,185 24,033	-5,341 -6,132 -5,195 -7,300 -6,052 -5,678		-6,371 -7,164 -6,221 -8,432 -7,122 -6,735
1984: Jan Feb Mar Apr May June	18,327 17,212 17,727 17,522 17,950 17,633	17,848 16,786 17,212 17,072 17,464 17,178	2,402 2,103 2,457 2,184 2,162 1,847	2,664 2,532 2,791 2,523 2,833 2,603	12,097 11,372 11,147 11,560 11,628 11,837	26,586 26,147 26,771 28,368 25,569 25,356	1,759 1,773 1,865 2,028 1,761 1,576	6,063 6,039 6,308 6,636 5,618 6,071	17,948 17,652 17,827 18,766 17,402 16,889	27,794 27,305 27,992 29,711 26,789 26,543	-8,260 -8,935 -9,044 -10,847 -7,619		-9,468 -10,093 -10,264 -12,190 -8,839
July Aug Sept Oct Nov Dec	19,442 18,036 18,177 18,387 18,373	18,963 17,578 17,676 17,862 17,835 18,710	2,195 2,100 2,637 2,315 2,493 2,440	2,740 2,642 2,378 2,243 2,485 2,966	12,988 11,766 11,924 12,436 12,108 12,491	31,883 26,567 29,430 26,313 27,033	2,002 1,711 1,803 1,924 1,705 1,719	6,494 5,788 5,809 6,094 6,148 5,738	22,376 18,326 20,994 17,579 18,211	33,503 27,895 30,824 27,567 28,310 27,430	12,440 8,531 11,253 7,927 8,661 6,940		

Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports.

2 Total includes commodities and transactions not classified according to kind.

<sup>3</sup> Includes fats and oils.

Includes machinery, transportation equipment, chemicals, metals, and other manufactures. Export data for these items include military grant-aid shipments through 1977 and exclude them thereafter.

Total arrivals of imported goods other than intransit shipments.

C.I.f. (cost, insurance, and freight) import value at first port of entry into United States. Data for 1967-73 are estimates.

Tea.s. (free alongside ship) value basis at U.S. port of exportation for exports and at foreign port of exportation for imports.

Note.—Data are as reported by the Bureau of the Census adjusted to include silver ore and bullion reported separately prior to 1969.

Trade in gold is included beginning 1974. Export statistics cover all merchandise shipped from the U.S. customs area, except supplies for the U.S. Armed Forces. Exports include shipments under Agency for International Development and Food for Peace programs as well as other private relief shipments.

Data for 1980 and 1981 include trade of the U.S. Virgin Islands, except that for 1980 Virgin Islands exports are reflected only in the figures for domestic and foreign exports combined, total domestic exports, and trade balance.

"Data for 1974-79 for domestic and foreign exports combined, total domestic exports, total general imports, and trade balance include trade of the Virgin Islands.

include trade of the Virgin Islands.

TABLE B-102.—International investment position of the United States at year-end, 1976-83
[Billions of dollars]

