

Economic Report

Economic Report of the President



**Transmitted to the Congress
February 1984**

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

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**ECONOMIC REPORT
OF THE PRESIDENT**

ECONOMIC REPORT OF THE PRESIDENT

To the Congress of the United States:

I have long believed that the vitality of the American economy and the prosperity of the American people have been diminished by inappropriate policies of the Federal Government: unnecessary government regulations that discouraged initiative and wasted scarce capital and labor; an inefficient and unfair tax system that penalized effort, saving, and investment; excessive government spending that wasted taxpayers' money, misused our Nation's resources, and created budget deficits that reduced capital formation and added to the burden of the national debt; and monetary policies that produced frequent business cycles and a path of increasing inflation.

I came to Washington to change these policies. The needed reforms are far from complete, but substantial progress can already be seen: the burden of regulation has been reduced, tax rates have been lowered and the tax structure improved, government spending on a wide range of domestic programs has been curtailed, and a sound monetary policy has been established.

Although the full favorable effect of those reforms on our Nation's rate of economic growth will take time to develop, some of the benefit of our economic policies is already visible in the current recovery. The economy's performance in 1983 was very gratifying to me. The 3.2 percent rise in consumer prices between 1982 and 1983 was the lowest rate of inflation since 1967. The recovery produced a sharp drop in unemployment and a substantial increase in the income of American families. The number of people at work increased by more than 4 million and the unemployment rate fell from a high of 10.7 percent in December 1982 to 8.2 percent in December 1983. The 6.1 percent rise in real gross national product (GNP) last year means that real annual income per person in the United States rose \$700.

Reducing Unemployment

Despite the substantial reduction in unemployment, the number of unemployed workers remains unacceptably high. Continued economic recovery will mean millions of additional jobs in the years ahead and further declines in the rate of unemployment. In 1984 alone, the American economy is expected to add more than 3 million additional jobs. By the end of the decade, we will need 16 million new jobs to absorb a growing labor force. Only a strong and expanding economy

can provide those jobs while achieving a progressively lower level of unemployment over the next 6 years.

Although economic growth is by far the most important way to reduce unemployment, special policies to help the structurally unemployed and particularly disadvantaged groups can also be helpful. To assist these individuals in developing job-related skills that will lead to productive careers in the private sector, I proposed the Job Training Partnership Act that I signed into law in 1982. Last year I proposed additional measures to increase opportunities for training and retraining. Although the Congress has enacted some of my employment proposals, I am still waiting for congressional action on others.

Of particular concern to me is the unemployment among teenagers. Such unemployment is not only a problem in itself, but is also indicative of lost opportunities to acquire on-the-job training and job-related skills. It is widely recognized that the minimum wage law is a substantial barrier to the employment of teenagers, especially minority teenagers. I have proposed that during the summer months the minimum wage for teenagers be reduced to 75 percent of the regular minimum wage. This reform would give many teenagers the opportunity to get a first job and acquire the skills needed to help them with subsequent employment and would not hurt adult employment. With an unemployment rate of nearly 50 percent among black teenagers and with only about 20 percent of black teenagers employed, we must act. The Federal Government must not be the source of barriers to employment.

Inflation and Monetary Policy

Reducing the rate of inflation was my most immediate economic goal when I arrived in Washington. In the preceding 24 months, the consumer price level had increased more than 27 percent. Many people feared the U.S. Government had lost its ability to control inflation. Until inflation was brought under control, a healthy recovery could not get under way.

The inflation rate has declined dramatically over the past 3 years. Between 1982 and 1983, the consumer price index rose only 3.2 percent. Americans can again have confidence in the value of the dollar, and they can save for the future without fearing that the purchasing power of these savings will be destroyed by inflation. I am firmly committed to keeping inflation on a downward path. We must never relax in our pursuit of price stability.

The basic requirement for a continued moderation of inflation is a sound monetary policy. I continue to support the Federal Reserve in its pursuit of price stability through sound monetary policy. Last year was a particularly difficult time for monetary policy because of the

substantial changes in financial regulations. I am pleased that, in spite of these difficulties, the monetary aggregates at the end of the year were within their target ranges. I expect that in 1984 the Federal Reserve will expand the money stock at a moderate rate that is consistent with both a sustained recovery and continuing progress against inflation.

There are those who advocate a fast rate of money growth in an attempt to depress interest rates. Experience shows, however, that rapid money growth inevitably leads to an increased rate of inflation and higher interest rates. The only monetary policy that can bring interest rates down, and keep them down, is one that promotes confidence that inflation will continue to decline in the years ahead.

The Dollar and the Trade Deficit

The high interest rates in the United States and our low rate of inflation continue to make dollar securities an appealing investment for individuals and businesses around the world. In addition, the United States has been an attractive place for stock market investment and for direct business investment. The result has been a continued rise in the dollar's exchange value relative to other currencies of the world.

The sharp rise in the value of the dollar since 1980 has made it cheaper for Americans to purchase products from overseas, thereby helping us fight inflation. But the dollar's sharp rise has made it difficult for American businesses and farmers to compete in world markets. The decline in U.S. exports and the substantial rise in our imports has resulted in record trade deficits in 1982 and 1983. The trade deficit has been temporarily exacerbated by the international debt problems and by the more advanced stage of recovery in the United States than in the world at large.

Despite these problems, I remain committed to the principle of free trade as the best way to bring the benefits of competition to American consumers and businesses. It would be totally inappropriate to respond by erecting trade barriers or by using taxpayers' dollars to subsidize exports. Instead, we must work with the other nations of the world to reduce the export subsidies and import barriers that currently hurt U.S. farmers, businesses, and workers.

I am also firmly opposed to any attempt to depress the dollar's exchange value by intervention in international currency markets. Pure exchange market intervention cannot offset the fundamental factors that determine the dollar's value. Intervention in the foreign exchange market would be an exercise in futility that would probably enrich currency speculators at the expense of American taxpayers. A combination of exchange market intervention and expansionary mon-

etary policy could reduce the dollar's exchange value, but only by causing an unacceptable increase in the rate of inflation. The dollar must therefore be allowed to seek its natural value without exchange market intervention.

Regulation

One of the four key elements of my program for economic recovery is a far-reaching program of regulatory relief. Substantial progress has been made during the last 3 years. The growth of new regulations has been reduced by more than a third. The demands on the private sector of government paperwork have been reduced by several hundred million hours a year. The Congress approved legislation that has led to substantial deregulation of financial markets and intercity bus transportation. The Federal Communications Commission, with our support, has reduced the regulation of broadcasting and of new communications technology, and the Interstate Commerce Commission and the Civil Aeronautics Board have gone far down the path of deregulation of competitive transportation markets. The benefits of these and other deregulation measures are now increasingly apparent to American consumers and businesses.

It is also apparent that substantial further deregulation and regulatory reform will require changes in the basic regulatory legislation. I urge the Congress to act on the several measures that I proposed last year on natural gas decontrol, financial deregulation, and reform of private pension regulation. I remain confident that there is a basis for agreement on measures that would reduce the burden of Federal regulations, while protecting our shared values and not jeopardizing safety.

Tax Reforms

The final installment of the 3-year personal tax cut took effect in July, giving a helpful boost to the economic recovery. The income tax rate at each income level has been reduced by about 25 percent since 1980. In 1984 a median income four-person family will pay about \$1,100 less than it would have without these tax reductions. And, beginning in 1985, the tax brackets will be adjusted automatically so that inflation will no longer push taxpayers into higher brackets and increase the share of their income taken in taxes.

The Economic Recovery Tax Act of 1981 went beyond reducing tax rates to establish important reforms in the structure of the tax system. For businesses, the Accelerated Cost Recovery System increased the after-tax profitability of investments in plant and equipment. The sharp fall in inflation has also increased after-tax profit-

ability. As a result, investment in business equipment has recently been quite strong despite the high real interest rates.

For individuals, the Economic Recovery Tax Act reduced the marriage tax penalty, the estate tax burden, and tax discrimination against saving. The response to the universal eligibility of Individual Retirement Accounts (IRAs) has been far greater than was originally expected. It is estimated that more than 15 million individuals now use IRAs to save for their retirement. Last year, I proposed to expand the opportunity for all married couples to use IRAs fully by allowing them to contribute up to \$2,000 each per year to an IRA even if only one has wage income.

Further improvement and simplification of our tax system are sorely needed. The burden of taxation depends not only on the quantity of tax revenue that is collected but also on the quality of the tax system. I have asked the Secretary of the Treasury to develop a plan of action with specific recommendations to make our tax system fairer, simpler, and less of a burden on our Nation's economy. By broadening the tax base, personal tax rates could come down, not go up. Our tax system would stimulate greater economic growth and provide more revenue.

Government Spending

One of my principal goals when I came to Washington was to reverse the dramatic growth of Federal spending on domestic programs and to shift more resources to our Nation's defense. Although many doubted this could be done, both goals are being achieved. We must do everything that we can to avoid waste in defense as in other areas of government. But we must also be willing to pay the cost of providing the military capability to defend our country and to meet our responsibilities as the leading Nation of the free world. Outlays for defense had declined to only 5.2 percent of GNP in 1980, less than one-fourth of total government outlays. By the current fiscal year, defense outlays have increased to 6.7 percent of GNP and 28 percent of total outlays. Real defense outlays have grown 39 percent since 1980. Our spending on defense, however, remains a far smaller percentage of our national income than it was in 1960, when defense outlays took 9.7 percent of GNP.

Real spending has been cut on a wide range of domestic programs and activities. Many wasteful bureaucratic activities have been eliminated and the number of nondefense employees on the Federal payroll has been reduced by 71,000. We have examined every area of Federal Government spending, and sought to eliminate unnecessary and wasteful spending while protecting the benefits needed by the poor and the aged. As a result, total nondefense spending now takes

a smaller share of our GNP than it did in 1980. Moreover, under present law, nondefense spending will continue to take a declining share of our GNP in the years ahead.

This reduction has been accomplished without any decrease in existing social security benefits or any change in the medicare benefits for the elderly. Spending on all other nondefense activities and programs has actually declined over 12 percent in real terms since 1980. Even with no further reductions in these activities and programs, their share of GNP in 1986 will be nearly back to the level of 1965.

I am committed to continuing the search for ways to reduce government spending. The budget that I am submitting to the Congress identifies significant savings in entitlement programs and reductions in outlays for other programs that are excessive or that are not the proper responsibility of the Federal Government. The Grace Commission has given us some 2500 ways to reduce wasteful spending that could save billions of dollars in the years ahead.

Budget Deficits

I have long believed that our Nation's budget must be balanced. A pattern of overspending by the Federal Government has produced a deficit in 22 of the last 23 years. My most serious economic disappointment in 1983 was therefore the failure of the Congress to enact the deficit reduction proposals that I submitted last January in my budget for fiscal 1984. We would be much closer to a balanced budget today if the Congress had enacted all of the spending cuts that I have requested since assuming office, and if the long recession and the sharp decline in inflation had not substantially reduced real tax revenue. In last year's budget I proposed changes in outlays and revenues that could put the deficit on a sharply declining path that, by 1988, would have been less than 2 percent of GNP and on its way to a balance of revenues and outlays.

The unwillingness of the Congress to accept the proposals that I offered has made it clear to me that we must wait until after this year's election to enact spending reductions coupled with tax simplification that will eventually eliminate our budget deficit. But we cannot delay until 1985 to start reducing the deficits that are threatening to prevent a sustained and healthy recovery. I have therefore called on the Democratic and Republican leaders in the Congress to designate representatives to work with the Administration on the development of a "downpayment" deficit reduction program.

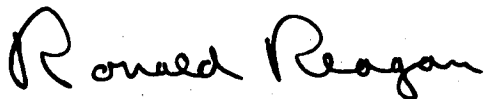
I believe that this bipartisan group could develop a package that could be enacted this spring which would reduce the deficit by about \$100 billion over the next 3 fiscal years. The package could include a number of the less contentious spending cuts that are pending before

the Congress plus additional outlay savings based on the proposals of the Grace Commission. Additional revenue could be provided by measures to close certain tax loopholes—measures that the Department of the Treasury has previously said are worthy of support.

These deficit reductions can increase the public's confidence in our economic future and their faith in the ability of the political system to deal satisfactorily with the deficit. The downpayment package can be a first step toward full elimination of the remaining deficits. Even with a 3-year \$100 billion package, the deficits projected for fiscal 1986 and beyond are totally unacceptable to me. They would be a serious threat to our Nation's economic health and a heavy burden to future generations. I am committed to finding ways to reduce further the growth of spending and to put the budget on a path that will lead to a balance between outlays and receipts. In 1985 I will submit a budget that can achieve this goal. But we must go further and make basic structural reforms in the budgetary process—including the line-item veto and the balanced budget amendment—that will keep spending under control and prevent deficits in the future.

Looking Ahead

As I look ahead, I am very optimistic about the prospects for the American economy. Substantial progress has been made in reforming the economic policies that will shape our economic future. If we continue to develop and pursue sound policies, our Nation can achieve a long period of strong economic growth with low inflation, and the American people can enjoy unprecedented prosperity and economic security.

A handwritten signature in dark ink, reading "Ronald Reagan". The signature is written in a cursive, flowing style with a large, prominent "R" at the beginning.

February 2, 1984

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

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., January 31, 1984.

MR. PRESIDENT:

The Council of Economic Advisers herewith submits its 1984 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.

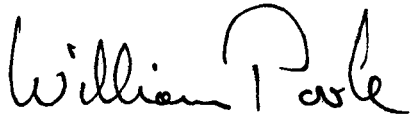
Sincerely,

A handwritten signature in black ink that reads "Martin Feldstein". The script is fluid and cursive, with the first name and last name clearly legible.

Martin Feldstein
CHAIRMAN

A handwritten signature in black ink that reads "William A. Niskanen". The signature is written in a cursive style, with the first name and last name clearly legible.

William A. Niskanen

A handwritten signature in black ink that reads "William Poole". The signature is written in a cursive style, with the first name and last name clearly legible.

William Poole

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CHAPTER 1

The Strategy of Economic Policy

THE ECONOMIC RECOVERY IN 1983 was a very favorable combination of rising output, falling unemployment, and declining inflation. These economic improvements and the long-term economic strategy that the Reagan Administration has been pursuing since 1981 are a welcome change for the American economy.

The Administration's redirection of economic policy was a necessary antidote to the poor economic performance of the 1970s. The real earnings per week of the average employee were actually lower in 1980 than they had been a decade earlier. The unemployment rate doubled between the end of the 1960s and the start of the 1980s. The level of consumer prices more than doubled and the rate of inflation increased from 5.5 percent in 1970 to 12.4 percent in 1980. Net private capital investment declined from 7.1 percent of gross national product (GNP) in the 1960s to 6.4 percent of GNP in the 1970s and only 4.1 percent of GNP in 1980.

During these same years, the government expanded and tax burdens rose. Federal Government outlays for all nondefense programs rose from 10.3 percent of GNP in 1970 to 15.1 percent in 1980. Total Federal outlays rose from 20.2 percent of GNP to 22.4 percent of GNP despite the sharp fall in the GNP share devoted to defense.

Although Federal tax receipts took one-fifth of GNP in both 1970 and 1980, many taxpayers found themselves pushed by inflation into higher marginal tax brackets despite the absence of any rise in real income. A two-earner family earning twice the median income faced a marginal tax rate that was 26 percent in 1970 but 43 percent in 1980. The number of taxpayers facing marginal tax rates of 50 percent or higher rose more than five-fold during the decade. Inflation not only pushed people into higher tax brackets, but also distorted the measurement of interest income and capital gains, causing dramatic increases in the effective tax rates on real income from savings.

Nevertheless, the Federal budget moved from a position of near balance in 1970 (a deficit of only 0.3 percent of GNP) to a deficit of 2.3 percent of GNP in 1980.

By 1980 there was widespread agreement that the direction of economic policy had to be changed if economic performance was to im-

prove. The accelerating growth of the money stock would have to be slowed in order to bring down inflation. The high marginal tax rates would have to be reduced and the tax structure reformed in order to lower the adverse effects on the incentives to work, save, invest, and take risks. The share of government domestic spending in GNP would have to be reduced in order to decrease the distorting effects of government programs, raise defense outlays, and reduce the budget deficit.

These aims guided the formation of the Administration's economic policy in 1981 and in the years since then. Now, 3 years later, monetary policy has been successful in reducing the rate of inflation. Government spending on domestic programs has been reduced to a smaller share of national income. Tax rates have been lowered and the tax system has been improved.

This chapter begins with a brief review of the economic recovery of 1983; a more complete analysis is presented in Chapter 6. Here the primary focus is on the strategy of economic policy. Three elements of the Administration's long-term economic strategy will be discussed: sound monetary policy, reduced government spending on domestic programs, and a tax structure that is conducive to individual initiative and economic growth. The fourth facet of the Administration's economic strategy, the reduction in regulation, was discussed in detail in the 1983 *Economic Report*; the deregulation of financial markets is the subject of Chapter 5 of this year's *Report*. The final section of the present chapter describes the medium-term problem of reducing the projected budget deficits.

ECONOMIC RECOVERY

The inherent vitality of the American economy was amply demonstrated in 1983. In this first full year of economic recovery, real GNP rose 6.1 percent and business output climbed 7.0 percent. Industrial production rose 16.3 percent in the 13 months following its November 1982 low, and the capacity utilization rate in manufacturing bounced back from 68.8 percent to 79.4 percent during this same period.

Civilian employment rose by 4.0 million in 1983 and the civilian unemployment rate declined from 10.7 percent in December 1982 to 8.2 percent a year later. Although unemployment remains unacceptably high, the progress in raising employment and reducing unemployment in virtually every demographic group has been gratifying. Civilian employment rose 4.0 percent between December 1982 and December 1983, while employment among blacks rose 5.0 percent and among teenagers rose 1.7 percent. The unemployment rate de-

declined 2.5 percentage points, while the unemployment rate for blacks declined 3.1 percentage points and for teenagers declined 4.2 percentage points. Despite this progress, it is clear that more than cyclical recovery will be needed to reduce the very high unemployment rates among these problem groups. The Administration's employment and training policies and proposals (discussed in detail in Chapter 2 of the 1983 *Economic Report*) offer several ways of helping these individuals and others with temporary unemployment problems to find work.

The sharp increases in output and employment were accompanied by an inflation rate that was even lower than in the previous year. The GNP implicit price deflator rose only 4.1 percent in 1983 after rising 4.4 percent in 1982 and more than 8.7 percent in 1981. The consumer price index at the end of 1983 stood only 3.8 percent above the level of a year earlier, after rising 3.9 percent in 1982, 8.9 percent in 1981, and more than 12 percent in 1980. And the index of producer prices for finished goods rose only 0.6 percent in 1983, the smallest increase in nearly two decades and far below the 3.7 percent in 1982, 7.1 percent in 1981, and 11.8 percent in 1980.

The decline in price inflation accompanied smaller nominal wage increases and a slower rise in nominal compensation per hour. The 5.6 percent increase in compensation per hour was the slowest rise since 1967. In combination with the substantial cyclical improvement in productivity, the slow rise in compensation raised unit labor costs only 2.4 percent in 1983, far below the 7.9 percent rise in 1982 and the lowest since 1965.

Despite the slow rise in nominal compensation per hour, the low rate of inflation meant that real earnings and incomes increased significantly. Real average weekly earnings rose 2.5 percent in the 12 months to December 1983, after rising 0.5 percent in 1982 and declining in each of the 4 preceding years. Real personal income per capita rose 3.0 percent between the final quarter of 1982 and the final quarter of 1983 after rising a total of only 1.4 percent in the entire 3-year period between 1979 and 1982.

A significant problem in the otherwise outstanding recovery was the sharp decline in net exports. American imports rose while our exports of goods to the rest of the world declined. The U.S. merchandise trade deficit—the excess of imports of goods over our exports of goods—reached a record of about \$65 billion in 1983, nearly twice 1982's record level of \$36 billion. This trade deficit, and the even larger trade deficit projected for 1984, reflects several causes, including the decline of imports among less developed countries and the relatively advanced stage of the U.S. recovery, but of primary importance is the high real value of the dollar relative to other currencies.

(For discussion of the trade deficit and the high dollar, see Chapter 2).

MONETARY POLICY

The fundamental guiding principle of the Administration's approach to monetary policy is that the rate of growth of the money stock should be reduced gradually until the rate is consistent with price stability. This principle is consistent with the general approach enunciated in recent years by the independent Federal Reserve.

Controlling the growth of the money stock may be viewed as a means of achieving a desirable path of nominal GNP. Because the growth of nominal GNP tends to follow the growth of the money stock, this strategy of monetary policy can be expected to be consistent with a gradual decline in the trend rate of growth of nominal GNP, although the mix of real growth and inflation is subject to other influences. In the remaining years of this decade, this decline in the rate of growth of nominal GNP should be compatible with both a continuing growth of real GNP and a continuing decline in the rate of inflation.

Last year's *Economic Report* discussed the difficulty of applying the principle of steady monetary deceleration in a time of rapid institutional change. An appropriate monetary policy must balance the principle of steady monetary deceleration with the need to take account of changes in asset preferences or institutional arrangements that cause sustained shifts in the velocity of money, i.e., sustained shifts in the ratio of nominal GNP to the money stock. There are, however, many uncertainties about the timing, magnitude, and direction of the effects of such financial changes on velocity.

The year 1983 was a time of significant change in financial regulations that substantially altered the nature of the monetary aggregates (M1, M2, and M3) and the pattern of portfolio demand for monetary assets. In December 1982 depository institutions were permitted to offer money market deposit accounts, a form of small-denomination time deposit with no limit on the permitted interest rate. These deposits are classified as a part of M2. Beginning in January 1983, Super-NOW accounts—checkable deposits with no ceiling on the interest rate—were permitted. These accounts are classified as part of M1.

The desirability of stable money growth rests on the stability of the demand for money relative to the stability of other relationships in the economy, and on the role of stable money growth in reducing inflationary expectations. A change in the available mix of financial assets or in the characteristics of the monetary aggregates may

change the equilibrium ratios of nominal GNP to the monetary aggregates. The Federal Reserve can in principle adjust the supply of money to compensate for the shift in demand without altering the degree of liquidity in the economy or, equivalently, the likely growth of nominal GNP; however, because of the uncertainties mentioned above in practice it is often difficult to do so. As an example of these uncertainties, it is not clear at this time the extent to which the increases in the monetary aggregates in the early part of 1983 reflected demand shifts that will produce a sustained shift in the velocity of money.

In 1983 especially, there was no way to know by exactly how much the financial deregulation changed the demand for each of the monetary aggregates. The Federal Reserve appears to have followed a relatively passive strategy during the early months of the year, not putting pressure on bank reserves. This policy had the effect of not putting much pressure on interest rates. Between December 1982 and May 1983, the monthly average of the 91-day Treasury bill rate varied between 7.9 percent and 8.4 percent. After May, however, the Federal Reserve permitted short-term interest rates to increase.

The Federal Reserve's approach to the very difficult task of adjusting the monetary policy to the new regulatory environment permitted major adjustments to occur in 1983 with minimal disruption in the financial markets. Some observers, however, are concerned that the rapid expansion of the monetary aggregates in early 1983 may lead to much higher inflation by the end of 1984. Some also fear that the slow growth of M1 in the second half of 1983 may cause output growth to decline sharply, or even turn negative, by the middle of 1984. All that can be said with certainty at this time is that monetary policy has come through a very difficult year of substantial deregulation without destabilizing either real growth or inflation in 1983. It may be noted also that on the basis of data currently available, all three monetary aggregates ended the year 1983 inside the target ranges that the Federal Reserve had established in February for M2 and M3 and in July for M1.

All too often at this stage of an economic recovery, as growth slows from the unsustainable pace of the recovery's first year, political pressures have built to try to reduce interest rates through raising money growth. The Administration rejects calls to abandon a sound monetary policy. Interest rates cannot prudently be lowered by creating more money. The Administration recognizes that if the Federal Reserve were to try to maintain a strong recovery through excessive expansion of money and credit the rate of inflation would inevitably rise and undercut the prospect for sustained growth of employment and output.

The Administration desires a steady growth of real GNP and a gradually declining inflation rate. The monetary policy consistent with this outcome is expected to be one of gradually declining rates of growth of the monetary aggregates. Although no regulatory changes comparable to those of 1982 and 1983 are expected, future shifts in institutional arrangements could cause changes in velocity that would require a recalibration of the money growth targets. It is important that any such recalibration be made only in response to a significant and persistent shift in velocity.

GOVERNMENT SPENDING

The second major aspect of the Administration's economic strategy is to reduce the burden of government domestic spending. For the first time in a half century, total appropriations for domestic programs began a sustained decline in real terms and total Federal spending on all nondefense programs began to take a declining share of the Nation's potential output.

In 1929, Federal Government spending was only 3 percent of GNP. But the Great Depression ushered in a new era for American Government. In the half century after 1930, government spending exploded. By 1960 nondefense spending (excluding interest payments) by the Federal Government was 7.5 percent of GNP. Even after adjusting for inflation, the Federal Government spent nearly four times as much on nondefense programs in 1980 as it had spent in 1960. Between 1930 and 1980 there was a dramatic increase in the role of the government and of government outlays in American economic life.

Of course, not all government outlays represent government purchases of goods or services. By 1980, 56 percent of Federal Government expenditures were transfers to individuals or to State and local governments. But transfers as well as direct purchases shift the use of the economy's resources and require a sacrifice by present or future taxpayers.

The speed at which many of the outlays grew was itself unintended and unanticipated, reflecting the so-called "entitlement" character of many of the programs introduced or modified in the 1960s or early 1970s. In such programs, the basic legislation does not appropriate a fixed amount of money for a particular purpose, but establishes rules that define who is eligible for benefits and the nature and amount of the benefits for which each person is eligible. Funds must then be made available for these benefits.

The medicare program is a good example of the unintended and unanticipated growth in outlays. Medicare was introduced in 1966

and immediately experienced costs that were far greater than had been generally anticipated. A decade ago, medicare outlays were less than \$10 billion; in the current fiscal year, they will exceed \$50 billion. Medicare actuaries now project that by 1989 the cost of the program will exceed \$100 billion, or more than 2 percent of GNP. The dramatic growth of this program reflects greater utilization of health care services than had been anticipated and a very much faster rise in the cost of hospital care than had been forecast. For example, the cost of a day of hospital care, relative to all consumer prices, rose 67 percent in the decade before medicare was introduced, but jumped more than 100 percent in the decade after medicare began. This very rapid rise in the real cost of a day of hospital care reflected primarily the use of more personnel, equipment, and supplies for every patient. The increase in utilization and the rapid rise in costs were not accidents of history but were in large part a direct response to the medicare program itself.

The medicare example is paralleled in a wide variety of other programs in such disparate areas as housing, nutrition, and disability insurance. Other new programs were enacted and old programs expanded without a proper understanding of the future burdens that they would impose on the economy. The members of the Congress who enacted these programs and the analysts who advised them frequently underestimated substantially the future costs of the programs that they were creating. They failed to anticipate that introducing new programs or liberalizing old program rules would markedly change economic behavior—that a higher level of retirement benefits would significantly reduce the average age of retirement, that the introduction of medicare and medicaid would contribute to an explosive growth of hospital costs, and that the more generous provision of disability benefits would be followed by a four-fold increase in the number of persons collecting disability checks.

In addition to underestimating future program costs, many analysts in the 1960s and early 1970s also overestimated the future growth of economic resources with which to pay for them. The first half of the 1960s was a period of unusually rapid economic growth, with real GNP rising at a 4.7 percent annual rate. In the mid-1960s, when the Great Society programs were launched, and even in the late sixties and early seventies, there was a comforting but mistaken assumption that continued rapid growth would make it easy to finance an ever-increasing level of government spending. Unfortunately, the real rate of growth fell from the 4.7 percent experienced in the first half of the 1960s to 2.8 percent in the years since then. If that earlier rate of growth had continued, real GNP would now be nearly 40 percent

higher and, with current tax and expenditure rules, the Federal budget would now be in substantial surplus.

If the public had foreseen the future costs of the expanded social programs or the modest rate of economic growth during the past two decades, the Congress might not have enacted all of those programs and government would be smaller today. But once those programs were started, it became extremely difficult to stop them or even to reduce the level of benefits.

THE DECLINE OF DOMESTIC SPENDING

Between 1960 and the end of the 1970s, government outlays on nondefense programs nearly doubled as a share of GNP. The government took a larger and larger share of the typical family's income and used it to finance programs that came to be widely regarded as neither generally useful nor directed at the truly needy. Many observers concluded that many well-intentioned programs were actually often exacerbating the very problems that they set out to solve and usually creating adverse side effects of their own.

Since 1980 there has been a remarkable revolution in government spending. Social security benefits now take a decreasing share of GNP and all nondefense spending other than social security and medicare has already declined significantly as a share of GNP. Table 1-1 presents Federal Government outlays and receipts as percentages of GNP in fiscal years 1960, 1970, and 1980 through 1989. The values for 1984 through 1989 reflect current services levels for all domestic programs, the Administration's 1984 budget proposal for defense, and the economic assumptions with respect to real growth and interest rates used in the Administration's current budget calculations. (These economic assumptions are discussed in detail in Chapter 6.)