Type of investment	1976	1977	1978	1979	1980	1981	1982	1983
Net international investment position of the United States	83.6	72.7	76.1	94.5	106.1	143.1	149.5	106.0
U.S. assets abroad	347.2	379.1	447.8	510.6	606.9	719.6	838.1	887.5
U.S. official reserve assets	18.7	19.3	18.7	19.0	26.8	30.1	34.0	33.7
Gold	11.6 2.4	11.7 2.6	11.7 1.6	11.2 2.7	11.2 2.6	11.2 4.1	11.1 5.3	11.1 5.0
Fund	4.4 .3	4.9 .0	1.0 4.4	1.3 3.8	2.9 10.1	5.1 9.8	7.3 10.2	11.3 6.3
Other U.S. Government assets, other than official reserve assets	46.0	49.5	54.2	58.4	63.6	68.5	74.4	70.2
U.S. loans and other long-term assets	44.1 41.3 2.8	47.7 45.2 2.6	52.3 49.8 2.4	56.5 54.1 2.4	61.8 59.6 2.2	67.0 64.7 2.3	72.7 72.7 70.7 2.0	79.3 77.6 75.7 1.9
U.S. foreign currency holdings and U.S. short- term assets	1.9	1.8	1.9	1.9	1.7	1.4		
							1.7	1.7
U.S. private assets	282.4 136.8 44.2 34.7	310.2 146.0 49.4 39.3	375.0 162.7 53.4 42.1	433.2 187.9 56.8 42.0	516.6 215.4 62.7	621.1 228.3 63.4	729.8 221.5 75.6	774.4 226.1 84.8
Bonds	9.5	10.1	11.2	14.8	43.5 19.2	45.8 17.6	56.7 18.9	58.3 26.5
by U.S. nonbanking concerns	20.3	22.3	28.1	31.5	34.7	35.9	28.2	33.5
elsewhere	81.1	92.6	130.8	157.0	203.9	293.5	404.6	430.0
Foreign assets in the United States	263.6	306.4	371.7	416.1	500.8	576.5	<b>68</b> 8.6	781.5
Foreign official assets in the United States	104.4	140.9	173.1	159.9	176.1	180.5	189.0	193.9
U.S. Government securities U.S. Teasury securities Other Other U.S. Government liabilities	<b>72.6</b> 70.6 2.0 8.9	105.4 101.1 4.3 10.3	128.5 124.0 4.5 12.7	106.6 101.7 4.9 12.7	118.2 111.3 6.9 13.4	125.1 117.0 8.1 13.1	132.5 124.9 7.6 13.5	136.9 129.7 7.2 13.7
U.S. liabilities reported by U.S. banks, not in- cluded elsewhere	17.2 5.8	18.0 7.2	23.3 8.5	30.5 9.9	30.4 14.1	26.7 15.6	25.0 18.0	25.4 17.9
Other foreign assets in the United States	159.1	165.5	198.7	256.3	324.7	396.0	499.6	587.6
Direct investments in the United States	<b>30.8</b> 7.0	34.6 7.6	42.5 8.9	54.5 14.2	83.0 16.1	106.2 18.5	121.9 25.8	133.5 33.9
ties	54.9 12.0 42.9	51.2 11.5 39.8	53.6 11.5 42.1	58.6 10.3 48.3	74.1 9.5 64.6	75.4 10.7 64.6	93.6 16.8 76.7	114.6 17.4 97.2
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	13.0	11.9	16.0	18.7	30.4	30.6	27.1	25.2
U.S. liabilities reported by U.S. banks, not in- cluded elsewhere	53.5	60.2	77.7	110.3	121.1	165.4	<b>23</b> 1.3	280.3

Note.--For details on the series, see Survey of Current Business, August 1984.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-103.—International reserves, selected years, 1952-84
[Millions of SDRs; end of period]

								1984
Area and country	1952	1962	1972	1980	1981	1982	1983	Novem- ber
All countries	49,388	62,851	147,333	354,893	369,772	363,749	395,616	432,742
Industrial countries	38,582	52,535	110,282	211,904	212,693	211,918	232,398	252,435
United States	1,944	17,220 2,561 1,168 2,021 251	12,112 5,572 5,656 16,916 767	21,479 3,119 1,603 20,164 277	25,502 3,717 1,713 25,083 580	29,918 3,428 6,053 22,001 577	30,831 4,016 8,749 24,346 744	33,084 3,117 8,018 27,363 1,995
Austria	1,133 150 132	1,081 1,753 256 237 4,049	2,505 3,564 787 664 9,224	4,879 7,330 2,712 1,501 24,301	5,279 5,451 2,246 1,319 21,991	5,544 4,757 2,111 1,420 17,850	5,052 5,699 3,515 1,227 21,826	4,449 5,809 4,557 3,069 25,458
Germany	318 722	6,958 32 359 4,068 1,943	21,908 78 1,038 5,605 4,407	41,430 138 2,255 20,477 10,669	40,892 199 2,290 19,631 9,562	43,909 133 2,390 15,107 10,723	44,092 144 2,534 21,537 11,253	44,422 164 24,264 11,155
Norway Spain Sweden Switzerland United Kingdom		304 1,045 802 2,919 3,308	1,220 4,618 1,453 6,961 5,201	4,783 9,813 2,893 15,190 16,851	5,414 9,794 3,306 14,925 13,757	6,272 7,450 3,397 16,930 11,904	6,373 7,581 4,065 17,275 11,496	9,756 12,838 4,232 16,427 10,071
Oll-exporting countries	1,699	2,030	9,956	69,299	75,299	69,604	68,660	68,603
Algeria	84 314 177 131	186 108 211 193	454 531 885 720	3,153 4,311 8,150	3,370 4,416	2,391 2,959	1,991 3,660	1,831 4,882
IraqKuwait	50	97	335	3,169	3,583	5,449	5,048	4,344
Libya Nigeria Oman Qatar	500	96 289	2,694 346 34 56	10,372 8,049 463 286	7,860 3,371 649 339	6,525 1,486 801 382	5,110 970 738 404	3,814 1,230 599
Saudi Arabia		268	2,303	18,536	27,855	26,948	26,224	24,443
United Arab EmiratesVenezuela	443	583	1,595	1,600 5,579	<b>2,775</b> 7,415	2,037 6,365	<b>2,008</b> 7,701	2,188 9,217
Non-oil developing countries	8,573	8,172	26,137	71,851	75,450	74,361	83,087	96,823
Africa Asia Europe Middle East Western Hemisphere	1,202 3,407 966 825 2,173	1,635 2,550 1,348 940 1,699	3,168 6,640 6,428 2,406 7,494	4,480 24,968 8,060 8,311 26,032	4,208 27,466 8,150 9,001 26,625	3,846 34,393 6,874 10,132 19,195	4,343 40,801 8,137 9,478 20,328	3,900 47,001 8,837 7,986 29,099