Spending on social security benefits (including disability benefits as well as benefits for retirees and dependents) rose dramatically from 2.3 percent of GNP in 1960 to 5.3 percent in 1983. Although social security benefits will continue to grow in the future because of the increased number of retirees and rising benefit levels, the social security share of GNP has begun to decline and will shrink to 4.7 percent of GNP over the next 5 years.

The reduced share of GNP spent on all nondefense programs except social security and medicare (line 5 of Table 1-1) has been even more dramatic. In 1980 government spending on these activities took 9.3 percent of GNP. In the 1984 fiscal year, that share is down to 7.5 percent of GNP, a decline of one-fifth.

Between fiscal years 1980 and 1984 real government spending on all nondefense activities except social security and medicare will have

TABLE 1-1.—*Budget outlays and receipts as percent of GNP, fiscal years 1960, 1970, and 1980-89*

[Percent; fiscal years]

Item	Actual						Estimates							
	1960	1970	1980	1981	1982	1983	Current services						Policy 1989	
							1984	1985	1986	1987	1988	1989		
Total outlays	18.5	20.2	22.4	22.8	23.8	24.7	24.0	24.3	24.1	23.8	23.4	23.0	22.1	
National defense	9.7	8.4	5.2	5.5	6.1	6.5	6.7	7.3	7.6	7.7	7.7	7.8	7.6	
Net interest	1.4	1.5	2.0	2.4	2.8	2.8	3.0	3.0	3.0	3.0	2.8	2.6	2.4	
Other	7.5	10.3	15.1	15.0	15.0	15.4	14.3	14.0	13.4	13.1	12.9	12.6	12.1	
Non-OASDHI	5.1	6.5	9.3	8.8	8.4	8.4	7.5	7.2	6.7	6.4	6.2	5.8	5.5	
OASDHI	2.3	3.8	5.8	6.2	6.6	6.9	6.8	6.7	6.7	6.7	6.7	6.7	6.6	
Social security	2.3	3.1	4.6	4.8	5.1	5.3	5.0	4.9	4.8	4.8	4.7	4.7	4.6	
Medicare	0	.6	1.2	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.1	1.9	
Total receipts	18.6	19.9	20.1	20.8	20.2	18.6	18.7	19.0	19.0	19.0	19.3	19.4	19.8	
OASDHI	2.1	3.9	5.3	5.6	5.8	5.7	5.9	6.1	6.1	6.2	6.5	6.6	6.7	
Other	16.4	16.0	14.8	15.2	14.4	12.9	12.9	12.9	12.9	12.9	12.9	12.8	13.1	
Deficit	—1	.3	2.3	2.0	3.6	6.1	5.3	5.3	5.1	4.8	4.1	3.6	2.3	

Sources: "Budget of the United States Government, Fiscal Year 1985" and Council of Economic Advisers.

fallen by 12.5 percent. This real 4-year decline, which includes outlays for everything from entitlement programs to the administrative costs of running government departments, is absolutely unprecedented. During each of the five 4-year periods between 1960 and 1980, this spending rose between 11 percent and 38 percent even after adjusting for inflation

The changes that have been enacted since 1980 mean that the share of GNP spent on all nondefense activities except social security and medicare will continue to decline in the future even if the Congress adopts no further spending cuts. By fiscal 1986 this domestic spending share will be down to 6.7 percent of GNP and therefore back to the same GNP share that such nondefense spending took in the late 1960s. This decline as a percent of GNP means that total spending on these nondefense government activities will average \$84 billion less a year in the 3 fiscal years from 1984 through 1986 than it would have if the 9.3 percent GNP share of 1980 had continued. Although future spending could of course be increased by legislative action, it is significant that the Congressional Budget Resolution for 1984 through 1986 also called for essentially this same declining share of GNP.

Moreover, under current law this spending share will continue to decline to only 6.2 percent of GNP by 1988, back to the level of the early 1960s. And this lower level of outlays means savings that aver-

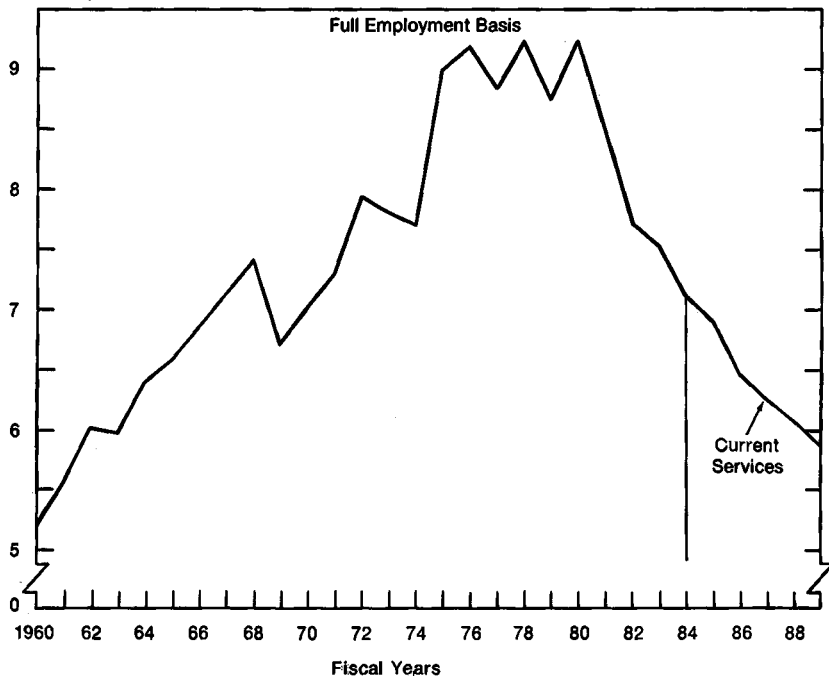
age \$157 billion a year from 1987 through 1989 relative to what would have been spent if the 1980 share of GNP had been maintained.

Chart 1-1 shows the share of potential GNP that nondefense spending excluding social security and medicare would represent at full employment. The growth in the 1960s and 1970s of these outlays will have been almost completely reversed by 1989.

Chart 1-1

Nondefense Non-Interest Spending Excluding OASDHI

Percent of potential GNP



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

These projected spending reductions relative to the 1980 GNP share reflect the current rules of entitlement programs and the assumption that the Congress will continue to appropriate funds to maintain the current level of service for all programs governed by annual appropriations. The President's 1985 budget proposes additional reductions in nondefense spending in each year from 1985 through 1989. These spending reductions total an additional \$74 billion.

Total nondefense government spending as a share of GNP, including social security and medicare as well as all other domestic programs, is now falling and will, on the basis of current law and the current services levels of annually appropriated programs, decline from 15.1 percent of GNP in 1980 to 12.6 percent of GNP in 1989. This decline represents an annual saving of more than \$138 billion a year in 1989.

One implication of the very substantial reduction in nondefense spending is that it permits an increase in defense spending without an equal increase in tax revenue. The Administration's budget calls for a rise in defense spending from 5.2 percent of GNP in 1980 to 7.6 percent of GNP in 1989. For comparison, defense spending was 8.4 percent of GNP in 1970 and 9.7 percent of GNP in 1960.

Unfortunately, the rapid rise in interest on the national debt will absorb a substantial share of the budget savings achieved by reduced domestic spending. The net interest paid by the government will increase from 2.0 percent of GNP in 1980 to 2.6 percent in 1989, even if the rate of interest on Treasury bills declines from the current level of nearly 9 percent to less than 6 percent by the end of 1989.

Putting these pieces together shows that nondefense spending excluding social security and medicare will decline by 3.5 percent of GNP between 1980 and 1989 while defense spending will rise by 2.6 percent of GNP and the net interest paid by the government will rise by 0.6 percent of GNP. The reduction in domestic outlays financed by general revenues is thus slightly more than sufficient to balance the increase in defense spending and interest costs, leaving total outlays excluding social security and medicare virtually unchanged as a share of GNP.

Despite the dramatic progress in reducing spending on domestic programs, government outlays are still projected to equal 23 percent of GNP in 1989, about 3 percentage points higher than in 1970 and 5 percentage points higher than in 1960. This increase in outlays does not reflect greater defense spending, because the GNP shares devoted to defense would actually be lower in 1989 than in either 1970 or 1960. The rapid growth of social security and medicare outlays (from 2.3 percent of GNP in 1960 to 3.8 percent of GNP in 1970 and 6.7 percent of GNP in 1989) accounts for nearly all of the increases in outlays as a fraction of GNP since 1960 and 1970. The additional source of increased outlays, the rise in interest payments on the national debt, will be more than offset by the fall in defense spending as a share of GNP between 1960 and 1989.

These are the fundamental facts that define the budget dilemma. Despite the remarkable reduction in domestic spending on a wide range of activities, the growth of the social security and medicare

programs raises the share of Federal Government outlays in national income. With the budget balanced in 1960 and with taxes taking the same share of GNP in 1984 as in 1960, the growth of spending since then implies large budget deficits. Before discussing the problem of the budget deficit, this chapter considers the changes in the nature of the tax system that have occurred in the past 3 years.

THE CHANGE IN TAX STRUCTURE

The third principal part of the Administration's economic strategy is to reduce the tax burden and restructure the tax system. The Economic Recovery Tax Act passed in 1981 substantially changed the quantity and quality of taxation. It reduced personal income tax rates by a cumulative 23 percent over 3 years. Special provisions reduced the tax on two-earner families, introduced the indexing of tax bracket and personal exemptions, and lowered the effective tax rates on income from saving and investment. The total Federal taxes paid by a median-income family, including both the personal income tax and the social security payroll taxes, will be \$1,750 lower in 1984 than they would have been without the tax cuts. These changes represent a reduction of 36 percent in Federal income tax liabilities and of 26 percent in total tax liabilities.

The total share of GNP taken by taxes has come down significantly (see Table 1-1, line 9). In fiscal 1980, all Federal taxes took 20.1 percent of GNP. In the current fiscal year, this tax share will be 18.7 percent of GNP. Continuing economic recovery and the rise in social security payroll taxes will raise the tax share of GNP to 19.4 percent by 1989, if there are no further legislative changes. Without the 1981 changes, the tax share would have risen substantially from the 20.1 percent share of 1980.

These tax reductions occurred despite the rise in the social security payroll tax. If the social security payroll tax is excluded, the reduction in all other taxes has been even greater, falling from 14.8 percent of GNP to 12.9 percent of GNP. This fall is equivalent to a \$68 billion tax cut in 1984 alone.

The tax changes in the past 3 years have, however, gone far beyond reducing the amount of taxes and have achieved fundamental improvements in the nature of the tax system. The tax burden on the economy depends not only on the quantity of taxes but also on the quality. Although most taxes have adverse economic effects, some taxes are more harmful than others. Taxes are undesirable not only because they take away the fruits of labor, of risk-taking, and of saving, but also because they distort economic decisions and thereby lead to a wasteful misallocation of resources. Although there is no

simple rule for improving the quality of taxes, there are a few useful principles. The most basic principle is to minimize the tax-induced distortions of economic choices—choices about which goods to buy, how much to work, how hard to save, and how to invest the capital that results from savings. A key implication of this principle is that the marginal tax rates paid on additional income or profits are more important than the average tax rates. A second implication is that taxes do more harm when levied on individuals or activities that are more responsive to tax rules. Taxes that reduce the incentive to save or that cause a misallocation of capital among different uses are particularly undesirable, because they unnecessarily increase the total economic burden of the tax system and reduce productivity and economic growth.

The 1981 tax changes improved the quality of the tax system in several ways. The top marginal individual income tax rate was reduced from 70 percent to 50 percent and marginal tax rates at all income levels were reduced nearly one-fourth. Moreover, the reduced tax rates for two-earner families focuses tax relief on married women, a group whose labor supply is known to be particularly sensitive to tax rates.

In addition to reducing marginal tax rates, the Economic Recovery Tax Act provided for the indexing of tax brackets, beginning January 1985, to prevent inflation from pushing individuals into brackets with higher marginal tax rates. Without indexing, a decade of 5 percent inflation would more than offset the 23 percent reduction in tax rates.

Perhaps the most fundamental change has been in the taxation of personal saving. The American tax system has long been biased against saving and in favor of current consumption. The tax law changes in the Economic Recovery Tax Act represent a major shift away from this antisaving bias. The universal extension of eligibility for Individual Retirement Accounts (IRAs), the expansion of IRA and Keogh plan limits, the reduced tax rates on investment income, and other specific changes should spur private saving in the years ahead.

The favorable effect of these tax changes on saving can be expected to occur only gradually. At first, by transferring previously saved funds from existing accounts, many individuals can deposit the maximum \$2,000 a year to an IRA without doing any additional saving. Some individuals may extend this period by borrowing. But, after a few years, most taxpayers will have exhausted all previously accumulated funds; they can then make additional IRA contributions only if they save more.

The new tax treatment of saving represents something far more basic than just an increased stimulus to saving. The universal availability of IRAs and the increase in IRA and Keogh limits will allow most American taxpayers to pay tax only on that part of their income that they do not save—that is, only on the part of their income that they consume. It is also true that two-thirds of taxpayers do not itemize deductions and therefore cannot deduct interest expenses. Thus, for most Americans, the income tax system has now been virtually transformed into a consumption tax. This is a very fundamental change in the character of our tax system.

An indirect but important source of reduction in the effective tax rate on the income from savings has been the fall in the rate of inflation. Because our tax law bases tax liability on nominal interest income and nominal capital gains, a lower rate of inflation implies a substantial reduction in the effective rate of tax. An individual in the 30 percent tax bracket who earns a 15 percent nominal interest rate when the inflation rate was 10 percent had an after-tax nominal yield of 10.5 percent and an after-tax *real* yield of only 0.5 percent. By contrast, if the individual earns a nominal 10 percent interest rate when the inflation rate is 5 percent, the nominal after-tax yield is 7 percent and the real after-tax yield is 2 percent. The effective tax rate on the same real interest income falls from 90 percent when inflation is 10 percent to 60 percent when inflation is 5 percent. With no inflation and an interest rate of 5 percent, the effective tax rate would fall to 30 percent and the real after-tax rate of return would be 3.5 percent, or 7 times as great as it was with a 10 percent inflation rate.

The tax climate for business investment has also been substantially improved in the past 3 years. During the 1970s the rising rate of inflation combined with the old depreciation rules to raise very substantially the effective rate of tax on the income from investment in business plant and equipment. The 1981 changes in the tax rules governing depreciation, as modified in the Tax Equity and Fiscal Responsibility Act, and the sharp decline in inflation reduced this effective tax rate substantially. The result is higher after-tax rates of return on business investment, and therefore a renewed incentive to invest in plant and equipment.

The present strength of business investment in the face of very high real rates of interest can be attributed at least in part to the lower effective tax rates on business income and the higher real after-tax rates of return that result. What matters for investment is not just the rate of interest or the profitability of investment, but the difference between the net-of-tax real cost of funds and the after-tax real profitability of investment.

Similarly, the strength of the stock market in the face of very high real interest rates reflects in part the improved after-tax profitability that investors now expect. Indeed, one way to explain the current level of investment is to note that the change in business tax rules has raised the value in equity markets of new physical capital (or, equivalently, reduced the cost of equity capital to finance new investment). This has stimulated business to increase its investment.

The recent reductions in high marginal tax rates and the improved tax treatment of saving and investment represent major improvements over earlier tax rules. Much more can and should be done, however, to reduce the adverse effects of the tax system on individual and business incentives and therefore on the potential income and growth of the economy. The President has emphasized his interest in further improvements of the tax law. The Administration will continue to examine possible directions for tax reform and will propose reforms aimed at making the tax system simpler, fairer, and more efficient.

REDUCING THE BUDGET DEFICIT

Despite the dramatic reduction in the share of national income taken by government domestic spending and the fundamental improvement in the character of our tax system, the Nation still faces the serious potential problem of a long string of huge budget deficits. Vigorous economic growth can eliminate the cyclical component of the deficit. But without legislative action, the structural component is likely to grow just as fast as the cyclical one shrinks. The Administration's economic projections imply that the budget deficit will remain roughly \$200 billion a year—or about 5 percent of GNP—for the rest of the decade unless there is legislative action to reduce spending or raise revenue. Deficits of that size would represent a serious potential threat to the health of the American economy in the second half of this decade and in the more distant future.

DEFICIT PROJECTION

The cyclical component of the budget deficit is the part of the deficit that occurs because the unemployment rate exceeds the inflation threshold level of unemployment, i.e., the minimum level of unemployment that can be sustained without raising the rate of inflation. This excess unemployment raises the deficit by depressing tax revenues and by increasing outlays on unemployment benefits and other cyclically sensitive programs.

The remaining part of the budget deficit, known as the structural component, is the amount of the deficit that would remain even if

the unemployment rate were at the inflation threshold level. The Administration estimates that the inflation threshold level of unemployment is now 6.5 percent and will decline in the coming years as the relative number of inexperienced workers declines and as the Administration's employment policies are enacted and take effect.

Table 1-2 presents the cyclical and structural components of the budget deficit for 1980 through 1989. The 1983 deficit of \$195 billion was divided about evenly between the cyclical and structural components. Because of the lower level of unemployment projected for 1984, a much larger share of the current year's deficit is structural. The projected deficit of \$187 billion includes a cyclical component of \$49 billion and a structural component of \$138 billion. By 1989, the entire projected budget deficit is structural.

TABLE 1-2.—*Cyclical and structural components of the deficit, fiscal years 1980-89*

(Billions of dollars)

Fiscal year	Total	Cyclical	Structural
Actual:			
1980	60	4	55
1981	58	19	39
1982	111	62	48
1983	195	95	101
Estimates (current services):			
1984	187	49	138
1985	208	44	163
1986	216	45	171
1987	220	34	187
1988	203	16	187
1989	193	-4	197

Sources: *Budget of the United States Government Fiscal Year 1985* and Council of Economic Advisers.

A rate of economic growth for the next 5 years that is sufficiently greater than the growth forecast by the Administration and by virtually all private forecasters could in principle eliminate the deficit without legislative action. However, a 1 percent increase in the current level of real GNP would reduce the budget deficit by only about \$12 billion. It would require an increase of 40 percent in the projected growth rates over the next 6 years to eliminate the budget deficit by the end of the decade without a change in spending or tax rules. It would clearly be unwise to rely on such an unprecedented and improbably fast rate of growth. A prudent policy at this point must assume that economic growth alone will not eliminate these deficits.

The economic assumptions that are used to project the budget outlays and receipts are based on the premise that there will be a

sound monetary policy and that future legislative changes will reduce budget deficits sharply in the years ahead. In the absence of legislative changes to reduce deficits substantially in future years, interest rates will be higher than projected and the real growth rate will probably be lower than projected. The budget calculations assume that real GNP grows at an average annual rate of 4.3 percent from 1983 to 1989. The calculations also assume that the Treasury bill rate will fall from the current 8.9 percent to 5.0 percent by 1989. These assumptions are reasonable if the budget deficit in that year is about 1.5 percent of GNP and is moving toward complete balance. But if legislative changes to reduce outlays and increase receipts are not enacted and the Treasury bill rate remains at its current level, the higher interest payments on the national debt will raise the 1989 deficit by about \$60 billion, bringing the total deficit in that year to approximately \$250 billion. Growth rates of real income slower than those assumed in the budget calculations would raise the deficit even more.

LONG-TERM CONSEQUENCES

The projected budget deficits would directly and substantially increase the future size of the national debt. If legislative action is not taken, the cumulative budget deficit would be more than \$1,100 billion over the next 6 years. The annual interest on this extra debt alone would represent a permanent cost of about \$60 billion in 1989, if interest rates fall as assumed, or at least \$100 billion a year if the interest rates remain at their present level. These amounts are equivalent to between 10 percent and 17 percent of the personal and corporate income tax revenue now projected for 1989.

This growth of the national debt and the interest on the national debt shows that budget deficits do not eliminate the need for spending cuts or tax increases, but just postpone the time when extra spending cuts or larger tax increases must take effect to pay for current deficits.

The most important long-term economic effect of the prospective budget deficits would be to absorb a large fraction of domestic saving, and thereby reduce the rate of capital formation and slow the potential long-term growth of the economy. Federal borrowing to finance a budget deficit of 5 percent of GNP would absorb about two-thirds of all the net domestic saving that would otherwise be available to finance investment in plant and equipment and in housing.

The reduced availability of investable funds means that the real rate of interest must rise until the demand for funds for private investment is reduced to the available supply. Stated more generally, the real net-of-tax cost of capital must increase relative to the real

net-of-tax return on capital until the demand for funds is reduced to the available supply.

Although the 1981 tax changes and the reduced rate of inflation will direct a higher share of the remaining capital formation to business investment and away from owner-occupied housing, the effect of the budget deficits nevertheless would be a lower rate of investment in business plant and equipment as well as in housing.

Each dollar of additional budget deficit does not necessarily reduce capital accumulation by a dollar. The actual impact varies over time, with less crowding out of capital formation likely in the first year or two after an increase in the budget deficit than in subsequent years. This is particularly so when, as in recent years, the increase in the budget deficit occurs when there is substantial excess capacity in the economy.

The current situation also shows how the extent of the crowding out of capital formation in the United States can be temporarily reduced by an inflow of foreign funds that are attracted to the United States by the rise in our real interest rate and increased real after-tax return on equity investments. This capital inflow usually begins after a lag, rises to a peak, and eventually shrinks. Even if the budget deficit remains at a high level, the inflow of capital from abroad eventually contracts as foreigners become increasingly unwilling to hold even more U.S. assets in their portfolios.

If the current services budget deficits that are currently projected were actually to occur, the likely result would be to reduce net investment in plant and equipment to a substantially lower share of GNP than prevailed in the 1960s and 1970s. Net private investment has fallen from 6.7 percent of GNP in the three-decade period through 1979 to only 3.2 percent of GNP in the past 3 years. Much of this decline is attributable to the stage of the business cycle. The 1983 deficit strengthened the recovery and thereby boosted business fixed investment, although the government's competition for funds to finance the structural deficit also depressed the level of investment below what it would otherwise have been.

DEFICITS AND THE RECOVERY

The deficits will have effects on the economic recovery as well as on the capital stock and on long-term economic growth. To understand the effect of budget deficits on the economic recovery, it is important to distinguish the deficits in the early years of the recovery from the deficits that are projected for subsequent years. Although the projected future deficit would be likely to have serious adverse consequences on the character and possibly the duration of the recovery, the near-term deficits probably have a positive impact on the

pace of recovery in 1983 and 1984. The tax cuts in 1982 and 1983 raised after-tax incomes and therefore contributed to the rise in consumer spending that has been responsible for so much of the recovery. Similarly, the direct fiscal stimulus of the large 1984 deficit will do more to raise demand in 1984 than the increased real interest rates that result from the 1984 deficit will do to depress demand.

It is the continuing string of large deficits projected out through the end of the decade and beyond that is the serious threat to the health of the near-term recovery. The prospect of such prolonged deficits inevitably raises the real long-term interest rate above what it otherwise would have been, reducing current activity in key interest-sensitive sectors and causing the recovery to be lopsided. The most conspicuous example of such current crowding out is the sharp decline in net exports. High interest rates in the United States attract funds from the rest of the world, causing the exchange value of the dollar to rise. The strong dollar makes it difficult for U.S. products to compete in world markets and makes foreign products more attractive to American buyers. In addition, the high real interest rate is no doubt also causing the demand for housing, for some consumer durables, and for some plant and equipment investment to be lower now than it would otherwise have been. In these ways, the anticipation of future deficits may weaken the pace of recovery now even though the current deficit strengthens the pace of the current recovery.

If the deficits persist, the crowding out would also persist but the pattern of crowding out would change over time. As the value of the dollar declines, the merchandise trade deficit is likely to shrink, focusing more of the crowding out on the domestic capital market. The current rise in profits and retained earnings that result from the cyclical upturn and from the 1981 tax changes temporarily protects business investment and concentrates more of the domestic crowding out on residential construction. This too will change with time, placing more of the burden of future crowding out on business investment in plant and equipment.

No one can be sure of exactly how the pattern of crowding out would evolve through time. It is clear however that the persistence of large structural budget deficits would contribute to producing a lopsided recovery. The recovery would not be shared fully by the export industries and by those firms that compete with imports from abroad. Nor would the construction industry and those industries that are directly involved in the production of capital goods and consumer durables be likely to keep pace with overall economic activity.

As a result, employment and economic activity would shift from these contracting interest-sensitive sectors to the areas of expanding

demand in the services and nondurable goods industries and in the defense-related industries. If this shift of demand proceeds smoothly enough, the overall recovery would continue at a satisfactory pace with declining total unemployment. It is quite possible, however, that the additional demand would concentrate in sectors that are operating close to capacity while the crowding out withdraws demand from industries where a great deal of excess capacity exists. If so, much of the additional demand might be absorbed in price increases while the crowding out adds to unemployment. If this occurs, the resulting recovery would be slower paced, more fragile, and more inflationary than a more balanced recovery.

No one can predict in detail the effects of a continuing series of such large deficits. The economy could continue to experience a satisfactory overall pace of recovery for several years with declining rates of unemployment and inflation. But deficits of this magnitude could lead instead to imbalances within the economy that cause the recovery to lose momentum. There is also the risk that the persistent deficits could lead to inappropriate economic policies in the future. An overly expansionary monetary policy would cause increased inflation while a sudden large fiscal contraction could depress economic activity. Although no one can be sure just how the economy would behave in the face of such unprecedented deficits, the longer the deficits are allowed to persist, the greater are the risks to our economic future.

BUDGET STRATEGY

A major reduction in the structural budget deficit must therefore be achieved over the next several years. This must be done without causing a contraction of economic activity. Because the direct effect of reducing the budget deficit is to reduce government spending and private consumption, there must be an increase in investment and net exports if real incomes and economic activity are to remain at high levels.

A reduction in the level of the current or future budget deficits automatically stimulates investment and net exports by lowering the real rate of interest and the exchange value of the dollar. However, experience shows that the rise in investment and in exports follows the fall in interest rates and the exchange rate only with a substantial lag.

It would be unwise, therefore, to reduce the 1984 deficit by a very substantial amount. To reduce the deficit by a significant amount without jeopardizing the recovery, the financial markets should be given adequate advance notice of the intended deficit reduction. The

result would be a stronger economy that could absorb the deficit reduction without a contraction of overall economic activity.

In the fiscal year 1984 budget that was presented to the Congress in January 1983, the Administration proposed a deficit reduction program that would begin with small reductions in the deficits of 1984 and 1985 but then would reduce the 1986 deficit by 41 percent and cut the 1988 deficit by 61 percent to only 1.6 percent of GNP. Unfortunately, the Congress failed to adopt those proposals.

The Administration is now taking a two-stage approach to dealing with the prospective budget deficits. The President has called upon the leaders of the Congress to establish a bipartisan group to work with the Administration to develop a "down payment" package that will reduce the deficit by about \$100 billion over the next 3 fiscal years. The aim of these negotiations is to achieve a deficit reduction package in the next few months. This package would be comprised of some of the less contentious spending cuts still pending before the Congress, certain measures to close tax loopholes, and additional outlay savings achieved through improvements in management procedures and elimination of unnecessary or inefficient activities.

Such legislation to reduce the deficit by about \$100 billion during the next 3 fiscal years would make a significant contribution to reducing deficits and the future national debt. It could also give increased confidence to the financial markets, business investors, and consumers that the projected deficits can be controlled and eventually eliminated. The result should be a stronger economy in 1984 and 1985.

Enacting a "down payment" package is just a first step in reducing budget deficits. The President has indicated that he will propose legislation in early 1985 that will further reduce deficits and point the way toward budget balance. If these proposals are enacted, the economy can enjoy continuing expansion and a reduced burden of national debt.

CHAPTER 2

The United States in the World Economy: Challenges of Recovery

THE INTERNATIONAL ECONOMY is in a much stronger position today than it was one year ago. In late 1982 the world was still in a severe recession, and prospects for recovery were uncertain; the third world debt crisis was a source of deep concern; and economic stagnation had given rise to strong protectionist pressures. In 1983 a vigorous recovery, originating in the United States, began to lead the world out of recession. Many of the high-debt countries made major strides toward successful adjustment. Despite increasing protectionist pressures, the open international trading system remained fundamentally intact.

But the outlook is not entirely sunny. The recovery is not a cure-all for the serious strains that remain in the world economy. From the U.S. point of view, the focus of these strains is the emergence of record trade deficits. Closely related to the problem of the trade deficits is the problem of the continued high value of the dollar in foreign exchange markets. There are also other economic troubles around the globe. Trade relations among the United States, Japan, and the European Community remain a source of friction. Much of Europe is lagging behind the recovery in North America. The high-debt countries are finding the road back to financial health to be slow and painful.

This chapter takes the U.S. trade balance as a starting point for an examination of the challenges that still face the world economy. It is organized in three sections. The first section examines the rise in the trade deficit and the related problem of the strong dollar. The second section covers developments among industrialized trading partners: Japan, Canada, and the European countries. The third section explores the third world debt problem.

THE U.S. TRADE DEFICIT AND THE DOLLAR

The most dramatic recent development in U.S. international economic relations is the rising trade deficit and associated capital inflow. The 1983 deficit in merchandise trade was about \$65 billion,

approaching twice the previous record, which was set in 1982. A deficit in the neighborhood of \$110 billion is forecast for 1984, three times the 1982 level. The deficits signify loss of income and employment in those U.S. industries that depend on exports or compete with imports. A common reaction is one of concern. It is easy to draw the impression that there is a serious adverse long-run trend in the competitive standing of the United States in the world economy. The greatest danger is that such ideas will come to be believed, and that as a result, the Nation will opt for major departures from its traditional economic system.

Understanding the source of the rising trade deficit is an essential precondition to making intelligent policy choices. If policy is charted in an atmosphere of panic, then crucial mistakes will be made. Mistakes in trade policy, once committed, cannot be easily undone. Foreign trading partners often react to protectionist measures in kind, while, domestically, powerful interest groups coalesce around the new status quo.

SOURCES OF THE TRADE DEFICIT

Although the 1983 and likely 1984 trade deficits are without precedent, they are not difficult to explain. To begin with, the United States has a normal or "structural" deficit in merchandise trade that is offset by a surplus in exports of services and therefore need not be a cause for special concern. But it is the recent increase in the trade deficit that has attracted attention. The increase can be broken down into three parts. First, the appreciation of the dollar has made it difficult for U.S. firms to compete in world markets. Second, there has been a substantial loss in net exports to debt-troubled countries. Third, the United States is experiencing more rapid growth in income, and therefore, in imports, than are Europe and Japan. These three factors concern economic perturbations that, though large, are believed to be temporary. The structural deficit is normal in that it would exist even in the absence of the temporary factors.

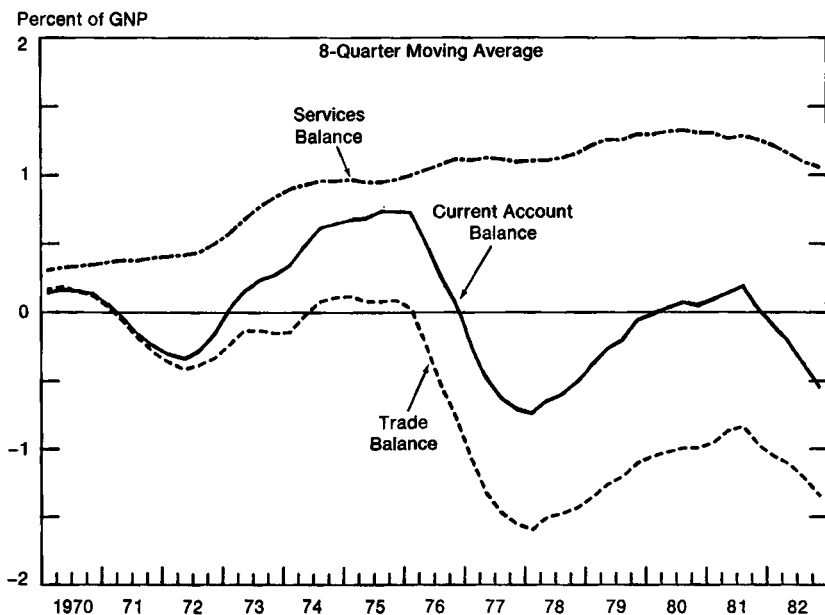
The Structural Trade Deficit

In the 1970s, the United States ran a merchandise trade deficit that was on average equal to 0.5 percent of gross national product (GNP), with a gradual increasing trend, as Chart 2-1 illustrates. This deficit in merchandise does not imply a failure of the Nation to pay its way in international trade. The United States normally runs a surplus in services to offset the deficit in merchandise trade. The largest component of the surplus is the earnings on overseas investments that American residents have made in the past; these earnings are counted as services because they are payments for the use of U.S. capital. But such exports as the services of lawyers, engineers, and computer

programmers, and banks, insurance companies, hospitals, and universities are also an important and growing component of the U.S. balance of payments. The balance in services trade has a gradual upward trend, as Chart 2-1 shows.

Chart 2-1

Balances on Current Account, Trade, and Services as Percent of GNP



Note.—Based on seasonally adjusted data.

Source: Department of Commerce.

Indeed, it is possible that, because of measurement errors, the true U.S. surplus in services is greater than that recorded. Statistics show that the sum of the services balance of all countries is a large negative number, on the order of $-\$80$ billion. Because one country's exports are another country's imports, this number should in theory be zero. It must necessarily be that some countries are underreporting their services balance. For example, fleets of open registry (i.e., flying "flags of convenience") often do not report their earnings to any country. Another example is investment income that is channeled through tax havens and is thus unrecorded in the recipient country. Given the importance of the United States in services trade, it is possible that part of the unreported service exports are American.

Adding together the balances in merchandise trade, services, and transfers (such as immigrants' remittances to their countries of origin) gives the balance on current account. A country's current account balance indicates its changing investment position vis-a-vis its trading partners. A current account deficit means that foreigners are on net accumulating claims on assets located in the domestic country. Countries with profitable investment opportunities, such as South Korea, Taiwan, Singapore, and other rapidly industrializing countries, are normally in this situation, borrowing savings from abroad to finance their development. A current account surplus means that the domestic country is on net accumulating claims on assets located abroad. Capital-rich countries with high saving rates, such as Japan and West Germany, are normally in this situation, lending their savings to other countries where they can earn a higher rate of return. There is no clear argument as to whether the United States should normally be a net borrower or net lender at this stage in its history. The United States has been a capital-rich country throughout the 20th century, and before the 1970s the current account was normally in surplus. But the U.S. saving rate now appears to be the lowest among major countries. As it happens, the U.S. current account balance, as shown in Chart 2-1, was on average virtually zero during the 1970s.

The point is that a certain amount of the U.S. merchandise trade deficit is normal: it would be there, offsetting the surplus in services, even if the U.S. current account balance were zero. Judging from the long-run trends in the merchandise trade deficit and the services surplus, this structural trade deficit now appears to be in the range of \$20 to \$25 billion. Most of the recent trade deficit is thus still to be explained.

Effect of the Strong Dollar

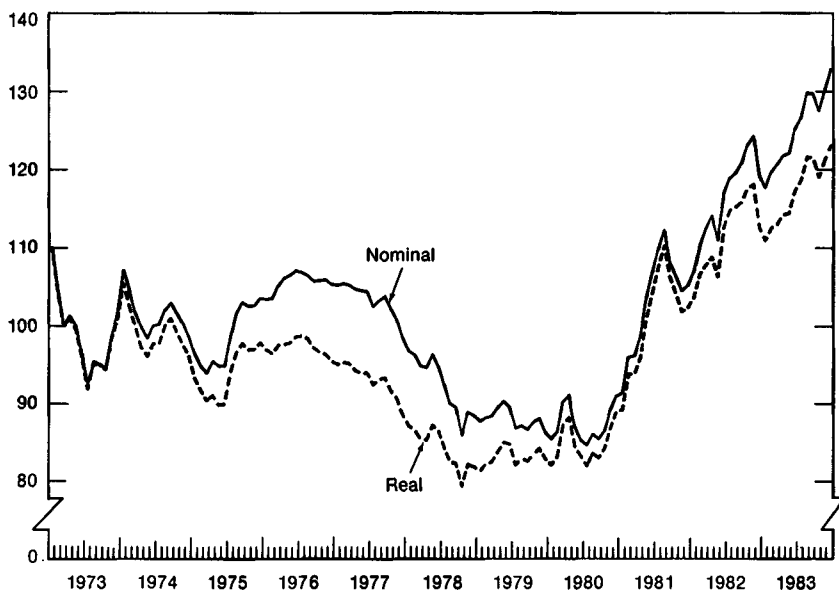
The high value of the dollar in foreign exchange markets is the most important cause of the recent increases in the trade deficit. As Chart 2-2 shows, the dollar has appreciated sharply over the past 3 years. As of December 1983, the dollar had risen 52 percent against an average of 10 trading partners' currencies weighted by their shares in world trade, relative to the average for 1980. (Weighting countries by trade with the United States alone, which gives relatively less weight to Europe and relatively more to Canada and Japan, yields a smaller number.) Exchange rate trends sometimes match international differences in inflation rates, but that has not been the case in this episode. Very little of the appreciation of the dollar was offset by a more rapid increase in the foreign price level than in the U.S. price level. In other words the dollar appreciated not only in *nominal* terms, but in *real* terms as well. The real appreciation of the

dollar between 1980 and December 1983 came to 45 percent. This means that U.S. firms are now offering their products on world markets at prices that on average have risen significantly relative to those of their competitors, when compared in a common currency.

Chart 2-2

Nominal and Real Effective Exchange Rate of the U.S. Dollar

March 1973 = 100



Source: Board of Governors of the Federal Reserve System.

The year 1980 does not constitute a proper standard of comparison because the dollar had depreciated in real terms in the late 1970s: in 1980 U.S. firms were offering their products on world markets at prices that on average had fallen relative to those of their competitors, when compared in a common currency. If one takes the average over the period 1973-79 as the standard of comparison, then the real appreciation of the dollar as of December 1983 comes to 33 percent.

This real appreciation represents a large loss in competitiveness of U.S. producers. In response, foreign residents are more likely to buy their own country's products than to buy the more expensive U.S. exports, and U.S. residents and companies are more likely to buy cheaper imports than to spend their money on products made at home.

The effect on the trade balance is complicated by questions of timing. Although the dollar's rise began in 1980, it was not until 1981 that the negative effect on the trade balance began to show up. It was not until late 1982 that the balance on goods and services turned to deficit. This pattern is in line with historical experience. The immediate effect of a dollar appreciation is actually to *improve* the trade balance, because it takes fewer dollars to buy a given quantity of imports. As time passes, more and more customers, both domestic and foreign, switch to the less expensive foreign producers. The real volume of imports rises and of exports falls, and the trade balance worsens. The dollar had completed a real appreciation of 27 percent by late 1982, relative to the 1973-79 standard of comparison. If the usual pattern of recent years holds up, the full effect on the trade deficit will be reached in late 1984. Estimates indicate that every 1 percent real appreciation adds about \$2 billion to the deficit at the peak. Thus the 27 percent real appreciation of the dollar translates into about \$54 billion of the projected deficit in 1984. The continued appreciation of the dollar through 1983 portends further deterioration of the trade balance in 1985.

Effect of Debt Problems in Latin America

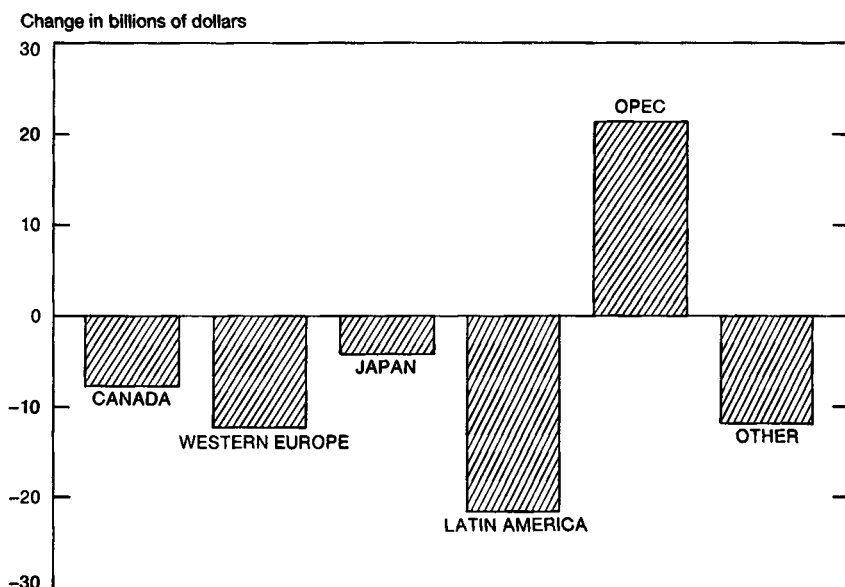
In the last couple of years, a number of highly indebted third world countries have experienced great difficulty meeting their debt obligations. They have had to take strong measures to reduce their imports and to boost their exports, in order to generate the foreign exchange to pay the interest on the debt. Many of these countries are in Latin America and conduct an especially high proportion of trade with the United States. Mexico alone accounted for 7.6 percent of U.S. exports in 1981. Seven of the most indebted Latin American countries together accounted for 13.9 percent of U.S. exports. The reductions in net imports that these countries have been obliged to undertake because of a shortage of foreign exchange are so great that the U.S. share looms large in the U.S. trade balance. Exports of U.S. industries such as farm and construction machinery have been particularly hard-hit.

As Table 2-1 shows, the U.S. bilateral trade balance with Mexico alone, which changed from surplus to deficit in 1982, registered a decline of \$12 billion between 1981 and 1983. The U.S. loss in net exports to Latin America was about \$21 billion. By comparison, the projected U.S. loss in net exports to Japan from 1981 to 1983 was only \$4 billion, and to all of Western Europe about \$12 billion, as illustrated in Chart 2-3. (The only source of improvement, U.S. trade with the Organization of Petroleum Exporting Countries (OPEC), is registering smaller deficits than in the past as a consequence of a decline in the demand for OPEC oil and in the dollar

price of oil.) As many of the Latin American debtors still have further economic adjustments to make, the loss in U.S. net exports to that region is not expected to diminish much in 1984.

Chart 2-3

Change in U.S. Bilateral Trade Balances From 1981 to 1983



Note.—Based on preliminary data for 1983.

Source: Department of Commerce.

Effect of Relative Cyclical Position of the United States

A country's level of imports varies with its level of income during the course of the business cycle. Thus world trade in general contracted in the 1980–82 period of recession.

As of late 1982, cyclical factors were a plus for the U.S. trade balance. In the first place, even when business cycles are synchronized across countries, the U.S. trade balance historically tends to improve in recessions and worsen in expansions. U.S. imports from other countries are usually more responsive to U.S. income than other countries' imports are to their incomes. In the second place, as of 1982, the recession had been more severe in the United States than for most trading partners. Real GNP had been on average almost constant in the United States from 1980 to 1982, but had grown at

TABLE 2-1.—U.S. trade balance by country, 1980-83

(Balance of payments basis, millions of dollars)

Country	1980	1981	1982	1983 ¹
Total	-25,544	-28,067	-36,389	-63,521
Canada	-1,277	-2,242	-9,198	-9,810
Western Europe	20,348	12,235	6,793	98
United Kingdom	2,970	-263	-2,352	-2,099
Germany	-243	-887	-2,688	-4,344
Other	17,621	13,385	11,833	6,541
Japan	-10,411	-15,802	-16,991	-19,886
Other developed countries	584	3,388	2,623	1,585
Latin American republics	5,860	7,481	-3,389	-13,911
Brazil	629	-676	-863	-2,491
Mexico	2,647	4,440	-3,808	-7,762
Venezuela	-740	-122	429	-2,328
Other	3,324	3,839	853	-1,330
OPEC (non-Latin America)	-37,476	-28,546	-10,978	-7,111
Other developing countries ²	-4,584	-7,490	-7,908	-15,909

¹ Preliminary estimates.² Residual excluding Eastern Europe and international organizations.

Source: Department of Commerce, Bureau of Economic Analysis.

an average annual rate of 1.4 percent in other industrialized countries. As of December 1982, U.S. industrial production was 12 percent below its previous peak, but industrial production in the other six major industrialized countries had fallen only 4 percent over the same period. Thus, the recent recession tended to reduce U.S. imports from the rest of the world more than it reduced the rest of the world's imports from the United States.

The cyclical position of the United States relative to its trading partners began to turn around rapidly in early 1983. In the third quarter of 1983 the United States reattained its previous peak in the level of economic activity as measured by industrial production; most of the major industrial countries had not yet done so. For the year, real GNP grew at an annualized rate 3.8 percent faster in the United States than among a weighted average of trading partners. Thus sometime in the middle of the year the two output paths crossed; the relative cyclical position was a positive factor in the trade balance in the first half of the year and a negative factor in the second half. The overall effect in 1983 was probably close to neutral.

With U.S. growth from 1983 to 1984 expected to continue well above that of its major trading partners, U.S. imports from other countries will rise faster than other countries' imports from the United States. The relative cyclical position becomes an increasingly negative factor for future trade balances. Estimates suggest that the relative cyclical position will account for \$15 to \$20 billion of the projected worsening in the trade deficit between 1983 and 1984.

Each of the three sources of the increase in the trade deficit—the exchange rate, the third world debt problem, and the relative cyclical position of the industrialized countries—warrants further analysis. In each case, the impact on U.S. trade may be the channel through which the problem is most forcefully brought to the attention of the American citizen; but each topic bears examination for its own sake. The exchange rate and related topics are considered in the remainder of this section; the cyclical position of other industrialized countries and the third world debt problem are considered in the second and third sections of the chapter.

SOURCES OF THE STRONG DOLLAR

In the 1950s and 1960s central banks were committed to maintaining their countries' exchange rates at fixed levels. This effort became increasingly difficult over time, due particularly to divergent inflation rates among countries. By 1971 the dollar had become unsustainably overvalued in the sense that the supply of dollars greatly exceeded the private demand for dollars. Central banks made up the difference, buying unwanted dollars in exchange for foreign currencies. The effort was abandoned in 1973 and the major currencies moved onto a system of floating, i.e., market-determined, exchange rates. When exchange rates float, there is no such thing as undervaluation or overvaluation, in the sense of excess market supply or demand for currencies. The value of the currency is whatever the market dictates that it should be.

The Floating Exchange Rate System

It is nearly impossible to imagine the world economy going through the past 10 years in the straightjacket of fixed exchange rates. Given the events of this period, notably the large changes in oil prices and the divergent macroeconomic policies among the industrialized countries, floating exchange rates have performed well.

Nevertheless, some critics argue that the system is not working as it should. They base their case on the large fluctuations that exchange rates have exhibited over the past 10 years—short-term variability as well as longer term swings such as the large rise of the dollar from 1980 to 1983. The critics also point to the fact that many exchange-rate fluctuations cannot readily be explained. Few believe that an early return to fixed exchange rates is possible, but there is sentiment in some quarters for government action to try to dampen the fluctuations.

Transactions costs in financial markets and government-imposed barriers to the flow of capital across national boundaries are today very low among most of the larger industrialized countries. The high international mobility of capital means that the foreign exchange

market is now dominated by capital transactions, not by trade transactions. The foreign exchange market is an asset market, like the stock or bond market; the exchange rate is the price of one currency in terms of another. It is not surprising that it is difficult to explain all the month-to-month ups and downs of the exchange rate, just as it is difficult to explain all the ups and downs in stock prices or bond prices. But most observers agree that an increase in the demand for dollar assets underlay the 1980–83 appreciation. An increase in the demand for a currency results in an increase in its price, for the same reason that an increase in the demand for any commodity results in an increase in its price.

Three reasons are often given for the recent increase in demand for dollar assets. They are (1) reduced expectations of U.S. inflation, (2) increased U.S. real interest rates, and (3) “safe-haven” and other possible portfolio shifts. We consider each in turn.

Effect of Reduced Expectations of Inflation

In the long run, the exchange rate tends to follow the differential trend in the domestic and foreign price levels. If one country's price level gets too far out of line with prices in other countries, there will eventually be a fall in demand for its goods, which will lead to a real depreciation of its currency.

Investors in international money markets are fully aware of the relationship between the price level and the exchange rate. If market participants think that a currency will be losing value in the future through inflation, then they will seek to avoid losses by immediately shifting their holdings out of that currency and into other assets. This attempt to sell the currency will cause its price to decline, even before the anticipated inflation occurs. For example, in the late 1970s the value of the dollar declined, in large part because of heightened expectations of U.S. inflation.

There is no way to know exactly what the market expects the inflation rate to be in the future, as opposed to what the inflation rate actually is. Table 2–2 shows three alternative measures of expected inflation: the actual inflation rate over the preceding year; a weighted average of actual inflation over the preceding 3 years (with more weight on the most recent years); and forecasts of future inflation made by Data Resources, Inc. Regardless which measure is used, there was a large drop in the expected U.S. inflation rate between 1980 and 1983. The market reduced its expectations of U.S. inflation in response to the firm anti-inflation policies of the Administration and of the Federal Reserve, to the 1980 and 1981–82 recessions, and to the actual decline in the observed inflation rate. As the table shows, expected inflation also fell in other countries between 1980

and 1983, but not as much. The differential between U.S. and foreign expected inflation declined.

The fall in the expected inflation differential is the first of the three reasons for the appreciation of the dollar. Investors who had previously shifted out of dollar assets because of fears of inflation, now shifted back. The increase in the demand for dollar assets caused an increase in the price of dollar assets, i.e., the exchange rate.

TABLE 2-2.—*Decreases in expected inflation rates and increases in real interest rates, 1980 to 1983*

Item	1980 average			November 1983			Change		
	United States	Trading partners ¹	Difference	United States	Trading partners ¹	Difference	United States	Trading partners ¹	Difference
	Percent per annum						Percentage points		
Long-term government bond rate.....	11.39	11.34	0.05	11.92	10.29	1.63	0.53	-1.05	1.58
1-year inflation ²	13.54	11.38	2.16	3.19	5.17	-1.98	-10.35	-6.21	-4.14
Real interest rate 1.....	-2.16	-.05	-2.11	8.73	5.11	3.61	10.88	5.16	5.72
3-year distributed lag inflation ³	11.67	9.35	2.32	4.90	6.46	-1.56	-6.76	-2.88	-3.88
Real interest rate 2.....	-.28	1.99	-2.27	7.02	3.82	3.19	7.30	1.84	5.46
DRI 3-year forecasted Inflation ⁴	10.05	8.56	1.49	5.29	5.90	-.60	-4.76	-2.67	-2.09
Real interest rate 3.....	1.34	2.77	-1.44	6.63	4.39	2.23	5.29	1.62	3.67

¹ Canada, France, Germany, Italy, Japan, and United Kingdom. Weighted by 1980 GNP.

² Change in the consumer price index (CPI) over the preceding 12 months.

³ Weights beginning with the immediately preceding 12-month change in the CPI are .5, .3, and .2.

⁴ Forecasts of CPI inflation over the subsequent 36 months. 1980 is the average of the four quarters' forecasts.

Sources: International Monetary Fund and Data Resources, Inc. (DRI).

Effect of Increased Real Interest Rates

The effect of the decline in expected inflation is only part of the story. If exchange rate movements were determined solely by inflation rates, the decline in expected inflation could explain the nominal appreciation of the dollar, but not the real appreciation of the dollar. The latter is the important concept for the question of the competitiveness of U.S. producers in world markets.

A second cause of the appreciation of the dollar between 1980 and 1983—and the major cause of its real appreciation—is the increase in the U.S. real interest rate. The real interest rate is defined as the nominal interest rate corrected for expected inflation. If nominal interest rates had come down as quickly as the expected inflation rate, then there would have been no increase in the real interest rate. But by the three measures in Table 2-2, the U.S. real interest rate rose between 1980 and 1983. This is typical of historical experience with monetary disinflation: it takes time for reduced expectations of infla-

tion to be reflected in reduced nominal interest rates. Real interest rates rose somewhat in other countries too, but not by as much. The real interest differential shifted in favor of dollar assets.

Because U.S. assets now pay a higher expected real rate of return than foreign assets, they have become more attractive to hold. The increase in demand for dollar assets arising from a higher real interest differential can explain an increase in the exchange value of the dollar, *above and beyond the increase that would be due to a lower expected inflation differential* in the absence of a change in the real interest differential. It explains why the dollar appreciated not only in nominal terms but in real terms as well.

Large real appreciations of a currency tend to be temporary. In the long run, the real value of the dollar is widely expected to fall back to a level that allows U.S. firms to compete in world markets on an equal basis. To believe otherwise would be to believe that U.S. producers can continue to be priced out of world markets, and the United States can continue to run 12-digit trade deficits, indefinitely. It is impossible to say when the dollar will come back down. The decline could start in 1984 or it could come later. To judge by past experience, even if there were no unforeseen developments, it could be as long as 10 years before the dollar returns to its long-run value.

It is possible to get a rough idea of how much above its long-run real value the dollar is currently, in the market's view, by looking at the long-term real interest differential in favor of the dollar. The long-term interest rate is the one reported in Table 2-2. The 10-year real interest differential is the compensation that investors get for holding assets in a currency that is expected to depreciate, in real terms, over the next 10 years. Taking the present 10-year real interest differential to be 3.2 points, the implication is that the market expects the dollar to depreciate, in real terms, at an average rate of 3.2 percent a year over the next 10 years, or 32 percent altogether (ignoring compounding). This arithmetic example would suggest that the market regards the dollar as currently being about 32 percent above its long-run real value.

In 1980 the real interest differential was *negative*; the market regarded the dollar as being about 23 percent below its long-run real value. Taking the increase in the real interest differential between 1980 and 1983 to be 5.4 points, the implication is that this factor by itself is sufficient to explain an increase in the dollar's value over this period of about 54 percent (without any change in its long-run real value). One can get different answers by choosing different horizons or different measures of the rise in the real interest rate. It is possible that none of the three alternative measures of expected inflation in Table 2-2 adequately reflects true expectations over the 10-year

horizon that is relevant. Nevertheless, it is evident that the real interest differential is capable of explaining the sort of real appreciation that the dollar has experienced.

Effect of "Safe-Haven" and Other Possible Portfolio Shifts

The third reason that is commonly given for the current strength of the dollar is the "safe-haven" effect: capital flees social and economic instability in other countries for the safety of the United States. There is some danger here of using the term "safe-haven" as a vague label for unexplained shifts in investors' portfolios. But one concrete interpretation is that investors have shifted their portfolios into dollar assets in response to the increased riskiness of investments in other parts of the world, Latin America in particular.

A decision by Latin Americans to move capital into the United States generates partly offsetting capital outflows from the United States to Europe and other countries. But in the eyes of some observers, investments in Europe have also become riskier, as a result of economic and political developments. Thus, a worldwide portfolio shift into U.S. assets in response to a change in relative risk may explain some part of the dollar appreciation. Other factors that are sometimes mentioned are the more favorable tax treatment for capital investment in the United States and the strength of the U.S. recovery in 1983.

The Source of High Real Interest Rates

If high real interest rates are the most important explanation for the high real value of the dollar, what is the explanation for the high real interest rates? This question is a subject of some controversy.

The real interest rate equilibrates the supply of saving, both private and public, to the demand for saving, in the form of investment. The real interest rate will rise either if the supply of saving shifts down or if investment shifts up. The contribution of the corporate income tax to the cost of capital facing firms has been reduced under this Administration. It is hoped that the increased incentive to firms will stimulate investment in the future. Unfortunately, as the second column of Table 2-3 shows, investment as a percentage of GNP was still lower in 1983 than in 1980, or than the average since 1970. Thus an upward shift of investment cannot be the sole explanation for the increase in real interest rates. A decrease in the supply of saving also must have played a major role. Indeed, there has been a decline in private saving, probably because of the recession, and a large decline in government saving, i.e., a large increase in the Federal budget deficit.

Although the decline in private and public saving is the most widely cited explanation for high real interest rates, other explana-

TABLE 2-3.—*Distribution of GNP by component, 1970-83*

[Percent]

Period	Personal consumption expenditures	Fixed investment	Government purchases of goods and services	Net exports of goods and services	Inventory investment
1970-79 average	62.4	15.3	21.0	0.6	0.8
1980	63.4	15.6	20.4	.9	-.4
1981	62.9	15.5	20.2	.9	.6
1982	64.8	14.3	21.1	.6	-.8
1983 ¹	65.2	14.4	20.9	-.3	-.2

¹ Preliminary estimates.

Source: Department of Commerce, Bureau of Economic Analysis.

tions are sometimes given. One is that an increase in uncertainty, usually ascribed to increased variability in the U.S. money supply, makes nominal dollar assets less attractive, so that they must yield a higher expected real return as a "risk premium" if they are to be willingly held. This argument could account for why real interest rates are high, but it cannot also be an explanation of the strength of the dollar. Any increased uncertainty attaching to dollar assets would cause a fall in demand for them and therefore in the price of the dollar, not a rise. Only increased uncertainty in *other* countries could induce the observed portfolio shift. Indeed that was one possible interpretation of the safe-haven argument discussed above.

THE CAPITAL ACCOUNT SURPLUS

The U.S. current account deficit in 1983 was nearly three times the previous record, which was set in 1978. The immediate connotation of the current account deficit, as of the trade deficit, is lost production in import-competing and export industries. But there is another way to look at it. The current account deficit is financed by a capital inflow from abroad. Foreigners have been investing in the United States, for example participating in the rising stock market and buying Treasury bills.

Relation to Crowding Out

This capital inflow has an important implication for the U.S. economy. Under the natural assumption that the capital inflow is not somehow offset by an equal decrease in domestic saving, it keeps real interest rates lower than they otherwise would be. As such, it allows those components of GNP that are especially sensitive to the real interest rate—housing, consumer durables, and business investment in plant and equipment—to be higher than they otherwise would be. Of course, the capital inflow has not been large enough to prevent real

interest rates from rising since 1980, as reported in Table 2-2, or investment as a share of GNP from falling, as reported in Table 2-3.