Note.—International reserves is comprised of monetary authorities' holdings of gold (at SDR 35 per ounce), special drawing rights (SDRs), reserve positions in the International Monetary Fund, and foreign exchange. Data exclude U.S.S.R., other Eastern European countries, and Cuba (after 1960).

Source: International Monetary Fund, "International Financial Statistics."

U.S. dollars per SDR (end of period) are: 1952 and 1962—1.00000; 1972—1.08571; 1979—1.31733; 1980—1.27541; 1981—1.16396; 1982—1.10311; 1983—1.04695; and November 1984—.98935.

TABLE B-104.—Exchange rates, 1967-84 [Cents per unit of foreign currency, except as noted]

Period	Belgian franc	Canadian dollar	French franc	German mark	Italian lira	Japanese yen
March 1973	2.5378	100.333	22.191	35.548	0.17604	0.38190
1967 1968 1969	2.0125 2.0026 1.9942	92.689 92.801 92.855	20.323 20.191 19.302	25.084 25.048 25.491	.16022 .16042 .15940	.27613 .27735 .27903
1970	2.0598 2.2716 2.5761	95.802 99.021 100.937 99.977 102.257	18.087 18.148 19.825 22.536 20.805	27.424 28.768 31.364 37.758 38.723	.15945 .16174 .17132 .17192 .15372	.27921 .28779 .32995 .36915 .34302
1975	2 5921	98.297 101.410 94.112 87.729 85.386	23.354 20.942 20.344 22.218 23.504	40.729 39.737 43.079 49.867 54.561	.15328 .12044 .11328 .11782 .12035	.33705 .33741 .37342 .47981 .45834
1980	2.7007 2.1982	85.530 83.408 81.077 81.133 77.244	23.694 18.489 15.293 13.183 11.474	55.089 44.362 41.236 39.235 35.230	.11694 .08842 .07411 .06605 .05708	.44311 .45432 .40284 .42128 .42139
1983: 	2.1110 2.0178 1.8838 1.8357	81.463 81.214 81.110 80.743	14.517 13.403 12.561 12.251	41.513 40.256 37.828 37.344	.07139 .06773 .06351 .06156	.42436 .42109 .41252 .42714
1984: 	1.8119 1.8095 1.6950 1.6230	79.663 77.366 76.111 75.837	12.060 12.004 11.160 10.673	37.052 36.891 34.251 32.726	.06019 .05967 .05558 .05288	.43326 .43539 .41055 .40635
	Netherlands	Swedish krona	Swiss franc	United Kingdom	Multilateral trade- the U.S. dollar (M	weighted value of larch 1973=100)
	guilder			pound	Nominal	Real <sup>1</sup>
March 1973	34.834	22.582	31.084	247.24	100.0	100.0
1967 1968 1969	27.759 27.626 27.592	19.373 19.349 19.342	23.104 23.169 23.186	275.04 239.35 239.01	120.0 122.1 122.4	
1970	27.651 28.650 31.153 35.977 37.267	19.282 19.592 21.022 22.970 22.563	23.199 24.325 26.193 31.700 33.688	239.59 244.42 250.08 245.10 234.03	121.1 117.8 109.1 99.1 101.4	98.8 99.2
1975 1976 1977 1978 1979	39.632 37.846 40.752 46.284 49.843	24.141 22.957 22.383 22.139 23.323	38.743 40.013 41.714 56.283 60.121	222.16 180.48 174.49 191.84 212.24	98.5 105.6 103.3 92.4 88.1	93.9 97.3 93.1 84.2 83.2
1980	50.369 40.191 37.473 35.120 31.245	23.647 19.860 16.063 13.044 12.103	59.697 51.025 49.373 47.660 42.676	232.58 202.43 174.80 151.59 133.56	87.4 102.9 116.6 125.3 138.2	84.8 100.8 111.7 117.3 128.7
1983: 	37.545 35.820 33.816 33.300	13.486 13.260 12.806 12.626	<b>49.595 48.178</b> 46.563 46.306	153.28 155.21 150.95 146.91	119.4 123.0 128.7 130.2	112.1 115.3 120.5 121.4
1984: 	32.865 32.738 30.365 29.011	12.556 12.492 11.887 11.477	45.525 44.514 40.938 39.726	143.50 139.58 129.65 121.50	131.6 132.8 141.7 147.2	122.4 123.3 132.3 136.7

<sup>&</sup>lt;sup>1</sup> Adjusted by changes in consumer prices.