Table 2-3 also shows how two other components of demand, consumption and government expenditure, have risen since 1980 as a percentage of GNP. Indeed, it was the increases in these components of spending that drove up real interest rates and crowded out investment, as explained in Chapter 1. The important point regarding the inflow of capital into the United States from abroad is that it dampened the rise in the real interest rate, and thus reduced the degree of crowding out of investment. This bonus did not come free. The counterpart to the capital inflow is the appreciation of the dollar and the worsening of the trade deficit. In effect, much of the crowding out is now borne by the import-competing and export industries, with the consequence that less of it is borne by the construction, consumer durable, and capital goods industries.

In 1984 the U.S. current account deficit is forecasted to be roughly 40 percent the size of the Federal Government budget deficit. This means that a capital inflow from abroad is financing the equivalent of 40 percent of the budget deficit, and the crowding out of other sectors of domestic demand is reduced correspondingly. International capital flows of this magnitude are consistent with the increasing integration of world capital markets.

Benefits of the Capital Inflow and Dollar Appreciation

Is the inflow of capital and the associated strength of the dollar desirable? In one sense it is not; the appreciation of the dollar imposes great costs on import-competing and export industries in terms of lost income and employment. But the strong dollar has substantial benefits too. It keeps down the general price level, both directly through lower dollar prices of imports, and indirectly through lower prices for domestically produced goods that compete with goods produced abroad. The important question for policy is whether the costs of artificially reducing the capital inflow are greater than the costs of the existing trade deficit.

In the long run, expansion of potential GNP is limited by such factors as growth of the labor force and of the capital stock. Even in the short run, monetary policy puts a limit on the expansion of actual dollar GNP, because the Federal Reserve is currently committed to a monetary policy that avoids a resurgence of inflation. It follows that if the capital inflow were somehow shut off, the dollar allowed to depreciate, and export and import-competing industries stimulated to increase production, the gains in those industries would probably be offset by losses in other industries so as to leave total GNP unchanged. The mechanism whereby this would happen is an increase in the real interest rate; the industries that would lose include con-

struction and other interest-sensitive industries, whose customers are primarily firms undertaking investment.

There are two reasons why the investment sector should not have its share of the national pie reduced in favor of the export and import-competing sectors, as it would be if the capital inflow were shut off. The first is that there is no reason to think that the profitability of investment has fallen. Investment determines how big the national capital stock will be in the future, and thus how big output can be. It is true that a capital inflow, which constitutes the sale of assets to foreigners, represents a loss of future income in the form of capital earnings paid overseas. This loss in income is as great as the loss of returns to plant and equipment never built. Indeed if the United States continues to run current account deficits at anything like the rate forecasted for 1984, sometime in 1985 the Nation will pass from being a net creditor to being a net debtor, for the first time in 68 years. But from the viewpoint of maximizing domestic output and employment, it is better to have machines working in the United States, even if owned by foreigners, than not to have them at all.

The second reason for sharing economic expansion proportionately among sectors, to whatever extent possible, has to do with inflation. Expansion is often associated with an increase in inflation. Whether U.S. inflation is reignited depends, among many other things, on the distribution of expansion across sectors. It seems possible that industries that sell their goods and services primarily to the consumer and government sectors will begin to run into capacity constraints before the rest of the economy. At that point, any further increases in demand in those sectors are more likely to be reflected in higher prices than in higher production. In the industries that sell their products to firms undertaking investment, by contrast, there is still tremendous room for expansion. Some industries, such as non-residential construction, have only begun to share in the recovery. The noninflationary payoff to expansion in these industries is large. But if the country had never had the capital inflow, the interest rate would be even higher, and production in the interest-sensitive industries would be lower without much gain in reduced inflation. The export and import-competing industries would be benefiting from a cheaper dollar. But they might now be starting to run into capacity constraints more quickly, with an adverse effect on the overall inflation rate.

MEASURES TO REDUCE THE TRADE DEFICIT

Four kinds of policy measures have at times been proposed to improve the trade balance: protectionism to keep out imports, foreign

exchange intervention to reduce the value of the dollar, capital controls with the same aim, and a change in macroeconomic policy. Each of these has costs. Of the four, protectionism is the most dangerous.

Protectionism

In a dynamic economy there are always some sectors expanding and others contracting because of technical change, shifting consumer tastes, and so forth. This is particularly true of an economy exposed to the rigors of competition in world markets. Earlier in its history, the U.S. economy, with its large domestic market, diversified economic resources, and geographic remoteness from Europe, was less dependent on international trade. But as domestic economies of scale were exhausted, as tariffs were reduced worldwide, and as declining transportation costs made geography increasingly irrelevant, international trade became increasingly important. The growth in exports allowed many U.S. sectors to expand rapidly that otherwise might not have been able to do so. Major examples in recent decades include agriculture, high-technology products, and services. But the increase in U.S. imports, which sooner or later must accompany any increase in exports, meant a loss in demand for other U.S. sectors. Some sectors that had previously had the domestic market to themselves found that their foreign counterparts could produce quality products at costs far below what they had become accustomed to receiving. Some major examples are the auto and steel industries.

The economic strains associated with long-term structural trends have always generated political pressure on the government to protect the adversely affected industries. In recent years temporary macroeconomic factors—the rise in unemployment during the last recession and the high value of the dollar—have exacerbated the economic difficulties of sectors vulnerable to import competition, and have intensified accordingly the political pressure to protect them. In addition, some exporters are finding that the strong dollar, and subsidies by some foreign governments, are making it more difficult to compete in foreign markets. This group traditionally forms a constituency for free trade but is now in some cases generating political pressures of its own for government action.

The Administration's stated policy is to resist these pressures. Protectionism usually succeeds in increasing the income of the sector seeking protection. However, it imposes costs on other sectors that more than outweigh the benefits for the protected sector. These costs are of three kinds. First are the effects on the purchasing power of consumers. A tariff or quota on imports cannot succeed in raising the prices received by domestic producers without at the same time raising the prices paid by domestic consumers. Second are the effects on other industries that use the output of the sector in question as an

input into their own productive process. Protection for the steel industry raises costs for the auto industry, protection for sugar growers raises costs for candy manufacturers, and so forth. Third are the effects on export industries. The dollars that foreign countries earn by selling to the U.S. market are useless to them unless, sooner or later, they spend them on U.S. exports. If the United States cuts off imports of foreign goods, foreigners will not have the dollars to buy U.S. exports. Usually it is difficult to identify the specific U.S. export industry that would benefit from increased trade. When the dollars come back to the United States, it will not necessarily be in the form of spending by the same foreigners that originally earned them, nor in the same year. But in one recent example, the connection is clear: China has indicated that if the United States cuts off imports of textiles from it, China will cease purchases of agricultural products from the United States.

The American public retains a broadly based commitment to the ideals of free trade. Nearly all political factions support free trade in principle. But there is a common fallacy that the arguments for free trade are theoretical arguments that lose applicability if other countries are not practicing free trade, that market distortions imposed by trading partner governments automatically warrant retaliation by the U.S. Government.

The desire to retaliate against a foreign government that is, for example, subsidizing exports, is understandable. Such retaliation has two effects, one predictable and one unpredictable. The predictable effect is to impose immediate costs, on domestic consumers and other domestic producers, that exceed the immediate benefits for the protected sector. It is irrelevant to this effect why foreign producers were underselling domestic producers, whether it was because of government subsidies, the level of the exchange rate, or lower labor costs. Export subsidies by foreign governments are in essence income transfers—i.e., foreign aid—to the importing country.

The unpredictable effect is the reaction of the foreign government. If the foreign government were to respond by removing its subsidies in exchange for the domestic country removing its measures, then both sides would be better off. All too often, however, the foreign government retaliates with more of the same. U.S. measures must be well targeted and explicitly temporary if they are to have the desired effect on foreign governments. There are no winners in a trade war.

The issue of the duration of protectionist measures is an important one. Frequently, measures that are originally adopted as temporary, such as quotas imposed to protect a domestic industry “just until it can get back on its feet,” turn out later to be very difficult to remove.

Often protection encourages the industry to delay making needed adjustments, rather than to speed them up.

Foreign Exchange Intervention

A second measure that has been proposed to improve the trade balance is intervention in the foreign exchange market by the monetary authorities to force down the value of the dollar and thus to restore price competitiveness to American industry. At the beginning of August 1983, and later in the year, U.S. authorities did intervene on a small scale, buying marks and yen in exchange for dollars, in cooperation with monetary authorities in other countries. The intervention did not noticeably depress the value of the dollar, nor was it intended to. It is U.S. policy to intervene only to calm disorderly markets.

There are two kinds of foreign exchange intervention, known as *sterilized* and *unsterilized*. Sterilized foreign exchange intervention occurs when the central bank, at the same time that it is buying foreign currencies with domestic currency, sells Treasury securities in the market in order to take the domestic currency back out of circulation. The point of sterilizing the foreign exchange intervention is to keep the domestic money stock unchanged. This is the type of intervention the U.S. monetary authorities undertake when they do intervene.

Unsterilized intervention has the effect of increasing the domestic money supply. This would have a strong downward effect on the value of the domestic currency. But like any other increase in the money supply, it can be inflationary.

The effect of sterilized intervention is much less clear than the effect of unsterilized intervention. The 1983 summer intervention amounted to \$254 million on the part of U.S. authorities. This was only 1 percent of the flow through the U.S. interbank foreign exchange market on a typical day in 1983. It was even less significant relative to the trillions of dollars in funds that investors around the world can commit to the foreign exchange market if they think that the exchange value of the dollar has been temporarily pushed below the true market level. Investors will move in quickly to exploit the potential profit opportunity, buying dollars, and thereby returning the price of the dollar to its previous level. This process ensures that, unless monetary authorities are prepared to intervene on a massive scale, any effects on the exchange rate will be transitory. After the Versailles Summit of 1982, a working group with representatives of the seven Summit countries was set up to study exchange market intervention. Its report, released in April 1983, concluded in part, that there was "broad agreement that sterilized intervention did not generally have a lasting effect."

If monetary authorities were prepared to intervene on a sufficiently massive scale, there could conceivably be some permanent effect on the exchange rate, even if the intervention were sterilized so as to leave the money supply unchanged. But to the extent that sterilized purchases of foreign currency were successful in reducing the value of the dollar, they would also be successful in raising the U.S. interest rate. The reason is that sterilized intervention does not leave market participants holding any more dollar currency than before; it leaves them holding more dollar Treasury securities than before. The interest rate would have to rise to induce the market to hold a greater quantity of Treasury securities, just as it does whenever the government sells large enough quantities of Treasury securities. The exporting and import-competing industries would be happy with the lower value of the dollar. But the capital goods, construction, and other interest-sensitive industries would be unhappy with the higher interest rate.

Capital Controls

The third kind of measure that has been suggested to reduce the U.S. deficit is the adoption of an international "interest equalization tax" or other restrictions on the international mobility of funds. The aim would be to shut off or reduce the inflow of capital and thus reduce the exchange value of the dollar.

The case against restrictions on the international flow of capital is analogous to the case against restrictions on the international flow of commodities, i.e., the case for free trade. Controls on international borrowing and lending interfere with the efficient allocation of capital among countries. The Administration is opposed to capital controls as a matter of general principle.

What effect would controls on capital inflow in the United States have in the present context? As with exchange market intervention, there are two possibilities. One possibility is that the controls would not even be effective. The experience of the United States in the 1960s, and of other countries today, is that there are many ways to circumvent capital controls. The alternative possibility is that the controls would be strong enough to reduce the capital inflow, and thereby reduce the value of the dollar. But if so, the reduced supply of saving from abroad would also raise the real interest rate and, once again, concentrate all the crowding out in the interest-sensitive sectors.

Macroeconomic Policy

The fourth kind of measure that has been suggested to reduce the U.S. trade deficit is a change in macroeconomic policy.

One possibility is a more expansionary monetary policy. This would clearly reduce the value of the dollar. In the short run, before prices throughout the economy had time to adjust, it would reduce the value of the dollar not only in nominal terms, but in real terms as well. Thus it would succeed in stimulating the demand for U.S. products. Unfortunately, a more expansionary monetary policy would also have adverse consequences for inflation. In the long run, when prices have had time to adjust, there would probably be no effect on the real exchange rate or real output, only an increase in the general price level. Because of the inflationary consequences, the Administration does not advocate using expansionary monetary policy to depress the value of the dollar.

On the other hand, for those who are concerned that monetary policy should be *tightened*, it is worth taking note of the undesirable consequences for the exchange rate in the short run. The fact that the price of the dollar in foreign exchange markets remained high throughout 1983 is a clear signal that the market had confidence in the Federal Reserve and that the money growth rate was not excessive.

The last possibility is a policy of reducing the budget deficit. Measures to reduce the budget deficit would lower real interest rates and thus allow the investment sector to share more fully in the recovery that is now taking place primarily in the government and consumer sectors. But, further, it would also lower the real value of the dollar and thus allow the exporting and import-competing sectors to share in the recovery as well. Of course, just as there are costs to the other proposed measures to improve the trade balance, there are also costs to reducing the budget deficit, whether by reducing government expenditure or by raising taxes.

DEVELOPMENTS IN OTHER INDUSTRIAL COUNTRIES

One of the challenges facing the world economy is the uneven geographical distribution of the recovery. Among the industrialized countries, only in Canada is real growth in 1984 expected to be as strong as in the United States. The implication for U.S. trade is negative: slower growth among trading partners than in North America means slower growth in U.S. exports than in U.S. imports. As Chart 2-3 shows, U.S. trade with both Europe and Japan is deteriorating.

EUROPE

The 1983 recovery in the United States and Canada is in the process of spreading to Europe as well. The United Kingdom and West Germany seem to have embarked on a path of renewed growth. Ex-

pansionary policies in France in 1981 postponed the recession there, but deteriorating inflation and balance of payments situations led to the adoption of austerity measures. Though the French trade balance improved in 1983, worries about inflation remained serious enough to keep a lid on expectations of future French expansion. In Italy and most of the smaller European countries there was no significant recovery for 1983 as a whole, although there were some signs of a pickup in economic activity toward the end of the year.

Effects on Europe of U.S. Economic Developments

Inflation has declined in all the larger European countries since 1980. This accomplishment has not been easy. The weakness of their currencies against the dollar has meant higher prices for oil and other imports in Europe. To limit the damage from both domestic and imported inflation, most European countries have accepted higher real interest rates than they would have accepted otherwise. Indeed, this is the mechanism through which recession was transmitted to Europe in 1981. Just as capital flowing into the United States has kept real U.S. interest rates lower and U.S. investment higher than they would otherwise be, so has capital flowing out of some European countries probably kept real European interest rates higher and European investment lower than they would otherwise be. In effect, the low U.S. rate of private and public saving is crowding out investment not just in the United States, but in the rest of the world as well.

The counterpart to a capital outflow is a current account surplus. This is the positive side of the ledger from the viewpoint of the European countries. Their depreciated currencies give their exporting and import-competing industries a competitive advantage in world markets. Until now, the Europeans have not on the whole considered that they were benefiting from the strength of the dollar and the U.S. trade deficit, despite their sizable share of it illustrated in Chart 2-1. Some have found it politically convenient to focus exclusively on the negative aspects of the exchange rate movement. The world current account discrepancy may also be part of the explanation: it is as if each country thinks it is running a deficit in goods and services, and someone else must be running the surplus.

In any case, in 1984 U.S. growth will lead to greater demand for European goods and thus is likely to help pull Europe out of its recession. The prospective reversal of the 1980-83 appreciation of the dollar is another development to which the Europeans can look forward. If the dollar depreciates, as many expect, the reduction in import prices will make the task of fighting inflation easier in Europe. Of course, the reversal in the gain in European competitiveness would also lead to an eventual reversal in the gain in net exports to

the United States. But it might allow European monetary authorities to bring down interest rates and stimulate domestic demand, at least in those countries such as West Germany and the United Kingdom that have relatively strong current account and inflation positions. The weaker-currency countries in Europe would find it difficult to expand on their own. The French franc, for example, might come under renewed pressure within the European Monetary System if a prospective world portfolio shift out of dollars were accompanied by a portfolio shift into marks.

Structural Problems in European Labor Markets

Regardless of what happens in the international financial markets, the problem of 18 million unemployed workers still plagues Western Europe. Indeed, in 1983 the unemployment rate continued to climb throughout Europe. In sharp contrast to the United States, Western Europe employs about the same number of workers, on an absolute basis, as it did in 1968. The most commonly cited cause of the bleak employment picture is excessive labor costs. Due to wage contracts indexed to consumer prices, and other less institutionalized social forces, real wages in Europe never adjusted in the 1970s to reflect the negative effect of oil shocks on the productivity of labor. Some observers argue that the greater rigidity of real wages in Europe than in the United States explains European governments' lack of enthusiasm for expansionary demand policies, despite low growth. For example, some European governments have taken steps to reduce government expenditure. They have also expressed the wish that the United States would reduce its budget deficit. Whether or not it is correct that expansion requires real wages to fall, it seems likely that any expansion of employment in Europe will greatly lag expansion of output. The implications for investment and long-term growth are also disturbing.

JAPAN

Economic performance in Japan has been impressive by the standards of most countries, even though the 1980–82 world recession was reflected in Japan as a clear slowdown in real growth. The Japanese trade account moved into substantial surplus again in 1983, as declining oil prices reduced the import bill and recovery in the United States and some others of Japan's trading partners boosted exports. Domestic demand remained somewhat sluggish.

Trade with the United States and Japanese Commercial Policy

As Table 2–1 shows, the U.S. trade deficit with Japan, known as a bilateral trade deficit, is larger than with any other single country.

Trade relations between the two countries are a source of special concern, and warrant a careful analysis.

To some extent the bilateral trade imbalance follows naturally from three other facts:

1. Japan usually runs a merchandise trade surplus with the rest of the world, as a consequence of its high rate of saving and its deficit in services.

2. The United States usually runs a merchandise trade deficit, as a consequence of its low rate of saving and its surplus in services.

3. Japan and the United States are the two largest market economies in the world and account for large shares of each other's trade.

There is an important reason why, even if Japan's overall trade balance were zero, it would still run a large bilateral trade surplus with the United States, and a very large surplus in manufactured goods in particular. Japan has few natural resources, and is dependent on imports for its supply of primary products, especially oil and other mineral fuels. It must earn the foreign exchange to pay for the oil by exporting other goods. If the United States were willing to sell enough Alaskan oil to Japan, for example, the bilateral trade imbalance would be reduced. As it is, Japan buys its oil elsewhere, running a large bilateral deficit with OPEC countries. And Europe normally runs a bilateral deficit with the United States. It is as though the United States sells to Europe in order to be able to buy from Japan, Japan sells to the United States in order to be able to buy from OPEC, and so forth around the circle of trading partners.

The important point is that it is neither necessary nor desirable that any two countries' bilateral trade be in balance, any more than it is necessary or desirable for an auto manufacturer to be in bilateral balance with its steel supplier, or a household with its plumber. One looks at the overall balance of a household, company, or country, not at bilateral balances, to see if it is earning more—from all its trading partners together—than it is paying out.

One widely held belief is that Japanese trade policy is responsible for the fact that Japan does not buy as much from the United States as the United States buys from it. Because the Japanese have accelerated tariff reductions agreed to in the Tokyo Round of multilateral trade negotiations, their tariffs are now lower than those of the United States and the European Community. But the Japanese maintain a number of nontariff barriers against imports that are a source of friction with the United States. These include import quotas for some agricultural products, and less tangible barriers to imports of manufactured goods, such as inspection requirements and government purchasing policies. Recent negotiations between the two governments in such areas as beef and citrus products, metallur-

gical coal and natural gas, cigarettes, and telecommunications equipment, have made some progress in reducing these barriers. But frictions remain.

Import barriers in every country protect those sectors that would not have the comparative advantage in a fair fight, at the expense of those sectors that would. In the Japanese case, it is agriculture that is easily the least competitive sector and therefore the most protected, with beef and citrus products the most highly visible examples. Japan already imports a lot of agricultural products; indeed, it is the largest customer of U.S. agricultural exports. But, in general, a high observed degree of "import penetration" does not preclude the existence of a high degree of protection. In fact, import penetration is often the cause and protection the effect, rather than the other way around. Many countries invoke national security arguments as a justification for protectionist measures; it should be noted that Japan does so on behalf of its agricultural sector.

It would be in the Japanese interest to reduce or remove the agricultural barriers because they can import these products far more cheaply than it costs to produce them domestically. Japanese liberalization would, of course, also be in the interest of U.S. farmers. It probably would not be in the interest of the U.S. manufacturing sector, however. In view of Japan's deficits in oil and services, it must run surpluses in its trade in other goods. If Japan were to start importing more agricultural products, its trade balance would not simply worsen by the same amount. Rather, the yen would eventually depreciate in order to generate the required trade surpluses in other sectors, i.e., manufactures. The point is that Japanese protectionism, like all protectionism, distorts the pattern of trade in such a way as to hurt both countries on net; but it is not a major source of the Japanese trade surplus.

The Yen Exchange Rate and Japanese Foreign Exchange Intervention

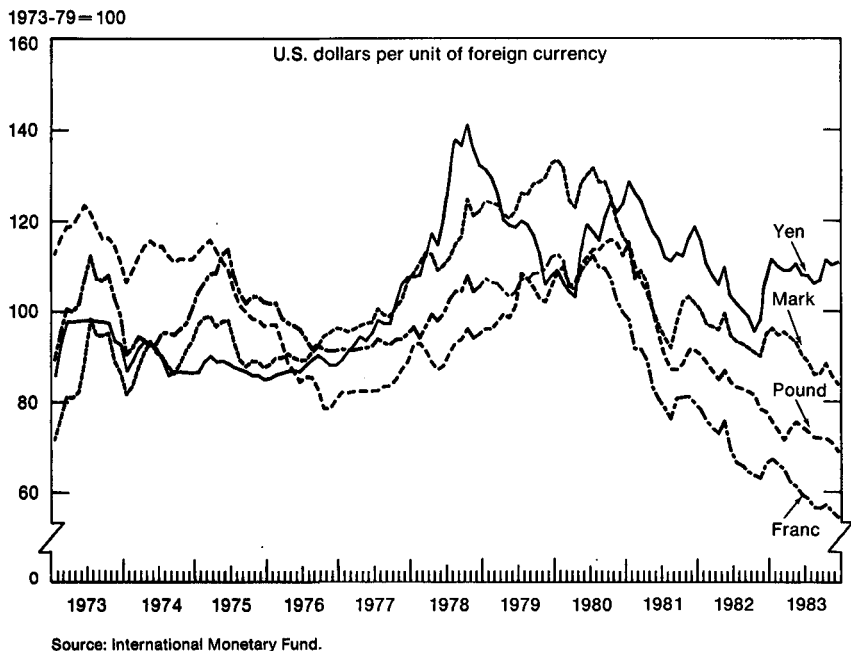
Another common claim is that an undervalued yen is the source of the trade problem. One version of this view is that the Japanese are deliberately keeping the yen undervalued, presumably either through foreign exchange intervention or through capital controls. No aspect of this view stands up well to the facts, however.

The value of the yen has indeed fallen in terms of dollars since 1980, though this movement was largely reversed in late 1982. As of December 1983, the yen had depreciated 3 percent, relative to the 1980 average. This depreciation has not been an offsetting reaction to different rates of inflation. Rather, the opposite is the case: because of superior inflation performance, the gain in Japanese competitiveness over this period has been 13 percent, as measured by consumer prices.

However, the dollar has appreciated against all foreign currencies, not just the yen. Chart 2-4 shows the value of the yen, mark, franc, and pound, each in terms of dollars. The mark, franc, and pound are all clearly down in value by more than the yen. In fact, relative to the 1973-79 average, the yen has actually *risen* in nominal terms by more than 10 percent against the dollar. It is difficult, given Chart 2-4, to single out the yen as the troublemaker.

Chart 2-4

Bilateral Exchange Rates



The bilateral exchange rate between the yen and the dollar remains a source of difficulty for U.S. businessmen who compete with Japan in domestic or foreign markets. Have the Japanese intervened to keep the yen at a lower level against the dollar than it otherwise would be? Although the Japanese authorities practice occasional exchange market intervention, their intervention has, if anything, prevented a further decline of the yen relative to the dollar. The Japanese monetary authorities have long followed a policy of trying to dampen fluctuations in the exchange rate, known as “leaning against the wind.” In 1977 and 1978 when the dollar was weak against the yen, the Japanese authorities bought dollars to dampen the franc-

ward movement of the dollar against their own currency. In the period since April 1981, when the dollar has been strong against the yen, the Japanese have sold dollars to dampen the upward movement of the dollar against their own currency. The intervention does not appear to have been effective at moderating the swings in the yen/dollar rate. But it has worked in that direction.

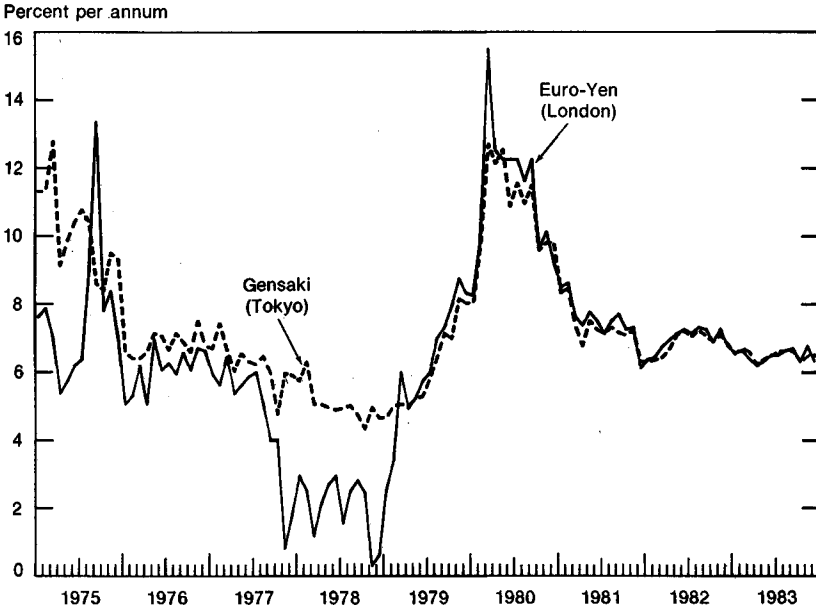
Liberalization of Japanese Capital Markets

The cause of the decline in the exchange value of the yen against the dollar since 1980 is the flow of capital out of Japan and into the United States. A primary reason for this capital flow is the high real U.S. interest rate. But it has been suggested that Japanese restrictions on the international flow of capital may also be a factor.

Japan, like the United States and European countries, maintained into the 1970s controls on the international flow of capital that had originated under the fixed exchange rate system. After the shift to floating exchange rates in 1973, the United States, West Germany, and the United Kingdom, one by one removed their capital controls. As recently as 1978, Japan still retained formidable barriers to both inflow and outflow. For example, foreigners were not allowed to hold many Japanese securities, such as gensaki, a 3-month repurchase agreement. Chart 2-5 shows the Tokyo gensaki interest rate and the London 3-month Euro-yen interest rate. The fact that the Tokyo gensaki rate exceeded the London Euro-yen rate in 1978 is clear evidence that capital controls were operating to reduce capital inflow into Japan. Otherwise foreign residents would not have been willing to hold Euro-yen in London when a higher interest rate was available in Tokyo. The yen was then at an all-time high against the dollar and the Japanese were trying to dampen its appreciation by keeping capital from flowing into the country.

When the yen depreciated rapidly in 1979, the Japanese moved quickly to remove controls on capital inflow, making it possible for foreigners to hold Japanese securities. Japan's Foreign Exchange and Foreign Trade Control Law of December 1980 established a presumption that international capital flows are permitted. Chart 2-5 shows that the *de jure* liberalization took place *de facto* as well. The differential between the gensaki and Euro-yen rates dropped sharply. In fact, the differential, though small, became negative in 1979 and 1980. This is evidence that Japanese controls on the inflow of capital were liberalized more quickly than controls on capital outflow. If some barriers to capital outflow had not remained, Japanese investors would not have been willing to hold assets in Tokyo when a higher interest rate on comparable yen securities was available in London. Thus those capital controls that remained were more a force keeping capital inside the country than outside, and thus more a

Interest Rates on the Yen



Source: Morgan Guaranty Trust Company of New York.

force keeping the yen value up than keeping it down. By 1983 the gensaki-Euro-yen differential was so small as to suggest that Japanese capital markets for short-term negotiable instruments were as open as, for example, European capital markets.

The governments of both Japan and the United States recognize that the yen/dollar exchange rate remains a source of concern, particularly insofar as it heightens protectionist pressures in the United States. One proposal is that the Japanese government take positive action to bring about some capital inflow. In 1984 some Japanese government-affiliated agencies plan to issue foreign currency bonds in New York. However, the governments of both countries feel that more direct measures, such as reinstatement of some of the controls on capital outflow, even if they were effective, would be counterproductive to the longer term goal of completing the integration of Japan into world financial markets.