Source: Board of Governors of the Federal Reserve System.

TABLE B-105.—World trade: Exports and imports, 1965, 1970, 1975, and 1980-84 [Billions of U.S. dollars]

			· · · · · · · · · · · · · · · · · · ·					
Area and country	1965	1970	1975	1980	1981	1982	1983	1984 1
				Ехро	orts, f.o.b.*	A:		
Developed countries 3	131.3	226.6	584.9	1,284.5	1,259.3	1,192.9	1,179.8	1,288.9
United States	8.4	43.2 16.7 19.3	108.1 34.1 55.8	220.8 67.7 130.4	233.7 72.7 151.5	212.3 70.5 138.4	200.5 76.7 147.0	218.0 89.0 168.0
European Community 4	65.2	113.5	299.6	665.8	612.4	590.0	575.2	615.
France	17.9 7.2	18.1 34.2 13.2 19.4	53.1 90.2 34.8 43.4	116.0 192.9 77.7 110.1	106.4 176.1 75.3 102.2	96.7 176.4 73.5 97.0	94.9 169.4 72.7 91.6	100. 170. 72. 92.
Other developed countries	21.7	33.8	87.4	199.7	188.9	181.8	180.3	197.6
Developing countries	34.5	52.5	207.8	557.1	541.3	462.8	431.1	470.0
OPEC *Other	10.3 24.2	16.9 35.6	111.5 96.3	298.9 258.2	278.1 263.2	215.4 247.4	176.4 254.8	185.2 285.3
Communist countries •	23.2	34.9	90.3	201.7	205.2	223.9	235.7	244.0
U.S.S.REastern Europe	8.2 11.8 2.0	12.8 18.2 2.2	33.4 45.3 7.1	76.4 86.2 18.9	79.4 83.8 21.5	87.2 91.4 22.9	91.7 96.7 23.7	93.9 100.0 26.0
TOTAL	189.0	314.0	883.0	2,043.3	2,005.8	1,879.6	1,846.6	2,004.
				Impo	orts, c.i.f.?			
Developed countries a	138.7	238.0	618.9	1,428.9	1,361.5	1,278.7	1,254.5	1,405.0
United States	23.2 8.7 8.2	42.7 14.3 18.9	105.9 36.2 57.9	257.0 62.8 141.3	273.4 70.3 142.9	254.9 58.4 131.5	269.9 65.1 126.4	327. 77.0 138.4
European Community 4	70.5	118.7	306.6	729.1	645.4	615.4	590.7	626.1
France	10.4 17.6 7.4 16.1	19.1 29.9 15.0 21.9	54.0 74.9 38.5 53.3	134.9 188.0 99.7 115.5	121.0 163.9 91.1 102.7	115.7 155.4 86.2 99.7	105.4 152.9 80.4 100.2	105.9 155.6 81.6 106.2
Other developed countries	28.2	43.4	112.4	238.7	229.6	218.5	202.5	235.8
Developing countries	36.0	53.1	180.1	440.8	488.6	463.1	421.8	432.5
OPEC 6	6.4 29.6	9.9 43.2	52.1 128.0	133.0 307.8	156.5 332.1	166.1 297.0	140.2 281.6	132.9 299.6
Communist countries 6	22.5	34.1	100.8	200.4	200.0	203.1	213.0	220.2
U.S.S.R. Eastern Europe China	8.0 11.6 1.8	11.7 18.5 2.2	37.1 51.3 7.4	68.5 91.2 20.7	73.2 87.5 19.3	77.8 87.1 17.9	80.4 91.7 19.6	80.5 95.8 21.9
TOTAL	197.2	325.2	899.8	2,070.1	2,050.1	1,944.9	1.889.3	2,057.7

<sup>Preliminary estimates.
Free-on-board ship value.
Includes the OECD countries, South Africa, Israel, and non-OECD Europe.
Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.
Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and</sup> 

Venezuela.

\*\*Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

\*\*Cost, insurance, and freight value, except Eastern Europe (except Hungary) and U.S.S.R., which are f.o.b. (free on board). Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B-106. - World trade balance and current account balances, 1965, 1970, 1975, and 1980-84 [Billions of U.S. dollars]

Area and country	1965	1970	1975	1980	1981	1982	1983	1984 1
				World trad	e balance 2			•
Developed countries 3	-7.4	-11.4	-34.0	-144.4	-102.2	-85.7	<b>—74.7</b>	-116.1
United States Canada Japan	4.3 2 .3	.5 2.5 .4	2.2 -2.1 -2.0	-36.2 4.9 -10.9	39.6 2.4 8.6	-42.6 12.1 6.9	-69.3 11.7 20.5	-109.1 12.1 30.3
European Community 4	5.3	5.3	7.0	63.3	-32.9	-25.4	15.5	-10.7
France	2 .3 2 -2.3	-1.0 4.3 -1.8 -2.4	8 15.2 -3.7 -9.9	-18.9 4.9 -22.0 -5.4	-14.5 12.2 -15.8 5	-19.0 21.1 -12.7 -2.7	10.5 16.5 7.7 8.5	-5.8 14.6 -9.0 -13.4
Other developed countries	-6.5	9.6	-25.0	-39.0	-40.7	-36.7	-22.2	-38.8
Developing countries	-1.5	6	27.7	116.2	52.7	3	9.3	38.1
OPEC *Other	3.9 5.4	7.0 -7.6	59.4 —31.7	165.9 49.6	121.6 -68.9	49.3 - <b>49</b> .6	36.1 26.8	52.3 14.3
Communist countries 6	.7	.8	-10.5	1.3	5.2	20.8	22.7	24.4
U.S.S.R. Eastern Europe China	.2 .2 .2	1.1 3 .0	-3.7 -6.0 3	7.9 -5.0 -1.8	6.2 -3.7 2.2	9.4 4.3 5.1	11.3 5.0 4.0	13.0 4.2 4.7
TOTAL 7	-8.2	11.2	-16.8	- 26.9	<b>-44.3</b>	65.2	-42.7	-53.6
				Current accou	ınt balances e			
Developed countries 3	3.2	4.7	0.2	-64.5	-30.4	-33.1	-26.8	-75.5
United States Canada Japan	5.4 -1.1 .9	2.3 1.1 <b>2.0</b>	18.1 4.7 7	1.9 -1.0 -10.7	6.3 5.1 4.8	-9.2 2.2 6.9	-41.6 1.4 20.8	-102.4 1.0 32.3
European Community 4	.8	2.8	3.4	- 35.4	-11.8	9.5	3.6	-1.0
France	-1.6 2.2 1	.1 .9 .8 2.0	2.7 4.0 6 3.3	-4.2 -15.7 -9.7 8.4	-4.7 -5.8 -8.1 14.5	-12.1 3.8 -5.5 9.1	4.4 4.1 .8 4.4	3 2.3 -1.0 -1.5
Other developed countries	-2.9	3.4	15.9	-19.3	- 24.6	-23.5	-11.0	-5.4
Developing countries	,	8.5	9	48.8	28.6	80.8	56.8	-30.0
OPEC 5		5 -8.0	27.0 -27.9	109.8 61.0	49.8 78.4	15.4 65.4	-18.1 -38.7	-32.0
Communist countries	i	8	-11.1	-4.6	4	11.6	12.5	ļ
U.S.S.R. Eastern Europe China	2	8 1	4.6 6.4 1	1.9 -5.5 -1.0	2 -3.7 3.5	4.3 1.7 5.6	4.7 3.8 4.0	4.8 2.9
TOTAL		4.6	-11.8	-20.3	59.4	<b> 102.3</b>	<b>-71.1</b>	<u></u>

<sup>1</sup> Preliminary estimates.
2 Exports f.o.b. (free-on-board ship value) less imports c.i.f. (cost, insurance, and freight).
3 Includes the OECD countries, South Africa, Israel, and non-OECD Europe.
4 Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.
5 Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and

<sup>5</sup> Includes Algeria, Ecuador, Gadun, Indunesia, Hon, Hong, Ho

TABLE B-107.-Industrial production and consumer prices, major industrial countries, 1960-84 [1967 = 100]