In the past the yen has not occupied a place in world financial arrangements that is commensurate with Japan's importance in world

trade. For example, the yen's share in world official holdings of foreign exchange, though it has risen rapidly, still falls short of, not only the dollar's share, but the mark's share as well. Similarly, the percentage of Japan's exports that are denominated in its own currency, though it has risen rapidly, is still below the corresponding percentage for other large industrialized countries. At the time of the President's trip to Japan in November 1983, the Japanese agreed to promote increased "internationalization" of the yen. This includes such concrete measures as relaxing the rules that previously restricted use of the yen forward exchange market to transactions arising from foreign trade. There is no reason to expect such measures to have a noticeable upward effect on the value of the yen in the short run. Nevertheless, in the long run an enhanced role for the yen in world financial markets is considered by some to be desirable in that it reflects Japan's importance in the world economy, and is hoped to contribute to some increase in its exchange value against the dollar as well.

A related goal is continued deregulation of *domestic* Japanese capital markets, which lags behind deregulation in the United States. Here the major beneficiary of liberalization would be Japanese households, who in the past have not been paid competitive interest rates on their savings. But it is also sometimes argued that, if interest rates rose in Japan, there might be a decline in capital outflow from Japan and an appreciation of the yen.

Changes in the Japanese-U.S. Trade Balance

The Japanese government is not using either foreign exchange intervention or capital controls to keep the yen "undervalued." Indeed, it would be more accurate to say that the dollar is "overvalued" than to say that the yen is "undervalued." The other major currencies are down against the dollar to a greater extent than is the yen. One would expect that the U.S. bilateral trade balance with Japan would not have worsened more than the bilateral trade balance with other countries.

This is indeed the case. As Chart 2-3 and Table 2-1 show, the bilateral balance with Japan has worsened. But the deterioration in the U.S. bilateral trade balance with Japan represents less than one-eighth of the total 1981-83 decline in the overall U.S. trade balance. The deterioration in the bilateral balance is less severe, as a proportion of U.S. imports from Japan, than the 1981-83 deterioration in the overall U.S. trade balance. The deterioration in the U.S. bilateral trade balance with Japan is also far less severe, on either an absolute or relative basis, than the deterioration in the U.S. bilateral trade balance with Mexico over the same period.

This is not to say that U.S. trade with Japan does not remain a source of concern. The point is that the trade balance with Japan has deteriorated for the same reasons as the balance with other countries.

THIRD WORLD DEBT PROBLEM

The decline in the U.S. trade balance is good news for many trading partners. In the cases of Canada, Japan, and Europe, it represents a pickup in exports that has helped to pull their economies out of recession. But in the cases of the third world countries, particularly those in Latin America, the changing pattern of trade represents something quite different. As seen in Chart 2-3, the decline in the U.S. trade balance with Latin America is much greater in magnitude than the decline in the U.S. trade balance with other parts of the world. The increase in their trade balances is not good news for the Latin Americans; it is the reverse. It is a symptom of the severe debt problem that afflicts most of these countries, and many in Asia, Africa, and Eastern Europe as well, and of the wrenching adjustments that they are finding it necessary to undertake.

THE NATURE OF THE PROBLEM

Recent Developments in the Debtor Countries

Although there had been previous isolated cracks in the international debt terrain, it was not until 1982 that the problem erupted in dramatic proportions. In August of that year, Mexico announced that it was unable to meet its debt obligations to foreign creditors, although it was taking steps to rectify the situation. In response, the U.S. Government mounted a rescue operation, involving the creditor banks, the International Monetary Fund (IMF), and other creditor governments. The package included a strict program of adjustment for the Mexican economy and a rescheduling of much of the debt. Nervous banks began to cut back lending to other countries that appeared to be heavily indebted, with Brazil the most obvious target. As long as the banks had been willing to continue lending, the debtor countries had had the foreign exchange necessary to continue servicing their accumulated debt, i.e., making scheduled payments of interest and amortization of principal. As the banks cut back, the debtors found debt-service obligations increasingly difficult to meet. One by one, Brazil, Argentina, and many other debtor countries found it necessary to seek debt relief from their creditors, while implementing programs of economic adjustment monitored by the IMF.

The most important result of these programs of adjustment has been a sharp improvement in trade balances, so that interest pay-

ments do not have to be met entirely out of new loans, but can be largely met out of foreign exchange earnings from international trade. In 1983 the adjustment efforts of several of the most troubled debtors were successful to the point of achieving significant surpluses in their balances of trade. By the end of the year the situation looked considerably brighter, especially in Mexico. If all concerned parties continue their efforts, and there are no unforeseen calamities, the system can be expected gradually to work its way back to normalcy.

The increases in debtors' trade balances have been achieved largely by cutting imports. Cutting imports is the only practical way of achieving a large increase in the trade balance in a short period of time. But, past a certain point, it is difficult to sustain. It means that the population's standard of living is falling, inventories of raw materials and spare parts have been exhausted, and investment is at a standstill. In some cases, inadequate supplies of imported inputs have forced firms to curtail production, even firms producing for export markets. Beginning in 1984 further progress will depend most critically on expansion of exports, rather than further contraction of imports. Only then will adjustment be compatible with a world of economic growth.

Liquidity Versus Solvency

Central to an analysis of the current debt problem is the distinction between liquidity and solvency. Because countries do not go out of business, as do firms, the distinction is not absolute but is rather a matter of degree. A country might be defined as insolvent if it is likely to find servicing its debt increasingly difficult over time, and eventually to have to default. A country is merely short of liquidity if its economy is believed to be fundamentally sound and its debt-servicing difficulties are believed to be temporary. In that case, continued lending to keep the country liquid is justified, so as not to cause unnecessary damage to the local economy, and so as not to risk more drastic solutions, with their adverse economic and political repercussions. In the case of insolvency, however, there would be no point in the country making it through another year, only to face the same difficulties next year that much further into debt; more drastic solutions would be called for.

Argentina, Brazil, and Mexico are the three debtor countries that have dominated the discussion, not only because of their size, but also because of the acuteness of their financial distress. One indication of their difficulties is that in all three cases, debt-service obligations (interest and amortization, including short-term debt, as originally scheduled) exceed 100 percent of exports of goods and services. This means that even if the countries could somehow cut their imports to zero, their export earnings would not be sufficient to serv-

ice the debt in the absence of continued new lending. But many healthy, developing countries borrow abroad to finance their development, and would be hard put to meet their debt obligations if for some reason they were suddenly cut off from new lending. Furthermore, debt-service numbers are particularly sensitive to yearly fluctuations in interest rates. A longer term measure of “how far in over their heads” the debtor countries have gotten is the ratio of debt to exports. This ratio is reported in the first row of Table 2-4 for Argentina, Brazil, and Mexico taken together. The ratio increased rapidly between 1981 and 1982, and now exceeds 300 percent. If the debt/export ratio were expected to continue to increase in the future, the countries could be considered insolvent.

ORIGINS OF THE PROBLEM

The solvency issue is analyzed below. But to evaluate the future, it helps first to recount the past.

The 1970s: Incurring the Debt

The present pattern of lending to third world countries, with its heavy concentration on bank lending, is only 10 years old. In the aftermath of the 1973-74 oil price shock, banks “recycled” billions of dollars of savings that the OPEC countries could not in the short run absorb. World inflation rates were high and real interest rates very low—even negative—through the remainder of the decade, signaling a high level of savings in search of investment opportunities. The funds went, not to all the third world countries that were having difficulty paying their higher oil bills, but mainly to those judged to have good prospects for future growth, and thus good prospects for full repayment of the debt.

This lending seemed sensible at the time. The high world inflation rates and low real interest rates meant it was advantageous for the countries in question to borrow, and that servicing the debt did not look difficult. A high level of indebtedness is not necessarily a source of concern, as long as the borrowing countries are expected to grow. Corporations whose income is expected to grow in the future often have a high ratio of debt to earnings. Countries do the same. The United States in the 1880s had debt/export ratios as high as those in Table 2-4. Nor were the banks’ expectations of high growth rates in the debtor countries in the 1970s disappointed. The rate of growth of exports from 1975 to 1980 was as great as the rate of growth of debt, in Argentina, Brazil, and Mexico taken together. Thus the key measure, the debt/export ratio, did not rise during this period.

Prior to 1970, private capital flows to third world countries had predominantly taken the form of foreign direct investment, bonds issued for specific projects, and short-term trade credit for specific

imports. The pairing of loans to projects has the virtue of ensuring that the sum of the lending equals the sum of the investment. The bank lending of the 1970s was more often for general balance of payments financing. There is nothing wrong with this in itself. But it allowed total lending to exceed total project investment. The fact that a large number of banks were involved, and that good aggregate statistics on lending did not at first exist, added to the confusion. The banks may not have realized the extent of their collective investment.

The debtor countries also made policy mistakes. The mistakes fall into two broad categories: overexpansion of demand and overvaluation of currencies. Both kinds of mistakes led to excessive trade deficits and therefore excessive borrowing to finance those deficits. But beyond this observation, generalization is difficult. In many countries the government sector expanded too quickly, especially in the form of credit to inefficient state enterprises. Often government deficits were monetized, and the currency was not devalued fast enough to keep up with inflation; then the loss in competitiveness of export industries led to trade deficits that were financed by borrowing from abroad. The end result was the same as when the governments financed their deficits by borrowing from abroad directly. Though much of the money was used for profitable investment, some went to unwise projects, to consumption, and to capital flight out of the countries involved.

In some countries, a capital inflow and consequent real appreciation of the currency were the unintended effects of favorable developments. For example, the discovery of oil in Mexico brought about an increase in indebtedness—financing the investment necessary to develop the oil. Furthermore, the monetary inflow added to inflationary pressures, and the loss in price competitiveness had an adverse effect on the exports of other industries, especially the manufacturing sector on which previous hopes for growth had been pinned.

In other countries the simultaneous adoption of an array of monetarist and free market policies did not prevent indebtedness. Monetary stabilization made the country's assets seem attractive to hold, trade liberalization increased the trade deficit, and removal of capital controls allowed foreign capital to flood in. In several countries, real overvaluation of the currency was an intentional element of the plan to reduce inflation quickly. The magnitude and duration of the loss in export competitiveness that followed were not intentional.

1980–82: A Change in the International Environment

As of 1980, there was little reason to doubt the ability of most of the debtor countries to sustain high rates of growth. If the international economic environment had remained favorable, it is possible that the debtor countries could have gone for years without having to

adjust their policies. But beginning in 1980, they were buffeted by several blows not of their own making. First, inflation rates fell and real interest rates rose in the United States and in other countries. Because the percentage of the debt that was short term had been increasing, and most of the rest carried floating interest rates, the rise in the market rate of interest showed up quickly in debt-service requirements.

Second came the 1980-82 world recession. The export earnings of the debtor countries fell sharply. The demand for the primary products that many of the countries produce has always been highly sensitive to income in the industrialized countries. The years 1981 and 1982 saw sharp drops in the prices of these products relative to goods produced in the industrialized countries. In addition, the non-traditional exports that had grown rapidly in the 1960s and 1970s were hurt by the increased application of protectionist measures in the industrialized countries. Protectionist measures sometimes operated to limit exporters to their past levels of sales, in which case exports from the "new arrivals" in the market were hurt disproportionately. In Argentina, Brazil, and Mexico, total export revenue fell about 8 percent in 1982 in dollar terms.

A third factor that contributed to the debtors' loss in export revenue was the large appreciation of the dollar. The strength of the dollar was in particular a source of the fall in primary product prices when expressed in dollars, which is the appropriate measure because most of the debt is denominated in dollars.

A fourth factor for some countries was the decline in dollar oil prices after 1981 (which in turn derived partly from the other three factors). The oil price decline of course helped the oil-importing countries, which are the majority. But it added to the list of problem debtors a number of oil-exporting countries, OPEC members such as Venezuela and Nigeria, as well as nonmembers such as Mexico.

The loss in export earnings attributable to the world recession shows up immediately in the denominator of the debt/export ratio. The higher interest payments show up immediately in the current account deficit, which in turn shows up over time as a rise in the numerator of the debt/export ratio. As seen in Table 2-4, the ratio rose sharply in 1982.

It is worth noting that virtually all the major Latin American countries got into trouble, the oil exporters as well as the oil importers, those that followed monetarist and free market policies as well as those that increased the money growth rate and expanded the role of the government in the economy. This suggests that in retrospect the key factor, which they all shared, was getting deeply into debt in the first place.

TABLE 2-4.—*Debt/export ratios for Argentina, Brazil, and Mexico aggregated, 1974-83*

Item	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
(1) Debt/export ratio.....	2.1	2.6	2.8	2.7	2.8	2.7	2.4	2.7	3.2	3.2
Billions of dollars										
(2) Interest payments.....	2.7	3.4	4.3	4.9	6.6	10.3	15.1	22.6	28.4	26.2
(3) Trade deficit ¹	7.6	8.9	5.0	0.6	1.8	6.6	10.4	7.8	-6.5	-20.3
(4) Debt ²	43.4	52.5	63.9	75.7	95.0	118.7	143.2	185.1	205.3	213.9
Percent										
(5) Implied interest rate (2)/(4).....	6.2	6.5	6.7	6.5	6.9	8.7	10.5	12.2	13.8	12.2
(6) Trade deficit/debt (3)/(4).....	17.5	17.0	7.8	0.8	1.9	5.6	7.3	4.2	-3.2	-9.5
(7) Current account deficit/debt (5) + (6)...	23.7	23.4	14.5	7.3	8.8	14.2	17.8	16.4	10.7	2.8
(8) Change of exports to next period.....	-2.8	16.6	22.8	18.6	30.1	34.6	16.5	-7.9	4.6	11.5

¹ Trade deficit on goods and services excluding interest.

² Gross debt including short-term debt.

Sources: International Monetary Fund, Morgan Guaranty Trust Company of New York, and Council of Economic Advisers.

It is, however, true that South Korea and other Asian countries that had become as indebted as many of the Latin American countries, as measured by debt/output ratios, encountered less severe problems in the 1980s. What distinguishes South Korea and other Asian debtors from most Latin American countries is not the degree of government intervention in the domestic economy, but the degree of export-orientation. Exports of goods, services, and private transfers are 44 percent of GNP in South Korea, as the result of 20 years of vigorous export promotion. By contrast they are 17 percent of GNP in Mexico, 16 percent in Argentina, and just 8 percent in Brazil. Indeed, of the major Asian debtors, the one to run into the most serious problems, the Philippines, also has the lowest ratio of exports to output. While many other factors are relevant, a debtor country with a high ratio of exports to GNP is less likely to get into debt-servicing difficulties than an otherwise similar debtor country.

WILL DEBT/EXPORT RATIOS IMPROVE?

Argentina, Brazil, and Mexico are all expected to receive new loans in 1984. One point of view is that this is throwing good money after bad, that the loans will never be repaid, that the problem is one of insolvency rather than illiquidity. According to this view, the present case-by-case approach is unrealistic, and should be replaced by some sort of general write-down of the debt. This view is accompanied by widely ranging degrees of sympathy for the debtors. Some observers call for a new agency to buy the written-down debt and extend more favorable terms to the debtors. Others believe that the countries should be left to fend for themselves.

An evaluation of the insolvency versus illiquidity issue is critical. The question is what debt/export ratios are likely to do over the course of the next decade. Ever-rising debt/export ratios imply insolvency. Ratios that decline over time, and eventually reach reasonable levels, imply that the difficulty is only one of liquidity.

The debt/export ratio will decline if the rate of growth of debt is less than the rate of growth of exports. The growth of the debt can be identified with the current account deficit. (In the past, current account deficits could also to some extent be financed by foreign direct investment and temporary drawing-down of international reserves. In the long-term future, a successful resolution of the debt problem would include a revival of foreign direct investment. But, as of 1984, in many countries there is now little likelihood of a continuation of these flows.) The current account deficit consists of interest payments plus the deficit in merchandise trade and non-interest services and transfers. Rows 5 and 6 in Table 2-4 report interest payments and the trade deficit, respectively, each as a percentage of the level of the debt. If the expected rate of growth of exports is greater than the sum of these two numbers, i.e., greater than the current account/debt ratio reported in row 7, then the debt/export ratio can be expected to decline over time. This criterion was easily met by the 25 percent average annual growth rate in exports that prevailed from 1975 to 1980.

The sharp increases in interest rates after 1980 made the criterion much more difficult to meet. If the trade balance had remained in deficit or had been zero, the criterion would not now be met. But Argentina, Brazil, and Mexico succeeded in switching their trade balances from deficit to surplus by 1983. Comparing expected export growth with the average interest rate being paid on the debt (the number in row 5, 12.2 percent in 1983) alone would be too strict a criterion. It would not give the countries credit for the adjustment they have accomplished. But the total current account deficit/debt ratio in row 7 was only 2.8 percent in 1983. This is a more reasonable target against which to compare the rate of export growth.

What is export growth expected to be in coming years? The answer depends on the growth rate in the industrialized countries, among other factors. Even assuming the industrialized world's real growth rate has now returned to that of the late 1970s, there is little likelihood of the growth rate of export earnings returning soon to the 25 percent average annual rate of the earlier period. The quantity of debtor country exports demanded is expected to respond less favorably to this recovery than to past recoveries, in part because in recent years the debtors had come to rely to a greater extent on exports to each other and to OPEC, and strong recovery in the near

term is expected only in the industrialized countries. But, allowing for some improvement in the dollar prices that the debtor countries are paid for their products—and the improvement might be large over the next few years if the dollar depreciates—there does not seem to be much doubt that the rate of growth of export revenue will exceed 2.8 percent by a comfortable margin in 1984 and into the indefinite future. Thus there is not much doubt that the debt/export ratio will decline. Eventually, as export growth and lender confidence are restored, the debtors can be expected to return to the trade balance deficits appropriate to developing countries.

SHARING THE BURDEN

Because the debt problem seems to be one of liquidity rather than one of solvency, i.e., continued lending will permit exports to grow more quickly than the debt burden, it is important to keep the lending going. Chart 2-6 illustrates the amount of foreign exchange available to Argentina, Brazil, and Mexico taken together. In the 1970s imports exceeded exports, that is, they ran trade deficits. Because the prospects for future growth looked good, voluntary private lending was sufficient to finance both the trade deficit and interest payments on previously incurred debt. By 1983 interest payments had become very large and—because of worsened prospects—banks had become reluctant to extend enough new lending to cover the interest payments, let alone any trade deficit. It was only as part of a cooperative effort among the debtors, banks, industrialized country governments, and the IMF that the debtor countries were able to get through the year. The next four subsections consider in turn each of the four parties to this cooperative effort.

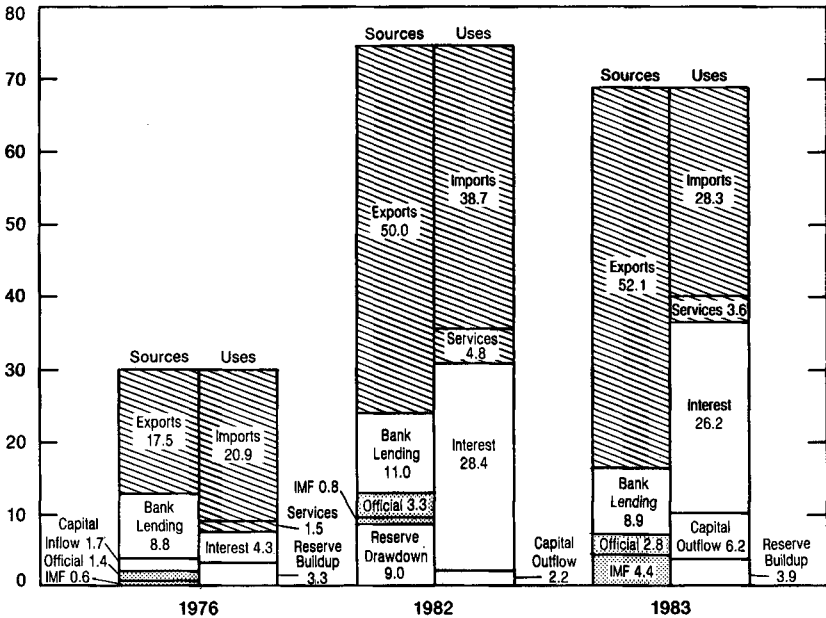
Adjustment by the Debtor Countries

By far the greatest share of the burden was borne by the debtors themselves. Between 1981 and 1983 the three Latin American countries taken together succeeded in improving their aggregate trade balance in goods and services (excluding interest) by \$28 billion. In the larger debtor countries, most of the change was accomplished by cutting imports sharply, mainly by contracting income and expenditure, although partly by devaluation and other methods. From 1981 to 1983 imports were slashed about 52 percent in Argentina, 30 percent in Brazil, and 66 percent in Mexico. All three countries have had to suffer severe recessions in order to reduce expenditure on traded goods. Real GNP has been falling rapidly. In these and other countries, unemployment is very high, and the standard of living of most of the population, including the middle class, has deteriorated sharply.

Chart 2-6

Sources and Uses of Foreign Exchange: Argentina, Brazil, and Mexico Aggregated

Billions of dollars



Notes:

Capital Inflow/Outflow: Nonbank long-term lending from private sources and non-debt-creating flows (such as foreign direct investment); net (of capital flight).

Official: Long-term borrowing from official sources, official transfers, and reserve-related liabilities (such as loans from the Bank for International Settlements).

IMF: Use of Fund credit.

Services: Net payments for services, excluding interest, less private transfers.

Source: International Monetary Fund.

Calls for solutions to the debt problem through adjustment by the debtor countries must acknowledge the fact that an enormous amount of adjustment is already taking place. Indeed, it was the large swing in the trade balance from deficit to surplus that allowed the debt/export ratio to begin falling.

New Bank Lending

As can be seen from Chart 2-6, the increase in the debtor countries' trade balances in 1983 was still not enough to pay for all of the interest they owed. In other words, most of them ran current account deficits. The largest source of financing of the deficits was the banks. New bank lending to Argentina, Brazil, and Mexico in 1983 was about \$9 billion.

The role of the banks has been controversial. One commonly expressed point of view is that the banks made unwise loans, and they now deserve to suffer the consequences. A related viewpoint is that, regardless of whether in the 1970s one could have foreseen the debt crisis, a necessary part of the discipline of the marketplace is the taking of losses when things go wrong, unmitigated by help from national or supranational government institutions. Proponents of this philosophy will be skeptical of solvency calculations like those in Table 2-4. They may ask why it is necessary for the IMF, and the United States and other governments, to get involved, if the loans are profitable and repayable.

In the current international financial system, an individual bank, particularly one of the many smaller banks, has an incentive to discontinue new lending to a problem debtor. A new loan adds to the amount of capital the bank has at risk. Yet—if the bank's share is small relative to the total—a new loan does not visibly add to the debtor's ability to remain current in its payments on its previously incurred debts. If all the banks, as part of a package, continue new lending, this does add significantly to the ability of the country to service its debt on schedule. But an individual bank has no incentive to take into account that its actions might contribute to the failure of the package, and thus precipitate the default that it fears. Left to itself, the bank would be a "free rider," allowing the quality of its portfolio to benefit from the new loans of others, without putting up any new money itself. This free-rider problem is one justification for a role for the IMF and other public institutions.

The International Monetary Fund

The IMF is the third of the four legs, after the debtors and the banks, on which responsibility for managing the debt problem rests. In 1983 the Administration sought, and eventually won, congressional approval for the U.S. share of an increase in resources for the IMF.

The IMF lends money to any of its 146 member governments that are in balance of payments difficulty. No member has ever defaulted on an IMF loan. In the past the two biggest borrowers have been the United Kingdom and the United States.

The IMF has increased total lending in the 1981-83 period of financial distress in the third world and tight liquidity worldwide, as it did in the aftermath of the 1973 oil shock. However, the magnitude of the resources supplied by the Fund is often less important than its role as a catalyst. In the past this has meant giving a "seal of approval" to countries that have agreed to follow particular programs of needed policy changes, enabling them to borrow from banks and other sources. In the financial packages of the past 2 years, the Fund

has gone a step further. In these cases, as a precondition to the IMF stamp of approval to a particular debtor country and to the availability of IMF resources, not only must the country agree to a set of policies, but the banks to which the country is indebted also must agree to extend new loans. In this sense, the IMF is "bailing in" the banks, rather than bailing them out. Chart 2-6 shows that the total amount of Fund lending to Argentina, Brazil, and Mexico in 1983, about \$4 billion, is less than half the amount of new bank lending, which is in turn less than the reduction of net imports achieved by the three countries.

In recent years, the Fund, recognizing that many countries' balance of payments problems require more than short-term stabilization policy and short-term financing, has at times extended financing for longer term structural adjustment. However, longer-term development loans remain the special province of the Fund's sister institution, the World Bank. Neither institution offers substantially concessional interest rates. Only the World Bank affiliate, the International Development Association (IDA), provides "soft" loans to poor countries. The recipients of IDA loans are not the debtors with which this chapter has been concerned. The debtors were rapidly growing economies until recently. Most of the IDA recipients are African and Asian countries that are poor and have always been poor. They do not have big debt problems because banks in the past have not been willing to lend to them.

Thus the purpose of the IMF is neither to bail out banks, nor to give foreign aid. The IMF is rather, as the President has described it, "the linchpin of the international financial system."

The Role of National Governments

The fourth leg in the cooperative effort to resolve the debt problem, after the debtor countries themselves, the banks, and the IMF, is the governments of the creditor countries. Besides supporting the IMF, there are two ways in which the governments play a crucial role in the process: direct credit and trade policy.

In a variety of ways, credit is extended directly by governments to the debtors that are the most afflicted and the most important to them. First, a crisis sometimes comes up so quickly that an IMF package cannot be assembled in time. Then the Bank for International Settlements (the "central bank for central banks" in Basle, Switzerland), or monetary authorities in the industrialized countries acting on their own, may extend a short-term "bridge loan," to tide the debtor over until the longer term financing and adjustment program are in place.

Second, most industrialized countries have government trade credit agencies that grant short-term trade credit to countries buying

their exports. Many U.S. firms that normally export to the debtor countries, especially Mexico and Brazil, are currently unable to do so, as trade credit from private sources has disappeared. The U.S. Export-Import Bank, as currently constituted, has a mandate to raise its levels of credit in these circumstances, when reasonable assurance of repayment exists. Such credit simultaneously increases the ability of U.S. firms to export, and the ability of the debtor countries to import. Other wealthy countries' trade credit agencies are granting corresponding credits for their own firms' exports to the large debtor countries.

Third is the Paris Club, a forum where debtor countries can negotiate debt-relief terms on credits extended by, or guaranteed by, official government agencies. Paris Club rescheduling, along with the other forms of direct credit from national governments, is a significant element in the financing picture for many of the problem debtors.

Government financing for Argentina, Mexico, and Brazil, was about \$3 billion in 1983. This amount, like the IMF lending, is much smaller than the shares of the burden borne by the banks and the debtors themselves, as Chart 2-6 shows.

In the longer run, more important than the role of the national governments in lending may be their role in trade. Currently, for the debtor countries to meet their debt obligations, they must necessarily run trade surpluses. Up until now they have mainly been cutting imports, but in the future they will have to boost exports. Even in the short run, the promise of future export growth is necessary to keep private capital flowing in.

In order for these countries to export, the industrialized countries must import from them. Real growth in the industrialized countries is the most important determinant of imports from the debtor countries. The 1983 U.S.-led worldwide recovery was the best possible development for the debt problem. While policies that bring down real interest rates and sustain the recovery are desirable in any case, their implications for the debt problem make them doubly desirable.

Trade policy in the industrialized countries is the second most important determinant of imports from the debtor countries. The industrialized countries have a variety of tariff and nontariff barriers against imports from these countries. It would be inconsistent for the industrialized countries to expect the debtors to meet their debt obligations, and at the same time expect their trade balance with the debtors not to turn negative. It is essential to the successful resolution of the current international debt problem that the industrialized countries not shut out the products that these countries wish to sell.

The soundness of the current four-way strategy, and its success to date, do not mean that future crises, even major ones, cannot occur. It would take a major unforeseen event, such as a sudden end to the world recovery, to change the outcome of the debt/export calculations; but it might take somewhat less than that for the four-way co-operation to fall apart.

The breakdown of the strategy could hypothetically come from either of two directions: (1) declaration of default and withdrawal of lending, by nervous banks, or (2) suspension of payments or even repudiation of the debt, by suffering debtor countries. Both of these worst-case scenarios are unlikely. Nevertheless, there is an undesirable all-or-nothing element to the present system. From the viewpoint of the creditor nations, a default or repudiation means that the value of the loans drops essentially to zero. From the viewpoint of an individual debtor country it might mean ostracism from the world system of trade and finance. Not only would many years pass before the debtor could resume the long-term borrowing necessary for economic development, but it would be subject to legal entanglements and probably cut off even from the short-term banking services necessary to carry on trade. Ways might be found to reinforce the current strategy that, although not necessarily altering the distribution of gains and losses in an average sense, would take some of the instability out of the system.

Credit Terms Versus the Level of Financing

One way to ease the burden on the debtor countries would be to increase the level of financing, and thus allow them to import more. The obvious drawback to allowing too high a level of financing is that it leaves the accumulated debt that much higher at the end of the year and reduces the pressure on the country to adjust.