Year or quarter	United States	Canada	Japan	European Commu- nity <sup>1</sup>	France	West Germany	italy	United Kingdom
		<u> </u>	I	Industrial p	roduction 2			
1960	66.2 66.7 72.2 76.5 81.7 89.8 97.8	63.1 65.6 71.2 75.7 82.6 89.7 96.2	43.0 51.2 55.4 61.7 71.4 74.2 83.8	74.7 78.1 81.3 84.8 91.0 94.7 98.4	70 73 78 86 90 93 98 100 104 114	78.4 82.8 86.1 88.9 96.6 102.1 103.0	59.2 65.5 71.9 78.4 79.2 82.8 93.3	83.9 84.2 85.0 87.1 95.0 97.1 99.1
1967 1968 1969	100.0 106.3 111.1	100.0 106.4 113.7	100.0 115.2 133.4	100.0 107.4 117.6		100.0 109.2 123.2	100.0 106.4 110.5	111.
970 971 972 972 973 974 975 976 977 978	107.8 109.6 119.7 129.8 129.3 117.8 130.5 138.2 146.1 152.5	115.3 121.5 130.7 144.6 149.2 140.3 148.5 152.7 157.8 167.6	151.8 155.7 167.0 190.5 183.1 163.9 182.0 189.7 201.1 215.3	123.3 126.1 131.7 141.4 142.3 132.8 142.6 145.9 149.7 156.8	120 128 135 145 148 139 149 152 155 163	131.1 133.6 138.7 147.7 145.1 137.1 149.1 152.0 154.1 161.5	117.6 117.5 122.7 134.6 140.6 127.6 143.5 145.1 147.9 157.6	111. 1113. 123. 120. 114. 118. 124. 127.
980	147.0 151.0 138.6 147.6 163.5	165.1 165.9 149.5 157.6	225.2 227.5 228.4 236.5	155.8 152.1 149.7 151.1	161 160 158 159	162.0 159.1 154.5 155.7	166.5 163.8 158.8 153.7	124. 119. 121. 125.
983: 	138.5 144.5 151.8 155.5	149.8 154.2 160.6 166.5	228.6 232.7 239.0 245.5	148.1 148.5 151.8 154.1	159 159 159 160	1 <b>52.3</b> 155.7 155.2 159.9	154.6 150.5 154.5 155.2	123. 123. 126. 128.
984: 	159.8 163.1 165.6 165.3	167.4 168.7 174.1	253.6 259.9 264.2	155.1 153.0 156.0	163 161 164	161.4 153.7 163.1	156.8 157.6 160.6	127. 124. 124.
			<u></u>	Consume	r prices			
960	88.7 89.6 90.6 91.7 92.9 94.5 97.2 100.0 104.2 109.8	85.9 86.7 87.7 89.2 90.9 93.1 96.5 100.0 104.0 108.8	68.3 71.8 76.7 82.5 85.8 91.6 96.3 100.0 105.3 110.9	79.2 81.2 84.3 87.6 90.7 94.1 97.5 100.0 103.7 107.9	3 78.0 3 80.6 85.4 89.5 92.5 94.8 97.4 100.0 104.5 111.3	82.9 84.8 87.4 89.9 92.0 95.0 98.4 100.0 101.6 103.5	74.1 75.7 79.2 85.1 90.1 94.2 96.4 100.0 101.4 104.1	79.0 81.6 85.1 86.6 89.6 93.9 97.6 100.6 104.6
770	116.3 121.3 125.3 133.1 147.7 161.2 170.5 181.5 195.4 217.4	112.4 115.6 121.2 130.3 144.5 160.1 172.1 185.9 202.5 221.0	119.3 126.5 132.3 147.9 184.0 205.8 224.9 243.0 252.3 261.3	113.2 120.2 127.5 138.2 156.2 176.7 195.2 214.3 229.2 250.0	117.1 123.5 131.1 140.7 160.0 178.9 196.1 214.5 233.9 259.1	107.1 112.7 119.0 127.2 136.1 144.2 150.5 156.0 160.2	109.2 114.4 121.0 134.0 159.7 186.8 218.1 255.2 286.2 328.5	117.4 128.5 137.7 150.2 174.3 216.5 252.4 292.4 316.6
980	246.8 272.4 289.1 298.4 311.1	243.5 273.9 303.5 321.0 335.0	282.3 296.2 304.1 309.7	280.9 312.1 343.0 368.5	294.2 332.7 373.1 407.9	175.8 186.9 196.8 203.3	398.0 472.4 549.4 631.8	423.6 473.9 514.7 538.3
983: 	293.2 296.9 300.5 303.1	314.5 318.8 324.0 326.8	306.5 310.1 309.0 312.6	359.6 365.7 371.3 377.5	393.2 404.4 413.1 420.8	201.2 202.2 204.3 205.2	609.7 627.5 643.0 671.9	525.3 536.1 543.0 549.1
984: 	306.4 309.7 313.1 315.4	330.7 333.6 336.7 339.0	313.9 316.6 316.0	383.1 389.3 393.0	428.1 436.1 443.7	207.0 208.0 208.0	684.9 699.6 709.0	552.5 563.7 568.6

<sup>&</sup>lt;sup>1</sup> Consists of Belgium-Luxembourg, Denmark, France, Greece, Ireland, Italy, Netherlands, United Kingdom, and West Germany. Industrial production prior to July 1981 excludes data for Greece, which joined the EC in 1981.
<sup>2</sup> All data exclude construction. Quarterly data are seasonally adjusted.
<sup>3</sup> Data for 1960 and 1961 are for Paris only.

Sources: Department of Commerce (International Trade Administration, Office of Trade Information and Analysis, Trade Statistics Division) and Department of Labor (Bureau of Labor Statistics).

TABLE B-108.—Civilian unemployment rate, and bourly compensation, major industrial countries, 1960-84

## (Quarterly data seasonally adjusted)

Year or quarter	United States	Canada	Japan	France	West Germany	Italy	United Kingdon				
	Civilian unemployment rate (percent) <sup>1</sup>										
60	5.5	6.5 6.7 5.5 5.2	1.7	1.6	1.1	3.2 2.8 2.5 2.1 2.4	2				
61 62	6.7 5.5 5.7 5.2	5.5	1.5 1.3 1.3	1.4 1.3 1.2 1.3	.6 6	2.8	2 1 2 3 2				
63	5.7	5.2	1.3	1.2	.6 .5 .4	2.1	3				
64	5.2	4,4	1.2								
65 66	4.5 3.8	3.6 3.4	1.2	1.4 1.7	.3 1.3 1.1 .6	3.0	2 2 3 3 3				
67	3.8	3.8	1.4 1.3	1.8	1.3	3.3 3.0	3				
68	3.6 3.5	4.5	1.2	2.4 2.2	1.1	3.1	3				
69		4.4	1.1			3.1					
70 71	4.9 5.9	5.7 6.2	1.2	2.4 2.7 2.8	.5 .6 .7 .7	2.8 2.9	3 3 4 3 3				
72	5.6	6.2	1.4	2.8		3.4	1 4				
73	4.9 5.6	5.5 5.3	1.3 1.4	2.7 2.9	.7 1.6	3.2 2.8	3				
74			i								
75 76	8.5 7.7	6.9 7.1	2.9	4.2 4.6	3.4 3.4	3.0 3.4	4				
77	7.1	8.1	2.0	4.9	3.5	3.6	l è				
78	6.1 5.8	8.3 7.4	1.9 2.0 2.0 2.3 2.1	5.4 6.1	3.4 3.0	3.7					
79						3.9					
BO	7.1 7.6	7.5 7.5	2.0 2.2 2.4	6.5 7.7	2.9 4.1	3.9 4.3	10				
82	9.7	11.0	2.4	8.7	5.9	4.8	l 12				
83	9.6 7.5	11.9 11.3	2.7	8.8	5.9 7.3 7.4	5.3	13				
4	7.5	11.3		***************************************	7.4	5.6	13				
83:	10.4	12.5	27	87	7.1	40	13				
	10.1	12.2	2.7 2.7 2.7	8.7 8.8	7.4	4.9 5.4	13				
W	9.3 8.5	11.6 11.2	2.7	8.8 9.1	7.5 7.3	5.3 5.6	13				
V	0.5	11.2	2.0	3.1	/.3	3.0	1.				
94:	7.9	11.3	2.8	9.5	7.2	5.5	13				
1	7.9 7.5 <u>7</u> .4	11.4 11.3	2.8 2.7 2.8	10.0	7.4	5.6	13				
V	7.4	11.3		10.2	7.5 7.3	5.5 5.6 5.5 5.6	13				
*	7.2	****				0.0					
					977=100)2						
50	36.7 37.7	29.7 29.2 28.4	6.6 7.7	15.1 16.7	10.5	11.9	23				
52	39.2 40.3	28.4	8.8	l 18.5	12.2 13.9	13.1 15.5	20				
53	40.3	29.2 30.3	9.8	20.1	14.8	18.3	28				
4	42.0		11.0	21.9	16.1	20.4	29				
55	42.8 44.8	31.8 34.4	12.4 13.6	23.7 25.1 26.9 30.3	17.6 19.1	21.8 22.8	32 31				
57	47.0	36.9 39.7	15.3 17.9	26.9	20.2	25.4 27.1	36				
58	50.4 53.9	39.7 42.7	21.3	30.3 30.8	21.7 24.2	27.1 30.7	33				
	57.6	47.4	25.4	32.4	30.6	36.8	42				
	61.1	52.7	30.3	36.8	35.9	43.1	50				
'I		57.6	40.1	44.2 57.7	43.5 59.3	52.3	57				
'I	64.4	27.0				66.4	63				
0	61.1 64.4 69.0 76.4	62.8 74.4	55.0 67.1	63.3	69.3	74.0	76				
1 2 3 4	76.4	62.8	55.0 67.1 77.1	63.3 87.9	69.3						
71 2 2 3 3 4 4 5 5 6	76.4 85.5 92.3	62.8 74.4 81.7 96.9	67.1 77.1 82.3	63.3 87.9 91.4	69.3 80.2 84.3	95.0 89.5	95 92				
71 22 33 44 45 55 66 77	76.4 85.5 92.3 100.0	62.8 74.4 81.7 96.9 100.0	67.1 77.1 82.3 100.0	63.3 87.9 91.4 100.0	69.3 80.2 84.3 100.0	95.0 89.5 100.0	95 92 100				
71 2 2 3 3 4 4 5 5 6	76.4 85.5 92.3	62.8 74.4 81.7 96.9	67.1 77.1 82.3	63.3 87.9 91.4	69.3 80.2 84.3	95.0 89.5	95 92 100 128 166				
11	76.4 85.5 92.3 100.0 108.3 118.8	62.8 74.4 81.7 96.9 100.0 99.5 107.3 118.7	67.1 77.1 82.3 100.0 136.1 138.5	63.3 87.9 91.4 100.0 124.2 149.9	69.3 80.2 84.3 100.0 124.7 146.2	95.0 89.5 100.0 119.1	95 92 100 128				
11 22 23 44 45 66 77	76.4 85.5 92.3 100.0 108.3 118.8	62.8 74.4 81.7 96.9 100.0 99.5 107.3	67.1 77.1 82.3 100.0 136.1 138.5	63.3 87.9 91.4 100.0 124.2 149.9	69.3 80.2 84.3 100.0 124.7 146.2	95.0 89.5 100.0 119.1 143.1	95 92 100 128 166				