There is a more promising alternative to ease the burden of adjustment that is being implemented for the case of Mexico in 1984. The banks, rather than increasing new lending to Mexico in 1984, are reducing it below 1983 levels, but are agreeing to lower the interest rate and loan fees charged. This tradeoff reduces the banks' total exposure relative to what it would otherwise be, and at the same time increases the probability that they will eventually be repaid in full. Mexico's financial position is improved because, for a given trade surplus, lower interest payments mean a lower current account deficit and thus a lower level of indebtedness at the end of the year.

Any easing of terms on bank lending must be tied to good performance on the part of the debtor. If the criterion for granting reduced interest rates were the seriousness of the country's difficulties,

as measured for example by debt-service figures, then the incentives facing the debtor governments would be perverse. Reducing the costs of economic mismanagement can make it more likely to occur. One possibility is to use as the criterion an improvement in the trade balance to the point of a substantial surplus in the balance on goods and (non-interest) services. This would ensure that the benefit is limited to those countries that have serious debt problems *and* have taken the necessary steps to adjust.

Expenditure-Reducing Policies Versus Relative Price Policies

The level of financing and the level of interest payments together determine the trade surplus that a debtor is obliged to run to generate the foreign exchange needed to make interest payments. These levels still leave open the question of whether to attain that trade surplus through high levels of exports and imports, or low levels of exports and imports. The course up until now has been closer to the latter: expenditure on imports has been cut, largely through cuts in government expenditure and in national expenditure generally. Both Mexico and Brazil appear to have cut imports in 1983 below the levels that had been agreed upon with the IMF. The price has been low levels of output, income, employment, consumption, and investment. Particularly in the cases of the larger countries, where imports are a small share of expenditure, cutting expenditure is an inefficient way of cutting net imports.

The alternative strategy is to slow the rate at which budget-cutting and other expenditure-reducing policies are implemented, and to substitute policies that raise the prices of traded goods relative to the prices of nontraded goods. Such "supply-side" policies would provide the incentives for labor and capital to shift into the production of the now more profitable traded goods. (In the case of Brazil, for example, a shift of resources into export production equal to 4 percent of gross domestic product would itself be enough to pay all the interest on the debt.) At the same time, such policies would provide the incentives for consumers to switch expenditure away from traded goods. The trade balance, which is the difference between the production and consumption of traded goods, would increase without a drastic decline in the level of output.

The obvious way to raise the prices of traded goods relative to nontraded goods is to devalue the currency. Devaluations cause immediate corresponding increases in the prices of traded goods, at least in the case of agricultural and mineral products. But there is no reason why devaluations need to be reflected as fully or as quickly in wages and the prices of nontraded goods. It is always easier to provide firms the incentive to export by reducing wages relative to the

prices of traded goods, rather than by reducing wages relative to the general price level.

Three arguments are heard against an approach of substituting some increases in the relative prices of traded goods for some decrease in the level of expenditure. The first is that devaluation is contractionary because of its negative effects on real wages, the real money supply, and the balance sheet of firms with dollar-denominated liabilities. But this argument applies more strongly to the approach of attaining a given trade surplus through expenditure reduction than to the relative-price approach.

The second argument is that devaluation is a "beggar-thy-neighbor" policy that is unlikely to be effective when other countries are trying to do the same thing. This argument, however, applies equally to the alternative expenditure-reduction approach. In other words both the "contractionary" and "beggar-thy-neighbor" arguments are really arguments for allowing smaller trade surpluses through increased financing; they are not arguments about the best way to attain a given trade surplus.

The third argument is that devaluation would result in a higher inflation rate than would expenditure reduction. Inflation is undesirable, and overexpansionary policies in the past were to some extent responsible for both the inflation and the debt problem. But it does not necessarily follow that there is an ironclad connection between continuous progress on the inflation problem and progress on the debt problem. The need to generate foreign exchange to meet interest obligations and the need to put a limit on the rate of decline of production, consumption, and investment, would seem to be absolute constraints. This calls for a judicious mix of policies that reduce expenditure *and* policies that change relative prices.

CONCLUSION

The strong U.S. recovery is creating jobs both at home and abroad. It is helping to pull the other industrialized countries out of recession, and is providing markets for the exports of the debtor countries as well. For the first time since the 1973 oil shock, Canada, Japan, and the European Community are all running current account surpluses. Many of the debtors are showing sharply improved international payments positions; a few such as Mexico have even attained current account surpluses. The United States is acting as an engine of growth in the world economy.

The composition of the recovery remains lopsided as a result of high real interest rates. If real interest rates can be brought down in the United States, it will alleviate the pressure for capital inflow and

for current account deficits vis-a-vis Japan, Europe, and other trading partners. At the same time, lower real interest rates would alleviate the debt-service burden on the debtor countries, thus reducing the trade surpluses that they must run and making things easier for all concerned.

In the meantime, the greatest danger, in the United States as elsewhere, is that the desire to boost exports and reduce imports will be reflected in protectionist measures. The only sound way to improve the U.S. trade balance is to adopt macroeconomic policies consistent with a recovery in which all sectors of the U.S. economy share. The only sound way to promote world trade is to adopt policies consistent with a recovery in which all members of the world economy share. In particular, it is essential to the favorable outcome of the debt problem that the debtor countries be allowed to increase exports to the industrialized countries. The liberal world trading system can only lose if its members resort to heightened barriers to the international flow of goods, services, capital, and labor. All parties can only gain if the debtor countries are restored to health.

CHAPTER 3

Industrial Policy

SHOULD THE UNITED STATES adopt an industrial policy? Proponents argue that such a strategy is necessary to revitalize our manufacturing sector. They claim that U.S. manufacturing has done poorly compared with the manufacturing sectors of other countries, and that we are losing our international competitiveness. These claims have led to the perception that manufacturing's share of our economy is eroding and that we are "deindustrializing."

To reverse this alleged decline, some industrial policy advocates propose that the government encourage new high-technology industries and help older industries regain their former strength. They also recommend that the government assist declining industries to adjust more smoothly to lower levels of output and employment. Others propose government aid to prevent a decline in selected basic industries.

Industrial policy solutions seem attractive to observers who think that such policies have contributed to Japan's emergence as a major economic power. Since World War II Japan has had rapid growth in manufacturing output, productivity, and exports. The main sources of this growth have been high rates of saving and investment, the migration of workers from farms to factories, and the adoption of modern technology. In addition, the Japanese government has used an array of tools to encourage certain industries to develop and others to adjust to decline. Some observers argue that unless the United States adopts an industrial policy of its own, Japanese growth will contribute to U.S. decline.

In this country, industrial policy advocates have advanced several proposals that would increase the government's role in directing resources into or out of specific industries. First, there would be a central agency to shape the Federal Government's industrial policy. Second, councils including representatives of business, labor, and government would gather information on specific industries and forge a consensus strategy. Third, a Federal development bank would invest money in industries deemed to receive inadequate capital from private financial markets. Fourth, declining industries would receive

government aid and import protection to adjust to new economic conditions.

Some industrial policy advocates claim that the United States already has an industrial policy. They argue that such policies as trade protection and subsidies for exports and research and development are components of an industrial policy simply because they affect the composition of industrial output. The difference between our present policies and what they advocate, they say, is that the former is ad hoc industrial policy while the latter is coherent.

It is true that many Federal policies affect industrial output. But the argument about whether they constitute industrial policy, like all arguments about definitions, is pointless. What is relevant is whether the proposals of industrial policy advocates are a good idea. Should the U.S. Government have a larger role than it now has in deciding the composition of U.S. industry?

The answer is "no." An industrial policy would not solve the problems faced by U.S. industry and would instead create new problems. Industrial policy has a mixed record in Japan and has been unsuccessful in Europe. Most of the problems of U.S. industries can be solved with prudent monetary and fiscal policies. The best way to deal with the many changes in demand that occur in a dynamic economy is to allow investors and workers to respond to such changes. Because they reap the rewards of their successes and bear the costs of their failures, investors will seek out industries that pay the highest rates of return. Similarly, workers have incentives to work where they can earn the highest wages. The free movement of capital and labor in response to new profit opportunities and wage differentials increases growth. Government allocation of investment that ignores market signals usually stunts growth by diverting labor and capital from more productive uses.

IS THE UNITED STATES DEINDUSTRIALIZING?

Although selected manufacturing industries face serious problems, the United States is definitely not "deindustrializing." Table 3-1 shows that the output, employment, and capital stock of U.S. manufacturing grew from 1950 through 1980. Moreover, manufacturing's share of total output and capital stock was roughly constant between 1960 and 1980. The manufacturing share of total employment progressively declined, but the decline is a sign of relative productivity growth, not a sign of industrial demise. There is no evidence of either an absolute or relative long-run decline of U.S. manufacturing output.

TABLE 3-1.—Size and share of the manufacturing sector, selected years 1950–80

Year	Manufacturing			Share of total		
	Output (billions of 1972 dollars)	Employ- ment (millions)	Capital stock (billions of 1972 dollars)	Output	Employ- ment	Capital stock
				Percent		
1950.....	131.1	15.2	106.4	24.5	33.7	28.4
1960.....	171.8	16.8	140.4	23.3	31.0	25.8
1970.....	261.2	19.4	202.2	24.1	27.3	23.5
1980.....	351.0	20.3	287.0	23.8	22.4	23.4

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

It is true that the composition of U.S. manufacturing has changed substantially over the past two decades. As Table 3-2 shows, between 1960 and 1980 U.S. manufacturing shifted away from capital-intensive, labor-intensive, and resource-intensive industries toward high-technology-intensive industries. High-technology industries are defined as those with a high ratio of research and development spending to value added. (Value added equals industry revenue minus the cost of inputs purchased from other industries.) In high-technology industries, value added increased by more than 40 percent, and employment increased by more than 20 percent.

This shift in the composition of manufacturing output and the movement of capital and workers toward other sectors is not a threat to our economy or to our international competitiveness. Although we commonly call some industries “basic,” the products of these industries are no more important than the products of the agricultural or service sectors. Nor is our position in world markets endangered if our exports shift from steel and machinery to engineering services. Using industrial policy to halt the decline of our basic industries would not increase growth. It would merely shift investment and employment from one sector to another. Increasing the total level of saving and investment is the best way to increase economic growth.

TABLE 3-2.—Shares of value added and employment by industry group, 1960, 1970, and 1980
[Percent of manufacturing total]

Group	Value added			Employment		
	1960	1970	1980	1960	1970	1980
High-technology.....	27	31	38	27	30	33
Capital-intensive.....	32	30	27	29	30	28
Labor-intensive.....	13	13	12	21	20	19
Resource-intensive.....	28	25	23	23	21	20

Source: Robert Z. Lawrence, *Brookings Papers on Economic Activity*, 1:1983.

COMPARISON WITH OTHER NATIONS

U.S. manufacturing output and employment have generally performed well compared with other major industrial nations. Table 3-3 presents manufacturing data for France, West Germany, Japan, the United Kingdom, and the United States from 1960 to the first oil shock in 1973, and from 1973 to 1980. The data show that the slowdown in the growth of output and employment in manufacturing since 1973 was not limited to the United States, but also occurred in Europe and Japan. Whatever the causes of this slowdown, it is shared by our international trading partners, many of whom have industrial policies.

TABLE 3-3.—*Changes in manufacturing output and employment in selected industrial countries, 1960-80*

(Average annual percent change)

Country	Output		Employment	
	1960-1973	1973-1980	1960-1973	1973-1980
France.....	5.0	1.3	0.5	-1.3
Germany.....	5.2	1.0	.9	-1.7
Japan.....	12.5	2.4	3.4	-1.5
United Kingdom.....	3.0	-1.8	-6	-1.9
United States.....	5.4	1.8	1.4	.1

Source: Organization for Economic Cooperation and Development.

The U.S. manufacturing sector grew more rapidly than most European manufacturing sectors between 1960 and 1980. Japanese manufacturing output increased most rapidly during this period, but the difference between the Japanese and the U.S. growth rates declined substantially after 1973. Between 1973 and 1980, U.S. manufacturing employment grew slightly, while manufacturing employment fell in France, West Germany, Japan, and the United Kingdom.

Some industrial policy advocates also claim that the United States is losing its competitive edge in high-technology. Since World War II, other countries have followed the United States in developing this sector. As the number of producers has increased, the U.S. share of this rapidly expanding market has gradually declined. Between 1962 and 1980 the U.S. share of industrial countries' high-technology exports fell from 30.3 percent to 23.9 percent. During the same period, the Japanese share rose from 4.1 percent to 12.3 percent and the German share stayed constant at about 18 percent.

However, the United States is still the leading exporter of high-technology products. In 1980 the United States exported \$7.6 billion of high-technology goods, compared to \$7.5 billion for West Germany, \$4.8 billion for Japan, \$3.7 billion for the United Kingdom

and \$3.2 billion for France. In that year we were the leading exporters of office machines and automatic data processing equipment, and professional and scientific instruments. As Table 3-4 shows, from 1970 to 1980 the real value of net exports in many high-technology industries increased more in the United States than in Japan, West Germany, France, and the United Kingdom.

TABLE 3-4.—*Net exports in selected high-technology industries, 1970 and 1980*

[Millions of 1980 dollars]

Country	Medicinal and pharmaceutical products		Artificial resins and plastic materials		Electrical machinery		Professional, scientific, and controlling instruments	
	1970	1980	1970	1980	1970	1980	1970	1980
France.....	148.5	796.3	-62.2	33.2	272.5	664.0	-72.9	-56.0
Germany.....	546.1	981.4	1,573.5	2,590.0	2,914.2	4,480.1	1,094.9	1,573.0
Japan.....	-259.8	-779.5	1,092.0	1,315.1	3,638.1	7,230.1	907.6	562.5
United Kingdom.....	439.6	1,217.1	243.3	261.3	1,076.3	655.0	304.9	476.5
United States.....	575.0	1,216.9	1,635.5	3,171.1	1,378.8	169.8	966.0	3,712.7

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

PROBLEMS OF U.S. MANUFACTURING

Although U.S. manufacturing in general is not in a long-term decline, it has experienced serious short-term difficulties. In addition, certain industries have serious long-term problems.

Macroeconomic Problems

In the short run, U.S. manufacturing, like other cyclically sensitive industries such as housing, declined during the recent recession. Manufacturing employment fell from its peak of 20.4 million in July 1981 to 18.2 million in November 1982. Manufacturing output declined by 12.5 percent over the same period. However, employment has risen sharply since then, and stood at 19.3 million by the end of 1983, while output rose 17.8 percent between November 1982 and December 1983. As the recovery continues, manufacturing employment and output will also continue to grow. In any event, monetary and fiscal policies are the appropriate tools for avoiding cyclical problems. Industrial policy cannot hope to eliminate the effects of the business cycle on manufacturing.

A second short-run problem is the high value of the dollar relative to other currencies. The dollar appreciated 45 percent between 1980 and December 1983, after taking inflation into account. This increase in the dollar's exchange value has put U.S. producers at a serious competitive disadvantage in world markets. However, the problem is not limited to manufacturing, but extends to agriculture and such

services as construction, engineering, and tourism. As Chapter 2 explains, the solution once again lies with fiscal and monetary policies.

Problems of Basic Industries

Unfortunately, industries such as autos and steel, which have been hurt by the recession and the rise in the dollar, also face longer run problems. Foreign competition increased in both of these industries during the 1970s. The two oil shocks increased the U.S. demand for small cars, much of which was met by imports. Competition from imported steel increased as shipping costs fell and as foreign steel producers cut their prices in response to excess worldwide capacity.

During this period, management decisions may have worsened the competitive positions of these industries. U.S. auto firms let quality control slip, and they did not respond quickly to the shift in demand toward smaller cars. Some observers claim that steel firms were slow to adopt new technologies. In addition, labor costs increased more rapidly in autos and steel than in other manufacturing industries. In 1970 hourly compensation for auto and steel workers was about 30 percent higher than the average compensation in manufacturing. By 1981 the difference had grown to 70 percent for steel workers and 50 percent for auto workers. Since then, workers in both industries have made significant wage and benefit concessions, which may or may not be temporary.

These industries are now going through significant adjustments. If foreign firms continue to produce goods at lower costs than U.S. firms, then domestic output and employment in the affected industries will fall. The only ways to reduce the cost differentials are to increase productivity or to reduce or even reverse the growth in real wages. Otherwise, preserving output and employment would require a continuing subsidy from consumers or taxpayers to workers and stockholders in these industries.

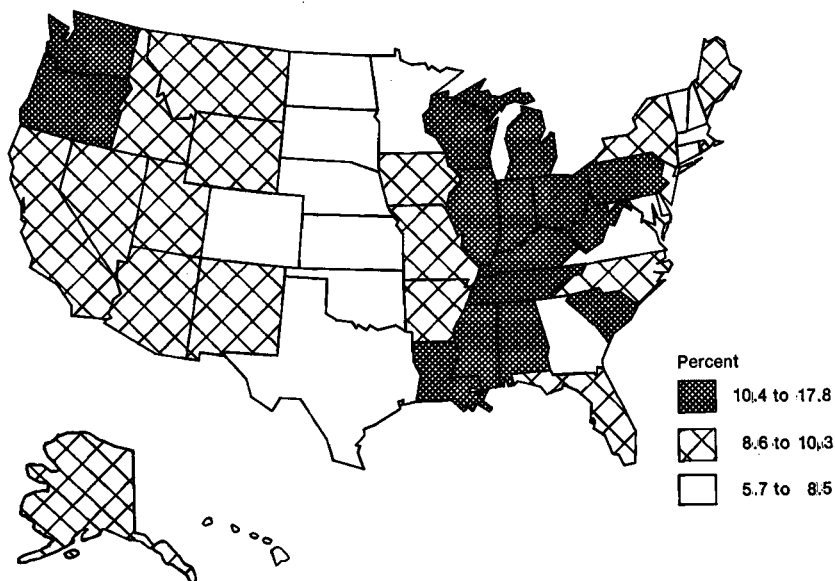
Regional Problems

Employment declines in manufacturing have created serious problems because of the regional concentration of job losses. In the late 1970s manufacturing employment grew by about 1 percent a year for the country as a whole but fell in the Middle Atlantic and Great Lakes States. The recent recession exacerbated these regional disparities. Chart 3-1 shows the uneven distribution of unemployment in fiscal 1983. Many of the States with high unemployment depend heavily on basic manufacturing industries for jobs.

These State unemployment rates hide a wide diversity of economic health within a State; real trouble spots are much smaller areas. In Ohio, for example, the unemployment rate in Columbus was half of Youngstown's in fiscal 1983. In Indiana, the unemployment rate in Lafayette was half the rate of Gary's.

Chart 3-1

Unemployment Rates by State in Fiscal Year 1983



Source: Department of Labor.

These small pockets of real distress persist in spite of job opportunities elsewhere because of the reluctance among some workers to move. Many unemployed workers do move, and broad regional population changes reflect these movements. One detailed study of two depressed areas found that among people who changed jobs, one-third found new jobs outside the region. However, many unemployed workers in depressed areas do not move. Some are tied to their communities by financial and family commitments—working spouses, homes that are hard to sell, and children in school. Unemployment benefits and the hope of returning to a high-wage job near home reduce the incentives for unemployed workers to move in order to find new jobs.

But unwillingness to move is not sufficient to cause lengthy unemployment—workers who are unwilling to move can still find work if their local economies are healthy. As one study shows, in regions with healthy local economies unemployed workers from declining industries are not out of work any longer than unemployed workers from other sectors. Geographic immobility together with depressed

local economies is the source of the special distress associated with the decline in specific manufacturing industries.

For people in these depressed local areas, the shift in manufacturing employment has been difficult. But the total amount of long-term unemployment caused by shifts in the manufacturing sector is relatively small. Workers from declining industries who suffer long-term unemployment are only about 2 percent of the unemployed. Other, larger groups appear to have bigger labor market problems.

Since hardships caused by economic adjustment are often regional problems, programs to ease adjustment should be targeted regionally. Otherwise, those in need do not get enough aid or budget costs of the program become too large. But the prospects for regionally specific programs are dim. Federal programs to extend unemployment benefits illustrate this problem. The original intent of the Federal program was to channel benefits to States with the highest unemployment rates. Under the current Federal Supplemental Compensation program, all States get benefits regardless of their unemployment rate. Complicated clauses in the law reduce the decline in benefits when State unemployment rates fall.

The general history of regionally targeted programs is a steady expansion of eligibility rules until all States get some portion of the program. The prospects for a good Federal adjustment program may be limited by the same problems that would plague industrial policy initiatives in general—possibly deserving groups would be crowded out by their less deserving but politically powerful competitors.

IMPLICATIONS FOR U.S. POLICY

There is no evidence of a general deindustrialization of the U.S. economy. Over the long term, U.S. manufacturing has accounted for approximately 24 percent of real output. Although manufacturing's share of total employment has declined, the number of workers employed in manufacturing rose by nearly 5 million between 1950 and 1980, and productivity growth was higher than in the rest of the economy. Nevertheless, the combination of a recession at home and a strong dollar abroad caused manufacturing output and employment to suffer. However, manufacturing output is currently rising almost three times as fast as the rest of the economy.

This suggests that the most important contribution of Federal policy to the strength of American manufacturing would be monetary and fiscal policies that are consistent with long-term economic growth and a sustainable trade balance. Such policies would not resolve all the problems of the few industries in long-term trouble. But

they would probably resolve most of the concerns that have led to the calls for industrial policy.

JAPANESE INDUSTRIAL POLICY

Proponents of an industrial policy often use Japan as a model for the United States. First, Japan has enjoyed rapid economic growth since World War II. Second, many Japanese products compete successfully in export markets. Although Japan has had great economic success, it is not clear that industrial policy contributed on net to this success. Other features of the Japanese economy, such as the high saving rate and the transfer of labor from agriculture to industry, were undoubtedly more important. Net saving in Japan over the past three decades has been over one-fifth of Japan's net domestic product. By contrast, net saving in the United States has averaged less than one-tenth of net domestic product.

THE INSTRUMENTS OF JAPANESE INDUSTRIAL POLICY

The first step in formulating an industrial policy for an emerging or declining sector of the Japanese economy is gathering information and creating a consensus. To gather the information about potential growth industries and the best way of developing them, the Japanese government meets with outside experts and convenes councils of informed individuals from banks, trading firms, producing and consuming firms, universities, and trade unions as well as relevant government agencies.

The final product of the council process is either a general "vision" urging private firms to develop a sector, or a specific plan to produce certain goods by some future date. The detailed plans, however, are simply targets that the government officials and private experts believe are both possible and desirable to meet. Japan's economy is not centrally planned, nor is there much government ownership of manufacturing firms. Although the government may provide incentives to encourage the development of certain industries, it does not force individual firms to comply with its targets.

The incentives provided by the Japanese government have included tariffs or import quotas, special tax treatment, research subsidies, subsidized loans, antitrust immunity, and administrative guidance. During the early postwar period of reconstruction Japan had steep barriers against all imports. Japan began to relax these barriers over 20 years ago. Since the mid-1970s, Japan's tariffs on manufactured goods have been similar to those of the other major industrial nations, and today they are among the lowest of all major industrial nations, including the United States. However, Japanese tariffs are

markedly higher than average on some manufactured goods in which Japanese producers are relatively uncompetitive.

Significant nontariff barriers continue to protect parts of Japan's manufacturing sector. Standards and certification requirements impede imports of automobiles and many other consumer durables. Government procurement restrictions protect Japanese electronics and computer industries. These restrictions have recently been relaxed somewhat but they remain significant obstacles to trade.

Special tax treatment, subsidized loans, and loan guarantees have been used to stimulate emerging industries, and to ease the adjustment of declining sectors. Until recently, firms purchasing numerically controlled machine tools were eligible for depreciation schedules more generous than those available for other equipment. Today, computer software producers and investments in robotics receive special tax benefits. Subsidized loans and loan guarantees also have helped to develop the steel, computer, shipbuilding, and semiconductor industries, and have assisted firms in the aluminum and petrochemical industries in reducing capacity and employment.

The Japanese government has also encouraged the development of certain industries by providing subsidies for applied research. The work subsidized with tax dollars is usually only part of larger joint research projects financed mainly by private firms. Japanese firms have used joint research successfully in developing several important products, including the 64K RAM chip.

Finally, firms in industries with temporary or permanent declines in demand are sometimes allowed to form cartels to restrict output in order to raise or maintain prices. Cartels have been formed during cyclical downturns in some segments of the aluminum, paper, and steel industries, and have also been used to maintain prices and reduce capacity in declining industries, including synthetic fiber, ammonia, and urea. In these cases, the government has allowed firms to cooperate in restricting output in exchange for promises by firms to scrap excess capacity. Higher prices have often meant lower domestic consumption, reduced exports, and either increases in imports or increased trade barriers.

This list of industrial policy tools may understate the role of the Japanese government in the development of specific industries. Various government agencies review conditions in industries within their jurisdiction in consultations with outside experts. If they see problems or opportunities, these agencies look for solutions and then try to persuade the private sector to follow their advice. The advice may be accompanied by promises of loans, research subsidies, or other government aid. The total effect of the advice and the aid on private

investment decisions may be greater than the actual amounts of aid would suggest.

PRIVATE INVESTMENT AND GOVERNMENT SUBSIDIES

These industrial policy tools—import barriers, special tax treatment, research subsidies, subsidized loans, and antitrust immunity—may have been important in stimulating the growth of Japanese industries such as steel, shipbuilding, machine tools, and computers. However, government financial aid to many of these industries—including steel and computers—is only a small fraction of the investments made by the private sector.

Subsidized lending by the Japan Development Bank, for instance, averaged only 1.4 percent of total bank lending to the steel industry between 1961 and 1970, and only 3.8 percent between 1971 and 1980. Japan Development Bank loans to the electrical machinery sector, which includes computers and semiconductors, were only 0.6 and 0.8 percent of total bank lending to those industries during the same periods. Although they may have been instrumental in encouraging private banks to invest in favored sectors, government loans were not a large factor in the growth of these industries.

Furthermore, Japanese subsidies to encourage the development of certain manufacturing industries have been only a small fraction of total government subsidies to specific sectors. As seems to be the case for all developed countries, by far the largest subsidies and the highest trade barriers go to agriculture. Energy projects designed to decrease Japanese reliance on imported oil, subsidies to small businesses, and Japan's government rail system also claim a large share of subsidies. Subsidies to emerging manufacturing industries are small by comparison with subsidies to these other sectors.

The sectoral distribution of the Japan Development Bank lending program reflects these priorities. In 1981 about 37 percent of the total loans of \$4.9 billion was earmarked for energy projects. The next largest shares went to urban and regional development, ocean shipping, and "quality of life" projects such as pollution control. About 9 percent or \$441 million was allocated to the development of technology, which encompasses the computer, electronics, and semiconductor industries. For comparison, plant and equipment investment in Japan in 1981 was about \$180 billion, and electronic computer production was \$6.7 billion.

Total spending for research and development in Japan as a percent of GNP exceeds that of France, but is less than that of Germany and the United States. Furthermore, in contrast to these countries, the Japanese government accounts for a small share of Japan's total research and development expenditures, and provides less than 2 per-

cent of the funding for all research and development undertaken by the business sector.

Government research and development funds in the late 1970s have been estimated to account for 6.7 percent of total research and development in the computer and semiconductor industries, versus 18 percent in agriculture and 28 percent of transportation research and development. The Ministry of International Trade and Industry (MITI), Japan's most important industrial policy agency, controlled about 12 percent of public research and development funds in 1983, or about \$708 million, and allocated about one-half of these funds to energy-related research and development. About \$350 million went to manufacturing industries.

Finally, Japanese government spending goes primarily to social welfare, aid for local governments, and public works rather than to develop emerging industries. In spite of its unique industrial policy process, Japan allocates government support to many of the same sectors that are favored in other advanced market economies, including the United States.

HAS JAPANESE INDUSTRIAL POLICY BEEN A SUCCESS?

Japanese industrial policy has had both successes and failures. Some targeted industries, including semiconductor and machine tools, are almost certainly stronger than they would have been without government support and can be claimed as successes for Japanese industrial policy. Other industries, such as shipbuilding and steel, probably grew more quickly because of government aid, but undoubtedly would have developed without any government intervention. However, the Japanese government has also picked losers. Aluminum smelting and petrochemicals were favored industries 15 years ago, but the public and private investments have paid off very poorly and now their capacity is being reduced. There are also several examples of successful industries that did not receive government assistance, including motorcycles and consumer electronics. Nevertheless, these industries have dominated world trade in the products they produce.

The Japanese automobile industry also received protection from imports. But the auto industry followed a course very different from that suggested by MITI. In 1961 MITI tried to force the industry's many firms to merge into a few. In 1965 MITI exhorted the industry to develop a prototype "people's" model of its product so MITI could designate the winning firm as the single producer. In both cases, the industry rebuffed MITI. Moreover, although import protection helped the Japanese auto industry develop, protection given to other industries hurt the auto industry by raising the price of

inputs such as steel. Furthermore, the auto industry has not received special tax treatment or subsidized loans for over 20 years. Therefore the success of Japan's auto industry cannot be attributed to industrial policy.

Furthermore, Japanese industrial policy did not create additional investment. It simply directed the existing pool of savings from one industry to another. It is possible that the industries that lost funds as a result of government industrial policy would have been at least as successful as the industries that received the government's blessing.

In conclusion, Japanese industrial policies have undoubtedly influenced Japan's industrial structure. However, the government and its councils of experts have a mixed record of success. They have indeed picked some industries that turned out to be winners in part because of their efforts, but they also picked industries that ended up losers. They failed to pick some big winners and they also picked industries that would have become winners without any help. The net effect of these policies on economic growth is not clear.

EUROPEAN INDUSTRIAL POLICIES

European economies have grown rapidly since World War II, primarily because of high rates of saving and investment, increases in education, and migration from agriculture to other sectors. However, many European policies that aid specific industries have been costly failures. Large scale efforts by European governments to promote high-technology industries have rarely produced commercially successful products. And attempts to ease the adjustment of declining industries have generally produced little reduction in excess capacity despite enormous government subsidies.

EUROPEAN INDUSTRIAL POLICY TOOLS

The tools used to implement industrial policies differ considerably among European countries. In France, the country with the most elaborate industrial policy, state efforts to develop the economy can be traced at least as far back as the time of Louis XIV. Since World War II, a series of 5-year "indicative" plans has set comprehensive targets for the French economy, often with specific sectors selected for special support. Although these targets have been voluntary, they have been designed as a framework for French economic growth.

The government owns a large portion of France's manufacturing and financial sectors, and thus is able to allocate resources directly into targeted industries, projects, or companies. Most of the capital for several emerging industries, including civil aircraft and comput-

ers, has come from the government. France has also used research and development subsidies and government procurement to encourage high-technology industries. In addition, the French government owns, subsidizes, and protects certain declining industries, including steel. Other declining industries, such as textiles and shipbuilding, receive subsidies and trade protection but are privately owned.

Britain does not have comprehensive economic plans or government ownership of banks and insurance companies, but government equity involvement in heavy and high-technology industries is common. Steel, autos, and semiconductors have received state equity support. In addition, many declining industries have received trade protection, manpower training grants, and financial subsidies.

As members of the European Community (EC), all the major industrial countries of Europe have common external trade barriers, most notably in steel and textiles. But West Germany, with its relatively efficient steel industry, has been less energetic than France or Britain in lobbying for barriers to protect declining industries. The West German government has provided substantial subsidies for research and development, but its subsidies for declining industries are low by European standards. There is little public ownership of manufacturing firms, but an important share of West Germany's banking system is state owned.

LESSONS FROM EUROPE

In spite of massive aid to favored European industries such as aircraft, computers, and semiconductors, most of the firms in these industries are not commercially successful. The explanation for this record may stem from the competing goals that governments generally pursue.

The Concorde is probably the most famous product of European industrial policy. Built by a British-French joint venture and flown only by their national airlines, the Concorde had cost French taxpayers \$4.4 billion by 1979. At no time have revenues covered the costs of operating the Concorde, much less the capital costs of the firms that built it. Work on the Concorde helped develop France's aerospace industry and may have achieved certain political and social objectives. But, these benefits aside, the Concorde project is a clear reminder of the costs of government encouragement of emerging industries.

The Airbus is another large scale project that has so far been a commercial failure. Produced by a firm owned mostly by a consortium of European governments, the Airbus has been a profitable investment for the airlines that bought it, but a costly burden for the sponsoring governments. The Airbus still requires production subsi-

dies despite the sale of about 350 planes. Bolstered by government guarantees, Airbus did not follow the usual commercial practice of collecting purchase agreements before beginning production. As a result, early production levels were too low to benefit from scale economies.

The French government also decided to develop an internationally competitive computer industry in the mid-1960s. Today, neither of France's two recently nationalized computer companies is profitable, in spite of over \$1 billion in direct subsidies, support through government procurement programs, and research and development subsidies. Many analysts conclude that the French government pursued an unrealistic goal of self sufficiency and ignored its competitors' comparative advantage and market share. Business decisions were made by the government and did not always reflect commercial realities.

Britain's computer and semiconductor industries seem similarly unable to overcome the competitive advantage of foreign producers in the British market, despite aid programs that include equity financing, loan guarantees, and government procurement policies. Neither the government-owned semiconductor firm nor the computer firm most heavily supported by the government is profitable. Once again, the appeal of technological independence outweighed economic considerations.

Aid to declining industries also reflects the sometimes competing goals of government intervention. Efforts to ease the adjustment of declining industries apparently slow that adjustment process, at enormous cost to European taxpayers. It appears to be difficult for governments to encourage an industry to decline sufficiently after giving it subsidies. Government assistance to the steel, shipbuilding, and textile industries has been designed to protect employment while encouraging restructuring. Despite massive infusions of aid and trade protection over a long period, there is still much excess capacity in the steel and shipbuilding industries.

Since the establishment of the European Coal and Steel Community in 1951, steel has been the most closely regulated and protected industrial sector in Europe. After years of import protection, subsidies, and output controls designed to raise prices, many European steel producers continue to sustain large losses. Although steel employment in the United Kingdom fell by almost 60 percent between 1974 and 1982, and has also declined in other EC countries, substantial restructuring remains to be done.

Restructuring of the European textile industry has also not been generally successful according to most analysts. Even when progress has been made in reducing excess capacity and modernizing equip-

ment, trade barriers have remained in place. Indeed, from bilateral quotas on cotton in the early 1960s to the current form of the Multi-fiber Arrangement, protection from imports has increased in scope and intensity.

European governments may be learning from their failures. The current French policy in electronics seems to be more competitively oriented than earlier policies, and since 1981 the British government has cut subsidies to declining industries. However, the French commitment to early development of a new commercial airplane suggests a continued belief that government can outguess the market.

SHOULD THE UNITED STATES HAVE AN INDUSTRIAL POLICY?

The perception that the United States is deindustrializing has spurred interest in industrial policy in this country. But we are not deindustrializing. Moreover, Japan's record with industrial policy is mixed, and industrial policy in Europe has generally failed. Industry-specific measures are not well suited to deal with the special problems of some U.S. industries and workers. Unemployment problems in declining industries are best solved with programs that focus aid on individuals rather than on entire industries. Allocating resources to different industries is best done by the market. Profit opportunities and wage differentials give investors and workers powerful incentives to seek out industries where their capital and labor are most valued and most productive.

Nevertheless, some people argue that industrial policy could promote growth and smooth adjustment. Many claim that government now fails to take account of the effects on industries of its various policies, and that better coordination within the government would improve the situation. Others claim that investors are reluctant to finance emerging industries because the time horizons of private investors are too short. These advocates therefore propose government aid to help emerging industries. Still others argue that government aid is needed for industries with learning curves, high value-added industries, linkage industries, and industries that compete with products subsidized by foreign governments. Finally, some industrial policy advocates argue that special aid should be given to declining industries to help them adjust.

COORDINATING AGENCIES AND TRIPARTITE COUNCILS

Industrial policy advocates argue that current Federal Government programs often conflict with each other. Creating a new agency and establishing tripartite councils of business, labor, and government,

they say, would bring these conflicts to the attention of government officials who would then make more judicious tradeoffs among competing goals.

Different government programs sometimes do have conflicting effects on an industry. Unintended consequences are inevitable in a complex economy where each policy affects a large number of sectors. More important, many policies have conflicting effects because governments have competing goals. Reducing air pollution, for example, raises the cost of producing steel and conflicts with the goal of a more competitive steel industry.

There is little reason to believe that introducing another agency would improve coordination. Government agencies and forums already exist to coordinate policies, and many government departments already have advisory committees to provide information on private sector views. Additional tripartite councils and a new agency would not necessarily be able to obtain better information than what is already available.

Tripartite councils are proposed to promote a consensus on policy decisions. This would strengthen the current tendency of government policy to take inadequate account of the interests of consumers and taxpayers, who have very weak incentives to organize on any particular issue. Business and labor groups are already heavily represented in Washington. An additional agency with stronger representation of business and labor interests would make the policy debate even more one-sided.

GOVERNMENT DEVELOPMENT BANK

Many industrial policy proponents propose a government development bank to augment private investment in certain industries. Some proposals include other types of aid, such as research and development subsidies to specific industries. These proponents claim that government support is necessary because the market does not invest enough in several types of industries—emerging industries, industries with learning curves, high value-added industries, basic or “linkage” industries, and industries that have been targeted by foreign governments. To supplement private capital, the proposed bank would lend additional money to industries in these categories.

Emerging Industries

Government investment in emerging industries is said to be desirable because private investors are too risk averse or have time horizons that are too short. Therefore they invest too little in risky ventures with long-delayed payoffs.

Investors may appear shortsighted or risk averse when they cannot capture all the returns from their investments. For example, patent

and copyright protection for computer software and integrated circuits is probably inadequate and may have deterred investors from taking risks and investing their time and money in these areas. More generally, research and development gains are often spread among many firms, not just the firm that incurs the costs.

The solution to these problems is not government investment in specific firms, but policy changes that improve incentives for all firms to invest in research and development. The Administration supports the provision of copyright-like protection for integrated circuit designs, and in 1981 supported enactment of a temporary tax credit for research and development expenditures.

The proposal to target emerging industries suggests that government can obtain better information than the private sector. It is difficult to understand how government officials, together with private business and labor leaders, will be able to gather more accurate information and use the information more wisely than the private sector. The United States has numerous investors willing to finance new ventures through equity or bank loans. Private investment analysts spend a great deal of time and effort evaluating new technologies and advising private investors on the most promising firms. Information on emerging industries is also exchanged by job shifting among scientists and engineers who are close to the development of new technologies. Ties between industry and the academic community also contribute to the spread of new ideas. In the United States the private sector already has information at least as good as the proposed government councils and banks could expect to gather.

In any event, a government agency is more likely to be shortsighted and risk averse than private investors. Since politicians face frequent elections, they often have very short time horizons. A government agency is also more likely to make decisions based on the shared expectations that are the conventional wisdom of the time; these processes tend to neglect or reject the idiosyncratic information that is the basis for decisions by the most successful private entrepreneurs.

Finally, government officials will often make investments based on politics rather than economics. One country tries to develop a computer industry before it has sufficient technical workers. Other countries invest in highly visible but wasteful energy projects that private firms think are likely to fail.

Learning Curves

In some high-technology industries, production costs drop significantly as firms gain experience. Some proponents of industrial policy say that the government should subsidize these industries or protect them from foreign competition to allow them to move down a

"learning curve." This would presumably speed up the drop in costs and increase their ability to compete in international markets.

Learning curves may exist for individual firms, for entire industries within a country, or for an industry in the world as a whole. If the learning curve is at the level of the firm, the U.S. market is likely to be far larger than the cumulative production required to advance an individual firm along its learning curve. Moreover, choosing a single firm to subsidize and protect in the beginning stages of a new technological development would be very risky. In every new industry there are false starts. Having government and private experts determine the best approach to a technical problem early in the process will generally produce a worse result than letting different firms compete to see whose idea is best.

If the learning curve is for the entire world, then the optimal strategy may be to let other countries go first and enter the industry only after initial research and development costs have been borne by foreigners. The Japanese have profited enormously by adopting U.S. technology.

While there may be special cases in which learning curves justify import protection, identifying them in practice would be very difficult. Because of this difficulty, many firms and industries would incorrectly claim that their learning curves justify import protection or subsidies. A similar problem arises in the Federal procurement process. Firms sometimes claim to have steep learning curves in order to justify becoming the only supplier to the government. Often, actual learning curves are flatter than predicted.

In short, knowing that a theoretical case exists may be of little practical importance. The end result of protecting or subsidizing a high-technology industry could be a domestic industry unable to compete in international markets. The trade protection granted to such industries could force U.S. buyers to pay higher prices and erode their competitive position in other markets.

Industries With High Value Added

Some proponents of industrial policy advocate redirecting investment to industries with high value added per worker. Value added is the revenue earned above that needed to purchase inputs from other industries. Value added is therefore the return to labor, capital, and know-how.

Total value added or, equivalently, real income in the economy is raised when a dollar of investment is moved from a use where its productivity is low to a use where productivity is higher. There is no reason, however, to believe that a dollar of investment in an industry with high value added per worker will be more productive than a dollar of investment in a low value added industry. What matters is

not the average productivity of labor or capital in that industry but the return on one more unit of capital. When markets work properly, investment is distributed among industries until the rate of return on additional investment is the same in all industries. In this situation, shifting investment from one industry to another will not raise total real income or value added.

The same is true of reallocating labor among industries. Although the average productivity and value added per worker differ among industries, a well-functioning labor market assures that employees will end up in industries where their contribution to output is highest. If this were not so, the employee would have an incentive to shift jobs in pursuit of a position with a higher wage.

The best way to promote high value-added industries is to expand the total capital stock of the economy. Investors will naturally seek to put that capital to its most productive use. If our tax laws distort the relative payoffs from investing in different uses, then it is the tax laws that need to be changed. Incentives to save and invest, such as Individual Retirement Accounts and accelerated cost recovery, are more likely to expand and modernize the Nation's capital stock, and thereby promote economic growth, than a government bank that merely reallocates a fixed amount of savings from one industry to another.

Linkage Industries

Some industrial policy proponents advocate government aid to "linkage" industries, that is, manufacturing industries whose output is a vital input into other industries' products. Steel and semiconductors are often cited as examples of "linkage" industries. However, if such an industry is vital, then the industries that rely on it will demand its output. The profit motive will ensure that this demand will be filled. If the demand can be met more cheaply by producers abroad, then it makes good economic sense for the firms that use the input to buy it abroad. The more uses the input has, the more important it is for the U.S. economy that the companies obtain this vital input at the lowest possible cost. Otherwise, the competitive position of the U.S. companies that use the input would be threatened.

Proponents of aid to linkage industries may have another idea in mind. They might be saying that producers of a particular good need to have producers of inputs nearby so that they can coordinate their plans. There do appear to be examples of industries that grew because they were near producers of vital inputs and therefore able to coordinate plans. Some observers have attributed part of the success of the U.S. personal computer industry to its location in the Silicon Valley, near the semiconductor industry. But if the advantages of locating nearby outweigh the disadvantages, companies will do so. Just as steel plants located close to coal mines earlier in this century, so

computer producers have located near semiconductor firms in the Silicon Valley. No government direction is needed.

Industries Targeted by Foreign Governments

Some industrial policy proponents also argue that the United States should subsidize industries targeted by foreign governments. If we do not, they claim, our industrial structure will be determined by other countries. A foreign subsidy that reduces the price of U.S. products clearly distorts the market, but a policy of countersubsidy by the United States would further depress prices and the return on capital. A general policy of countersubsidy would lead to increasing misallocation of capital and labor and lower economic growth.

Our present trade laws authorize countervailing duties on subsidized foreign products sold in the United States. In addition, selective subsidy of export financing may deter foreign export subsidies. The Export-Import Bank of the United States provides loans, loan guarantees, and export credit insurance for U.S. exports to counter foreign export subsidies. The Administration has been successful in the past 2 years in sharply reducing the export credit subsidies of other countries.

Some observers think that certain foreign industrial policies are responses to what they perceive as a U.S. industrial policy. They point to the stimulus provided by defense spending to our computer, aircraft, and nuclear reactor industries, and observe that our space program has made the United States the world leader in commercial telecommunications satellites. It is certainly true that the billions of dollars spent by the United States since World War II to develop new weapons and explore space have given a fortunate boost to some high-technology industries. However, the primary purpose of this spending has been to protect the United States and its allies and to pursue space science. If the main reason for this spending had been to develop commercial computer, civil aircraft, or satellite industries, our defense and space programs would certainly not have been the least expensive way of doing so.

AID FOR DECLINING INDUSTRIES

Most industrial policy proponents recommend government action to slow or reverse declines in "basic" industries. In addition to loans and special tax treatment, many proposals include government-sponsored restructuring plans that would spread adjustment burdens among labor, management, shareholders, suppliers, and creditors. In declining industries that face competition from imports, industry commitments to restructure would be extracted in exchange for trade protection, while expanded compensation and retraining programs would be used to help workers whose jobs are lost.

A basic problem with such proposals is that they would divert resources from emerging industries and from healthy established firms. Workers, stockholders, and suppliers in declining industries would exert political pressure to gain government aid. Experience here and abroad strongly suggests that resisting the pressure from declining industries would be difficult.

Aid to Firms

Proponents of aid to declining industries often cite Chrysler as an example of a company that has survived because of a government loan guarantee tied to a restructuring plan. But the Chrysler case should not be used as a model for several reasons. First, Chrysler might have survived even if it had gone bankrupt. The concessions extracted from workers, suppliers, and creditors in return for the loan guarantee might well have been made as part of an ordinary bankruptcy proceeding. Second, even if government aid were required to keep Chrysler in business, the auto industry and the economy as a whole may have derived little benefit from the guarantee. Many of the autos produced and jobs saved at Chrysler were at the expense of other U.S. automakers and their employees. Similarly, the loans that went to Chrysler would have gone to other sectors, possibly including emerging industries.

Third, loan guarantees to Chrysler may have been successful because such guarantees to failing companies are now the exception, not the rule. If loan guarantees became standard practice in such situations, workers, management, creditors, and suppliers might be less willing to make sacrifices. They might come to expect government aid whatever they did. Establishing a loan guarantee program would certainly encourage many other firms to apply for aid, and could lead to even more costly Federal commitments to firms that did not pull through after the first round of aid. This has been the common European experience, and it could well happen here.

Import Protection and Restructuring

Some observers suggest that trade protection be granted to industries hurt by imports in exchange for commitments to restructure and adjust. Without such commitments, trade protection reduces the pressure on firms and workers to make painful changes. Under existing trade law, import protection is granted with no guarantees that the workers and firms who benefit from the import protection will make the necessary investments or take other measures to become more competitive. The result is higher prices for consumers, often with little long-term improvement in the industry. The protected industry seldom becomes competitive and usually continues to pressure government for more protection.

Strictly enforced agreements, it is argued, could encourage workers and firms to use the financial benefits of temporary protection either to become more competitive or to scale down production. The current practice of granting import protection often has the opposite effect. It forces consumers to pay higher prices without requiring the industry to undergo difficult adjustments.

The main objection to this proposal is that once the presumption of aid is established, it is difficult to extract concessions from an industry. How often will government officials in this country be able to tell workers that they must accept lower pay, suppliers that they must cut their prices, and banks that they must write off loans in order to obtain import protection? Political pressure as well as economic considerations would undoubtedly influence the process.

In addition, an agreement to grant trade restraint in exchange for restructuring by an entire industry would be more difficult to enforce than a loan agreement with one firm. Should the government expect efficient firms as well as inefficient firms to make the same sacrifice? How would conflict between different segments of an industry be resolved? How would the agreement be enforced if some firms complied and others did not?

Aid to Workers

Industrial policy proponents who want to aid declining industries are motivated in part by concern for the workers in these industries. They often argue that manufacturing provides "good" jobs that cannot be replaced by jobs in other sectors of the economy. In fact, basic manufacturing jobs are no more important for the economy as a whole than jobs in, say, the service sector. The real difference between manufacturing jobs and service sector jobs is that the former often pay more than the latter because of differences in worker skills, or in some cases, because of the monopoly power of the manufacturing firm or of its union.

CONCLUSION

Many people advocate industrial policy as a way of stemming the alleged long-term decline in the U.S. manufacturing sector. But there has been no such long-term decline. Manufacturing's share of national output in 1980 was virtually the same as its share in 1950. Moreover, since 1973 the U.S. manufacturing sector has grown more rapidly than the manufacturing sectors of many of the major European industrial nations. And while our growth of manufacturing since 1973 has been less than Japan's, the difference in the U.S. and Japanese growth rates is less than half of what it was between 1960 and 1973.

While there was a short-run decline in U.S. manufacturing due to the recent recession, this was to be expected. Manufacturing is cyclically very sensitive, and our experience in the most recent recession was similar to our experience in earlier postwar recessions. Since the recovery began in the last quarter of 1982, manufacturing output has increased at almost three times the rate of total output. The answer to the short-run problems of most of our manufacturing industries is economic recovery.

A few industries, however, may be in long-term decline, in part because they face foreign competition. The problems of these industries stem partly from past mistakes by management, partly from wage increases that exceeded productivity gains, and partly from factors outside the industries' control. If these industries do not continue to make significant adjustments, either they will suffer additional declines in output and employment, or they will require permanent trade protection or subsidies at substantial cost to American consumers and taxpayers.

Using industrial policy to solve the problems of these few industries would be mistaken for two main reasons. First, industrial policy, in the form of either subsidies or trade protection in return for industry restructuring, would slow adjustment. Once the government helped these industries, it would find it very difficult to cut off or even phase out the aid, as various European governments' experiences with declining industries have shown.

Second, if the goal of industrial policy is to help the long-term unemployed, then helping declining industries is not an effective way of doing so. In healthy local economies, unemployed workers from declining industries find jobs as quickly as unemployed workers from other industries. Depressed local economies, not declining industries, are the real problem. The solution to the problem of the unemployed from declining industries is to enable them to find new jobs and to focus aid on those workers who are hurt by industrial change, as the Job Training and Partnership Act of 1982 is intended to do.

While some people advocate industrial policy to stem the alleged decline in U.S. manufacturing, others see it as a way of nurturing emerging industries, or industrial "winners." Some of these advocates argue that entrepreneurs in the United States have too much difficulty getting "patient" capital, that is, capital whose owners or lenders are willing to invest in a risky idea and to wait a few years for their returns. These advocates therefore want the government to give subsidies or subsidized loans to entrepreneurs with new ideas.

But to the extent the United States underinvests in new ideas, it is because the investors cannot capture the returns from such investments. The straightforward solution to this problem, if it is general,

is to increase tax incentives to research and development, as this Administration did with the 1981 Economic Recovery Tax Act. If the problem is specific to a few industries, the solution is to strengthen patent and copyright protection.

Moreover, even if there were too little "patient" capital, there is no reason to think that government finance would improve the allocation of capital. Government officials simply do not have the right incentives to make wise choices about which industries or companies to invest in. Governments often invest in projects with high political value but little economic value, or in safe projects favored by the conventional wisdom of the time. Neither way of choosing is likely to pick the potentially winning industries that lack capital and both kinds of investments siphon off capital that could have gone to the real winners.

To foster more rapid economic growth, the primary focus of government policy should be to strengthen the natural forces of the private economy by reducing the burdens and disincentives imposed by existing government laws. The most important goal of these changes should be to increase the rate of capital formation. A higher rate of capital formation fosters growth directly and permits a more rapid introduction of new technologies. The lower cost of capital and the faster technological advance also enhance the competitiveness of American industrial products in world markets.

To increase the rate of capital formation, the tax laws were reformed in 1981 in ways that reduced the burden of taxation on personal saving and on business investment in plant and equipment. The sharp decline in the rate of inflation since 1980 has also raised real after-tax rates of return and thereby increased the incentives to save and invest. As we look to the future, it is important to raise the Nation's rate of saving by reducing the government budget deficits. We must also seek new ways to revise the tax laws in order to reduce the disincentives that still restrict the rate of capital formation.

Our market economy and its system of rewards for superior performance have made the American economy the most productive and innovative in the world. An industrial policy that increases government planning, government subsidies and international protectionism would only be a burden on our economic life and a threat to our long-term economic prosperity.

CHAPTER 4

Food and Agriculture

AMERICAN AGRICULTURE is one of the most successful examples of agricultural development in the world. The industry is very productive: only 3.1 percent of the civilian labor force produces enough to feed the entire domestic population at low cost and still export enough to earn almost 20 percent of the total export revenue of the United States. Although farmers in most countries earn much lower incomes than nonfarm workers, the average disposable income of the U.S. farm population over the past decade has averaged close to that of workers in the rest of the economy. Average wealth per farmer is much higher than of people employed in the rest of the economy, and half of American farmers have no debt.

Despite these successes, all is not well with American agriculture. Farm export earnings and asset values have declined for the past 2 years. Recent entrants and farmers who have recently expanded their businesses have experienced cash flow difficulties. Although the farm bankruptcy rate is well below that for nonfarm businesses, the number of farm bankruptcies has substantially increased. The fraction of the farm population with incomes below the poverty level is still almost double that for the nonfarm population.

In fiscal 1983, Federal Government outlays for farm price and income support programs totaled \$18.9 billion, an increase of \$12.3 billion in 2 years. To this must be added another \$9.4 billion worth of payment-in-kind (PIK) commodities committed in 1983 to compensate farmers for reducing their crop acreage in order to reduce inventories. These programs cost taxpayers almost \$12,000 per farm. While Federal expenditures have been curtailed in many domestic program areas, the cost of farm programs has exploded.

Farm programs affect not only the taxpayer but also the consumer. Some farm policies clearly benefit the consumer. In particular, federally sponsored research has lowered food costs by generating a steady increase in agricultural productivity. Other policies artificially raise food prices through price supports and restrictive marketing and trade practices. This reduces consumers' purchasing power.

The present Federal farm programs were designed to address the problems of farming as it existed in the 1930s, but American agricul-

ture has changed dramatically since then. Farming has become a much more specialized, capital-intensive, and high-technology business. Many people justify farm income and price support programs on the basis of low farm incomes. But average farm family incomes of the commercial producers, to whom most benefits of the Federal programs go, are above income levels in the rest of the economy. Net farm incomes, however, vary substantially from year to year.

Exports now account for one-quarter of all farm sales. Yet present price support programs, along with the strong dollar, make U.S. agricultural products less competitive on world markets. If we value the foreign exchange earnings generated by farm exports and the market this provides for a quarter of the Nation's farm sales, our farm price and income support policies must become more market oriented than they are now.

THE FOOD AND AGRICULTURAL SECTOR

In 1982 the farm sector employed 3.1 percent of the U.S. civilian labor force and generated 2.4 percent of national income. In 1930, for comparison, 22 percent of the labor force was employed in farming and produced 9 percent of national income. With this shift have come increases in employment and income in industries producing goods and services purchased by farmers and processing farm products. Farmers now spend almost half of their gross income on inputs, such as seed, feed, pesticides, fuel, and fertilizers, 58 percent of which is produced in the nonfarm sector. After the products leave the farm, for every dollar's worth of sales destined for domestic consumption, processing, packaging, transportation, and other services add another \$2 before it reaches the retail purchaser.

FARM INCOME

In 1983 farm cash receipts from product sales totaled about \$144 billion (Table 4-1). This includes the net purchases by the government to support the prices farmers received for grains, cotton, tobacco, and milk. For example, to support the price of milk the government purchased \$2.7 billion worth of dairy products. American farmers also received direct government payments in cash and in kind totaling about \$9 billion. These total less than the fiscal 1983 budget authority for price and income support programs because part of those outlays occurred in the fourth quarter of 1982 and because farmers will take delivery of over half of their PIK commodities in 1984. The PIK program was designed to reduce the stocks that had accumulated following 2 years of bumper crops and weak demand,

particularly from exports. The acreage cutbacks, plus the severe drought of 1983, reduced grain and cotton inventories by \$9 billion.

Gross income of the farm sector totaled \$159 billion. Production expenses, which dropped substantially from 1982 because of reduced plantings, came to \$136 billion. This left net farm income of \$23 billion, up marginally from 1982. Net cash income, which excludes non-money income, the value of inventory change, depreciation, and perquisites to hired labor, reached a record high of \$43 billion in 1983. In addition, farmers earned \$41 billion of income from nonfarm sources.

TABLE 4-1.—*Farm income, 1980-83*

[Billions of dollars]

Item	1980	1981	1982	1983 ¹
Gross farm income.....	150.1	167.1	162.2	158.6
Cash receipts.....	140.0	140.3	135.5	144.4
Net CCC loans.....	0.5	2.0	9.1	-2.0
Direct Government payments ²	1.3	1.9	3.5	9.1
Other cash income ³	1.6	2.0	2.1	1.9
Nonmoney income ⁴	12.1	13.3	13.9	14.0
Value of inventory changes.....	-5.3	7.6	-1.9	-8.8
Production expenses ⁵	128.6	137.0	140.1	136.0
Net farm income.....	21.5	30.1	22.1	22.6
Addenda:				
Net cash income ⁶	38.1	34.7	36.3	43.4
Off-farm income.....	37.7	39.9	39.4	40.8
Change in loans outstanding ⁷	15.2	15.5	6.8	3.8
Capital expenditures.....	18.0	16.8	13.9	14.1

¹ Preliminary.

² Cash Government payments, except 1983, which includes \$4.2 billion of payment-in-kind (PIK) commodities.

³ Custom work, machine hire, and farm recreational activities.

⁴ Value of home consumption of farm products and imputed value of dwelling.

⁵ Cash expenses plus depreciation and perquisites to farm labor, but excluding expenses associated with farm dwellings.

⁶ Excludes nonmoney income, value of inventory change, depreciation, and perquisites to hired labor. Includes net Commodity Credit Corporation (CCC) loans.

⁷ Excludes CCC loans.

Source: Department of Agriculture.

As officially defined, a farm is a place that sells at least \$1,000 worth of agricultural products per year. So defined, there are 2.4 million farms, which in 1982 had an average net income from farming of \$9,188 and an average income from nonfarm sources of \$16,430, for a total \$25,618. The average family income for the whole population that year was \$27,391.