¹ Civilian unemployment rates, approximating U.S. concepts. Data for United Kingdom exclude Northern Ireland. Quarterly data for France, West Germany, and United kingdom should be viewed as less precise indicators of unemployment under U.S. concepts than the annual data. Beginning 1977, changes in the Italian survey resulted in a large increase in persons enumerated as unemployed. However, many also reported that they had not actively sought work in the past 3D days. Such persons have been provisionally excluded for comparability with U.S. concepts; their inclusion would more than double the rates shown for Italy.

² 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 Labor, Bureau of Labor Statistics.

TABLE B-109. —Growth rates in real gross national product, 1961-84

## [Percent change]

Area and country	1961-65 annual average	1966-70 annual average	1971-75 annual average	1976-80 annual average	1980	1981	1982	1983	1984 1
Developed countries <sup>2</sup>	5.3	4.5	3.1	3.4	1.2	2.0	-0.5	2.3	(*)
United States		3.2 4.8 11.2	2.6 5.0 4.6	3.7 3.3 5.1	3 1.0 4.9	2.5 4.0 4.0	-2.1 -4.2 3.2	3.7 3.0 3.0	6.8 4.3 5.8
European Community 4	4.7	4.5	2.7	3.1	1.1	3	.5	.8	2.3
France	5.0 5.2	5.4 <b>4.2</b> 6.2 2.5	4.0 2.1 2.4 2.0	3.3 3.5 3.8 1.5	1.1 1.8 3.9 -2.6	.3 1 -1.3	1.6 -1.0 3 2.3	.5 1.3 -1.5 2.5	1.8 2.5 3.0 2.0
Other developed countries	5.1	3.5	3.0	3.0	.9	2.3	-1.5	2.8	(3)
Developing countries	6.3	6.7	7.0	5.5	4.9	1.4	.9	.5	3,5
OPEC 5Other	6.9 6.1	7.7 6.3	9.1 6.3	<b>4.9</b> 5.7	1. <b>8</b> 6.2	-1.2 2.4	~.5 1.5	-1.1 1.0	—.5 3.6
Communist countries 6	4.2	5.1	4.2	2.7	1.4	1.2	2.2	3.8	3.2
U.S.S.REastern Europe	5.0 3.9 2	5.3 3.8 8.3	3.7 4.9 5.6	2.6 1.9 5.9	1.6 3 5.2	1.9 -1.0 3.0	2.6 8 7.4	3.6 1.9 9.0	2.0 1.8 13.0
TOTAL	5.1	5.1	4.0	3.5	1.6	2.4	.0	2.3	(3)

Preliminary estimates.
 Includes the OECD countries, Israel, South Africa, and non-OECD Europe.
 Not available.
 Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.
 Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwalt, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.
 Includes North Korea and Yugoslavia, not shown separately.

Sources: Department of Commerce, International Monetary Fund, Organization for Economic Cooperation and Development (OECD), and Council of Economic Advisers.