More than one-third of the 2.4 million farms sell less than \$5,000 worth of products per year, and 71 percent sell less than \$40,000. These smaller farms are not generally full-time commercial operations, produce only a small share of national farm production, and, on average, have negative net income from farming.

The 29 percent of the farms with annual sales of more than \$40,000 generate 87 percent of total farm receipts. In 1982 these 690,000 commercial farms had average annual gross receipts of about \$190,000 and net farm income of about \$36,000. Their net

farm income, however, varies substantially from year to year. These farms have average assets of about \$1 million and average equity of about \$800,000. This group received 78 percent of all direct government payments under farm programs in 1982. This accounted for 11 percent of their net farm income. These averages mask considerable diversity. For example, the largest 1 percent of all farms, which have annual sales of over \$500,000, produce 30 percent of all farm sales.

SPECIAL CHARACTER OF FARMING

The commercial farm, like the small manufacturer, is a business that buys raw materials, transforms them through a capital-intensive process, and sells the finished products.

How then does a modern commercial farm differ from a small manufacturing company? Its most distinguishing characteristic is a biological production process that involves lags arising from growth cycles. This severely constrains the speed with which farmers can respond to changing market conditions. In addition, the volume of farm production is less predictable than in the nonfarm economy because of the random effects of weather, disease, insects, and genetics. These supply conditions contribute to substantial year-to-year variability in farm incomes. Since the annual output of major field crops is harvested within a few weeks in the autumn, this requires storage capacity for most of a year's output.

Agriculture and manufacturing also differ in the role played by land. Because crop production and livestock grazing are land based, they have to be dispersed over a wide geographic expanse from which the marketing system must assemble the production. The geographic differences in climate and soil limit what products can be produced in each location.

Land has characteristics that distinguish it from other inputs. As the demand for land increases, users must bid against a relatively fixed supply. They bid on the basis of expected future returns to the use of that land. The price of farm land increases in response to expectations of higher returns—whether from strong demand for what it can grow, from inflationary expectations, or from artificial price enhancement associated with government policy. Appreciation of land prices tends to increase the wealth of its owners, and often represents a significant fraction of an owner-operator's total returns. It also raises the entry cost for new farmers. Physical capital, being reproducible, tends not to appreciate over time in this manner, but rather to depreciate.

A third way in which farms differ from manufacturing plants is in the proportions in which they use labor and capital. Most farms are family owned and operated, with little hired labor. (Only 0.2 percent

are owned by nonfamily corporations.) In 1979 American agriculture used \$43,000 of physical capital stock (machinery and buildings) per worker, compared with \$21,500 for the economy as a whole. Farming used three times as much physical capital per unit of production (GNP basis) as the average for the total U.S. economy. In both agriculture and the rest of the economy, this capital stock tends to be quite specialized, although machinery used to produce field crops has multiple uses.

FIVE DECADES OF CHANGE

In the 20th century the structure of U.S. agriculture and the well-being of farmers have undergone profound change. Farm production has tripled, while employment in agriculture has fallen by 80 percent (Table 4-2). The increase in labor productivity and, in turn, farm family income was achieved by improving technology and by increasing the land and capital used per worker. As a result, employment in farming fell substantially.

In the 1930s disposable farm family income per capita was less than 40 percent of that in the rest of the economy. Over the past decade, however, farm family income has averaged 88 percent of that in the rest of the economy and exceeded that in the nonfarm sector in 1973. This income differential was the driving force behind the structural change in agriculture. As the proportion of the labor force employed in agriculture fell and the proportion employed in higher productivity nonfarm employment rose, migration contributed to national economic growth.

The rate of migration from farming to the rest of the economy was strongly motivated by the income differential. As the differential narrowed in the 1970s, the rate of migration slowed. The rate has also been sensitive to the nonfarm unemployment rate—slowing when the perceived chances of getting a nonfarm job were low and accelerating when the unemployment rate fell.

Rural industrialization has increased the number of off-farm jobs in rural America. Most farmers who did not acquire more land and capital have become part-time farmers; almost two-thirds of all farm family income now comes from nonfarm sources. This additional farm family income has reduced significantly the farm-nonfarm income differential.

The number of farms and the farm labor force peaked during the 1930s. Employment in farming went into a pronounced decline after World War II, when a major technological revolution occurred in agriculture. The replacement of draft animals by the tractor, which had begun in the 1930s, was virtually completed by 1960. This released

about one-fifth of our cropland, which had been used to grow feed for draft animals.

The increased mechanization of farming permitted the amount of land cultivated per farm worker to increase five-fold from 1930 to 1980. The amount of capital used per worker increased more than 15 times in this period. As Chart 4-1 shows, total farm production grew 140 percent, but total input use rose only 5 percent. Total productivity (production per unit of total inputs) more than doubled because of adoption of agricultural research results such as hybrid seeds and improved livestock feeding. Table 4-2 illustrates that use of both agricultural chemicals and feed grew very rapidly in the postwar period. Agricultural production now relies heavily on the nonfarm sector for machinery, fuel, fertilizer, and other chemicals. These, not more land or labor, produced the growth in farm production. These changes have also greatly increased the capital investment necessary to enter farming; they have also generated new requirements for operating credit during the growing cycle.

Education has been an important stimulus to growth in the economy as a whole and agriculture in particular. Rural education facilitated the move from farm to off-farm jobs. As the rate of technological change accelerated, rural education also helped farmers to adopt new technology and adjust to technological change.

The farm sector has undergone a major shift in what it produces. Total farm production is now split about equally between crops and livestock, as it was early in the century. The composition of each, however, has changed in response to changes in demand and in technology. In value terms, the largest increases have been in beef cattle and oilseeds production and to a lesser extent in feed grains and poultry. The proportions of cotton, hogs, eggs, sheep, lambs, and wool in farm output have fallen.

The two largest components of farm cash receipts today are beef cattle and dairy products, making up 21 and 13 percent, respectively, of the total. These are followed by corn and soybeans with 9 percent each, and hogs and wheat with 7 percent each. Cotton, chickens, greenhouse products, eggs, and tobacco each contribute about 3 percent of the total.

DEMAND FOR FARM PRODUCTS

Changes in demand have been an important factor underlying the changes in the product mix of the farm sector. In 1982 the total value of farm marketings was \$144.6 billion, with \$70.2 billion from livestock production and \$74.4 billion from crops. The largest market for crops is domestic human consumption, which absorbed 43 percent of the value of crop sales. The second largest component of

Chart 4-1

Farm Productivity, Output, and Input

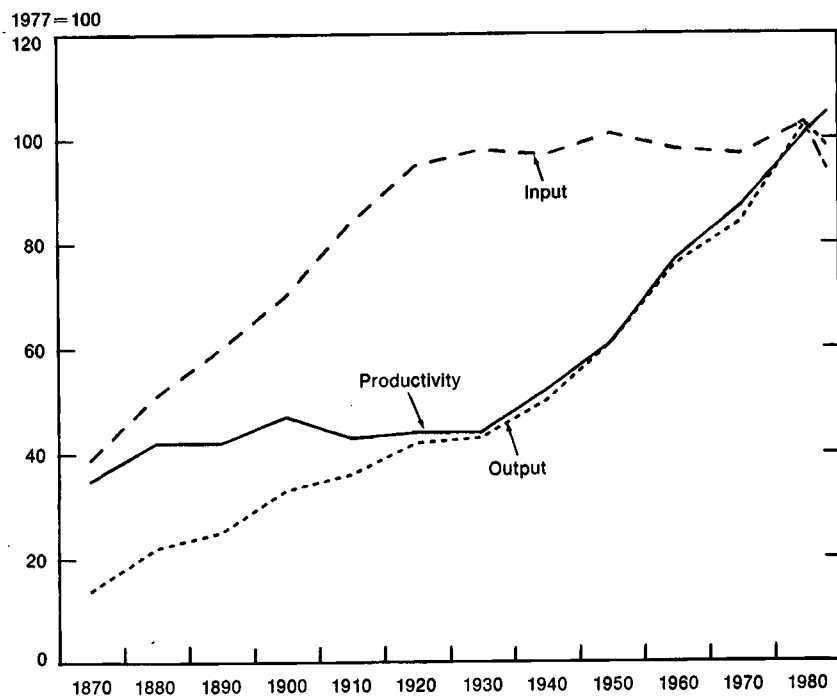


TABLE 4-2.—Farm input use, 1910-80

(Index, 1910=100)

Year	Labor	Real estate	Mechanical power and machinery	Agricultural chemicals	Feed and seed
1910	100	100	100	100	100
1920	106	105	159	167	135
1930	102	104	200	200	159
1940	91	106	212	300	229
1950	68	108	424	633	341
1960	45	102	488	1067	453
1970	28	104	506	2500	565
1980	20	101	618	4000	635

Source: Department of Agriculture.

demand is exports (31 percent) followed by livestock feeding (16 percent). The remaining 10 percent goes to industrial use and seed. Within the crop sector there is great variation among these proportions. For example, most fruit and vegetable output goes for human consumption, while virtually all of the tobacco and cotton is for domestic industrial use or exports. Most of the livestock production goes to feed the domestic population, while by-products such as hides and animal fats go to industry or exports.

Domestic Consumption

In 1982 Americans spent \$350 billion for food (excluding alcoholic beverages), of which \$255 billion was for consumption at home and \$95 billion for eating away from home. On the average this represents 16 percent of their disposable personal income, although the poor spend a larger percentage of their income on food than do the more affluent. Of the total retail expenditures for domestically produced food, consumers spent 29 percent for meats, 21 percent for fruits and vegetables, 15 percent for dairy products, 10 percent for bakery products, 7 percent for poultry and eggs, and the remaining 18 percent for miscellaneous food items.

Eighty-five percent of retail food expenditure originates from domestic farm production, and 15 percent is from imported foods. About one-third of our agricultural imports are products that we cannot produce in a temperate climate, in particular, coffee, tea, cocoa, spices, and bananas. Other imported goods that are produced domestically, although perhaps less efficiently, include sugar, dairy products, grass-fed beef, and some fruits, vegetables, edible oils, and beverages. In 1982, agricultural imports totaled \$16.9 billion, making the United States the world's third largest agricultural importer, after the European Community (EC) and the U.S.S.R.

Food consumption per capita appears to have reached saturation levels in the United States, with most growth in aggregate consumption now coming from population growth. Total consumption (by weight) per person of foods other than beverages (coffee, tea, and soft drinks) has changed little since 1910. However, there have been major changes in what products are consumed. In the 20th century, direct consumption of grain products has fallen by more than half, while use of fats and oils more than doubled. Consumption of meat, poultry, fish, and sweeteners has risen sharply; consumption of dairy products and eggs first rose and then fell. Nonalcoholic beverage consumption has almost doubled since 1910.

Aggregate food purchases tend to be less sensitive to changes in price and in family income than are purchases of manufactured goods. However, within their food budgets, consumers select from among many choices in food items. Purchases of meats and of miscellaneous foods are quite sensitive to changes in family income, while

consumption of fruits and vegetables and particularly of cereals and bakery products are quite insensitive. Consumption of the more income-sensitive products, such as meats, tends to be more cyclical.

As family income increases, people tend to purchase relatively more services in the food they buy, including eating out more often. The share of the retail food dollar received by the farmer, therefore, has declined to about 28 percent. Labor, packaging, and transport account for much of the additional cost after products leave the farm. As a result, retail prices, particularly of bakery and cereal products, tend to adjust much less than proportionately to changes in farm prices.

Livestock consume about 16 percent of U.S. crop sales. This includes corn and other grains, protein meal, by-products from milling grains, and forage. This understates the feed use of farm output, however. For example, 35-40 percent of corn production is fed to livestock on the same farm where it is produced. The demand for feed is derived from consumers' demand for livestock and poultry products. Forces that alter the demand for meat, in particular income, are reflected in the demand for livestock feeds. Therefore, feed demand tends to have a stronger cyclical response to the level of economic activity than does consumer demand for cereal products.

Livestock feed demand for crop output also tends to be more responsive to price changes than does consumer demand for the final products. An increase in feed prices that turns the profit margin on livestock feeding negative can trigger a substantial slaughter of livestock. In the short run, consumers benefit from cheaper meat at the supermarket. However, to rebuild their herds, farmers must later withhold animals from slaughter for breeding. This rebuilding takes time, during which meat supplies are reduced and retail prices tend to be higher than normal. The use of crops in livestock feeding, then, varies cyclically with herd size. In a sense, the livestock herd functions as a buffer stock of grains. In times of crop shortfall, high grain prices trigger a herd liquidation, thereby freeing up grain for more direct human consumption or exports.

The smallest component of domestic crop demand is industrial uses. Tobacco and fibers, such as cotton and wool, are industrial raw materials. There are also industrial uses of cereals, such as in alcohol and starch production. Many livestock by-products, such as hides and animal fats, are also industrial raw materials. Part of this industrial demand is satisfied by imports, including rubber, wool, and other fibers. Because there are many synthetic substitutes, industrial demand for farm products tends to be quite sensitive to price changes.

Farm Exports

The United States supplies almost 20 percent of world agricultural trade and is the world's largest agricultural exporter. In recent years we have supplied half of the world soybean and product shipments, 55 percent of the coarse grain, 40 to 45 percent of the wheat, 30 percent of the cotton, and 25 percent of the rice that move in world trade.

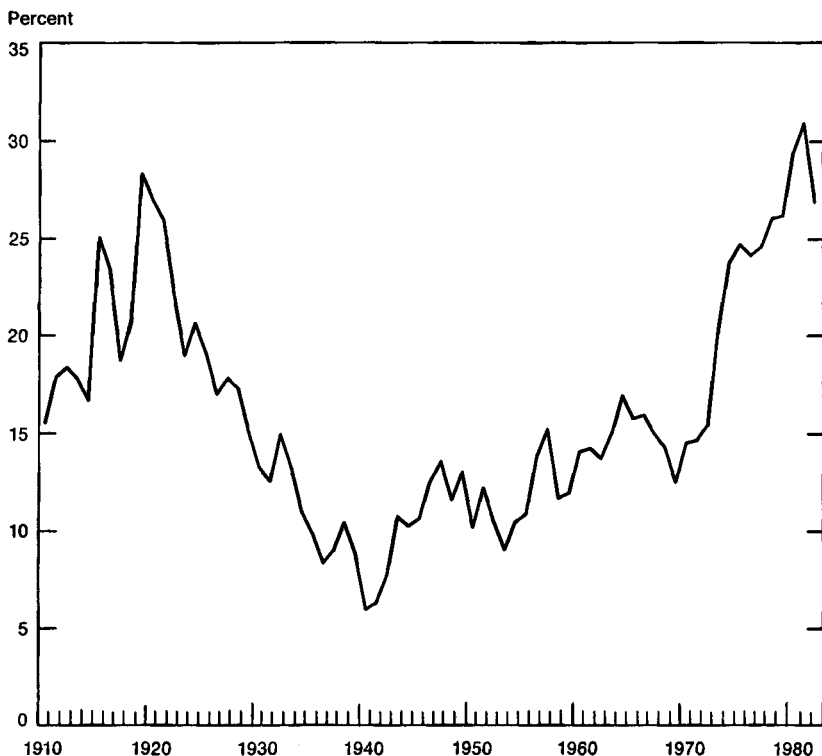
In fiscal 1983 agricultural exports of \$34.8 billion represented about one-quarter of U.S. farm sales revenue and the output of about 35 percent of the harvested cropland. Half of U.S. farm exports are for direct food use—wheat, rice, fruits, vegetables, and meats—while more than a third go for feed and other farm uses; the remainder are raw materials used in industrial processes, such as textile, cigarette, and shoe production. In 1983 we exported three-fifths of our wheat, two-fifths of our rice, soybeans, and cotton, one-third of our tobacco, and one-fourth of our corn and sorghum. In contrast, only 2 percent of U.S. meat production and 5 percent of fruit and vegetable output are exported.

During the 1970s the value of U.S. farm exports increased more than five-fold, and the percentage of farm receipts coming from exports increased from less than 15 percent to almost 30 percent. This growth in farm exports represented a major internationalization of American agriculture. Chart 4-2 provides a historical perspective to illustrate that after several decades of reduced importance, U.S. farm exports recovered in 1980 the share they represented in farm marketings 60 years earlier. U.S. farm exports were relatively strong during World War I and its aftermath. As European agriculture recovered after the war, grain exports fell and U.S. agriculture went into depression in 1921. World trade in farm products shrank further as protectionism grew during the 1920s and the Great Depression. U.S. farm exports fell from 22 percent of farm sales revenue in 1922 to 6 percent in 1940. Because U.S. agriculture had a larger export exposure than the manufacturing sector, the collapse of world trade tended to have a relatively greater effect on farm than nonfarm incomes during the Depression.

In the 1920s and 1930s more than half of farm exports were industrial raw materials, mainly cotton, tobacco, hides, and tallow. Since World War II, food, rather than industrial raw materials, has dominated our farm exports. In the 1960s, as economic growth occurred, consumption of livestock products grew in the industrialized countries and in some developing countries. This was reinforced by a major technological change in livestock feeding practices, which dramatically increased demand for feed grains and high protein feeds. The widespread adoption of hybrid seed by U.S. corn growers after

Chart 4-2

Agricultural Exports as Percent of Farm Cash Receipts



Source: Department of Agriculture.

World War II, which substantially increased the profitability and use of fertilizer, greatly expanded corn output and depressed its price. Corn Belt and Mississippi Delta farmers discovered that the soybean, a novelty crop before World War II, did well in their regions. With the postwar productivity growth, production capacity grew faster than domestic consumption, expanding U.S. agriculture's export potential. Corn and soybean products, in particular, became high-growth exports.

During the 1970s the volume of world agricultural trade grew 45 percent, while global farm production grew only 24 percent. In the 1960s and 1970s, world trade in feed grains, soybeans, high protein feeds, and vegetable oils grew fastest. Sugar, food grains, tropical

beverages, and cotton experienced low rates of growth, and meat was intermediate. Trade in other fibers declined.

The pattern of world grain trade shifted dramatically in the past 50 years. The United States substantially increased its share of a rapidly growing market. As Table 4-3 illustrates, as recently as the 1930s Asia, the U.S.S.R., Eastern Europe, North Africa, and the Middle East were net exporters of grains. All have become significant net importers. From the mid-1950s to the late 1970s, world grain trade grew from about 30 million to 130 million tons per year. The largest increase in exports was from North America.

TABLE 4-3.—*World net imports and exports of grain, selected periods, 1934-83*

[Millions of metric tons: annual averages]

Country	Net imports (—) or net exports					
	1934-38	1948-52	1960-62 ¹	1969-71 ¹	1979-81 ¹	1982-83 ¹
Developed countries:						
United States	0.5	14.0	32.8	39.8	106.4	99.0
Canada	4.8	6.6	9.7	14.8	18.6	25.8
South Africa	.3	.0	2.1	2.5	6.2	.5
Oceania	2.8	3.7	6.6	10.6	14.2	12.0
Western Europe	-23.8	-22.6	-25.6	-21.4	-11.1	-4.5
Japan	-1.9	-2.3	-5.3	-14.4	-23.2	-23.7
Centrally planned countries:						
U.S.S.R. and Eastern Europe	4.7	2.7	.5	-3.6	-39.3	-44.6
China	-1.0	-4	-3.6	-3.1	-11.4	-14.7
Developing countries:						
Latin America	9.0	2.1	1.5	5.3	-5.3	.2
North Africa and Middle East	1.0	-.1	-4.6	-9.2	-23.3	-27.8
Asia	2.4	-3.3	-5.6	-11.0	-13.4	-14.1

¹ Marketing years.

Note: Grain includes wheat, milled rice, corn, rye, barley, oats, sorghum, and millet.

Source: Department of Agriculture.

The growth in world cereals imports in the last decade has been fueled mainly by growth in per capita income, with growth in population being a significant but less important factor. The growth in imports occurred mainly in the centrally planned economies, the middle-income developing countries, Japan, and the oil-exporting countries. The U.S.S.R. and Eastern Europe alone accounted for 40 percent of the increase. These, like Japan and the middle-income developing countries, experienced rapid growth in incomes and in meat consumption but they lacked a comparative advantage to increase feed production. This effect is reinforced in the centrally planned economies by their policy of subsidizing food so that consumers pay less than the world price for meat and other livestock products. A small fraction of the growth in grain trade over the last decade has gone to meet food needs of low-income countries. These economies do not have the foreign exchange to pay for cereals imports, and their food aid imports have risen.

Since the global recession began in 1981, growth in world trade has slowed. This, together with record world production and third world debt problems, has reduced the volume of agricultural trade. The appreciation of the dollar has raised the cost of U.S. exports relative to other suppliers. Federal agricultural policies have also driven up the price of U.S. exports. This and the strength of the dollar contributed to a fall in the U.S. market share in world agricultural trade as well as the value of its exports.

The growth of exports in the last decade has radically changed the structure of demand for U.S. farm output. From World War II until about 1973, when exports were relatively unimportant, overall demand was quite insensitive to price. However, because there are other exporters and because most countries import farm products only after consuming their own domestic production, export demand tends to be more responsive to price and income changes. This means, for example, that when supply grows faster than demand, the market price may fall less than proportionately, and total farm revenue may increase.

Growth in exports has also introduced greater instability in the markets for American farm products. Exports are affected by weather, trade policy, exchange rates, population, and income in the rest of the world. All but population tend to be unpredictable and, therefore, generate shocks to the U.S. farm sector through the variability they cause in export demand.

In the 19th century, a country's competitive position in agriculture was strongly influenced by its endowment of fertile land and favorable climatic conditions. Today our fertile, abundantly rain-fed land base, while still important, accounts for only part of the competitiveness of U.S. agriculture. Other countries less well endowed with fertile land have followed the U.S. pattern of agricultural development by shifting to a more capital-intensive, science-based agriculture. A relative scarcity of land is no longer as severe a constraint on agricultural growth as formerly. If U.S. agriculture is going to maintain its competitive position, productivity growth must be sustained.

THE BROADER ECONOMIC ENVIRONMENT

American farmers responded strongly to the agricultural export boom of the mid-1970s. They substantially expanded their capacity by bringing previously retired land back into production and by buying more and larger machinery and equipment. The price of land was bid up to unprecedented levels. The boom attracted new entrants and encouraged many farmers to mortgage their present farms to buy more land. When the global recession hit in 1981 and the

dollar appreciated substantially in foreign exchange markets, U.S. farm exports and, in turn, prices and incomes, fell. This left U.S. agriculture with excess capacity relative to current demand. Many recent entrants and farmers who expanded in the 1970s suffered severe cash flow problems. These farmers have experienced capital losses as land prices have declined from their 1981 peak.

INTERNATIONAL TRADING ENVIRONMENT

The current world trading environment is characterized by weak demand and keen export competition. In the early 1980s the global recession, third world debt, and the strong U.S. dollar have reduced export demand.

Farm exports are not expected to grow as fast in the 1980s as they did in the 1970s. A decline in the value of the dollar would help all export sectors. However, in the past decade other major exporters have made large capital investments in agriculture and in marketing facilities to expand export capacity. They can be expected to compete aggressively for our share of the growth in world farm trade even when the dollar returns to a lower exchange rate.

Japan, Europe, and the U.S.S.R. are expected to continue to be large importers of U.S. agricultural products, although further growth is likely to be slow. The EC will probably continue to be a protectionist, slow-growth market even for those farm products that it imports. Eastern Europe, which was a rapid growth market in the 1970s, is experiencing such severe foreign debt problems that the outlook for rapid expansion in imports of farm products in the next few years is not bright.

The newly industrializing countries, particularly of East Asia, also expanded their imports rapidly in the 1970s. Resumption of this growth will depend upon their ability to generate foreign exchange earnings from exports. This will depend in part on the trade barriers erected against their exports by the developed countries. While the low-income countries are likely to need significant amounts of agricultural imports to feed their rapidly growing populations, their limited foreign exchange earnings will severely constrain their effective demand in the world market.

U.S. agriculture has a large interest in economic development of the low-income countries and in growth in world trade. Until the debt problems and foreign exchange earnings of Eastern Europe and the low- and middle-income developing countries improve significantly, the prospects for much growth in farm product imports by these countries are limited.

Competition is keen among exporters for the available markets in the current situation of depressed world farm trade. This has been

reinforced by the increases in agricultural protectionism and in predatory export practices. In particular, the U.S. Government has protested to the EC that its use of agricultural export subsidies to erode U.S. markets is a form of unfair competition. The internal price supports generally exceed world market prices by a substantial margin, yet the EC has chosen not to build up large stocks of grains. Instead the EC subsidizes farm exports in order to sell the surplus on the world market. Unlike the United States, the EC has not until recently required acreage or marketing reductions for farmers to qualify for price supports. The EC recognizes the problems with its agricultural policy, which now absorbs two-thirds of the total EC budget and imposes substantial additional costs on its consumers. The EC, like the United States, now has excess capacity induced in part by high price supports and is exploring means of reforming its farm policy to reduce the cost to taxpayers. It is unclear how the necessary adjustment will occur in the EC, but the United States has emphasized that other countries cannot be expected to bear the major burden of European adjustments.

MACROECONOMIC ENVIRONMENT

Modern American agriculture's relative capital intensity, reliance on purchased intermediate inputs, and export earnings integrate it tightly into the rest of the U.S. economy. Cyclical changes in the level of economic activity now have larger effects on agriculture than formerly. The agricultural sector, like other trading sectors of the U.S. economy, is strongly affected by interest rates and the value of the dollar. The agricultural sector therefore has a strong interest in reducing the Federal deficit to which recent farm programs have contributed significantly. Macroeconomic policy may have as great an absolute effect on agriculture today as do the direct effects of farm policy.

Prices of agricultural commodities tend to adjust to changes in the rate of money growth more quickly than do many other prices. This is true in part because contracts for raw materials tend to be written for shorter durations than for other goods and services. In addition, because of biological lags, agricultural supply tends to be very unresponsive to price changes in the short run. There are large differences among commodities in the degree to which demand responds to changes in consumer incomes. While demand for farm products tends to be less responsive than demand for many other goods, there nevertheless is a positive response to income changes. Therefore, agricultural prices tend to increase relative to other prices during the early phase of a monetary expansion and fall in relative terms at the start of periods of monetary stringency.

Because contemporary agricultural production requires a larger capital investment and uses more purchased inputs, a modern farmer's requirements for both mortgage credit and short-term operating credit are larger than in recent decades. Interest rates, therefore, have a greater effect on the cash operating costs of the modern farmer. Moreover, because one could earn interest on the capital invested in commodity inventories, the expected increase in agricultural commodity prices during the year must be at least as large as the forgone interest earnings if inventories are to be held.

Although the increasing overvaluation of the dollar impeded farm exports in the 1960s, depreciation of the dollar in the 1970s encouraged larger exports. The move from fixed to floating exchange rates, however, subjected all traded goods sectors to a new source of short-run instability. Because the present strong dollar has made imports cheaper to Americans and U.S. exports more expensive to foreigners, all traded goods sectors, including agriculture, have suffered reductions in demand and lower incomes. Agriculture, which earns around 25 percent of its gross revenue from exports, has a larger export exposure than most sectors of the American economy. Therefore it has been buffeted relatively more by the shifts in export demand that have accompanied the floating dollar over the last decade.

FEDERAL POLICIES AFFECTING AGRICULTURE

The development of U.S. agriculture and the well-being of American farmers have been strongly influenced by Federal policies since the Civil War, but particularly since 1933. During the Civil War a number of policy measures were taken to stimulate farm production. This helped satisfy the growing export market for grains. When the export market shrank in the 1920s and 1930s, farm prices and land values fell; bankruptcies became common. Several measures were taken in 1933 to support farm prices and incomes and save farmers from bankruptcy. When these, together with rapid technological change, caused production to grow faster than demand, another set of policies was implemented to expand demand. All three types of policies exist today in forms not greatly different from their original structure, despite the fact that conditions have changed markedly in the past 50 years.

POLICIES THAT REDUCE PRODUCTION COSTS

In the 19th century the construction of canals and later the trans-continental railroad opened up the fertile interior of the country to urban markets in the United States and Europe. Subsidized loans from the Rural Electrification Administration in the 20th century

helped extend electric and telephone service to remote rural areas at low cost. Because farm production is so geographically dispersed, these policies not only stimulated its expansion, but also lowered its cost. Federal regulation of transport and communication until recently kept rates to remote rural communities at or below cost. The implicit subsidies paid by high-density routes in other parts of the country, however, have been reduced recently by deregulation.

The Homestead Act, passed in 1862, provided a means of distributing public land in the unsettled regions of the Midwest and Great Plains free to settlers who would cultivate it for 5 years. The Morrill Act, also passed in 1862, established a land-grant college of agricultural and mechanic arts in every State. At first these were teaching institutions, but they later took on important agricultural research and extension roles as well. The Hatch Act of 1887 provided annual Federal support for agricultural research in each State, and the Smith-Lever Act of 1914 created the cooperative agricultural extension service. This land-grant system has developed and diffused higher productivity technologies adapted to the conditions of each State.

Research Policy

Since passage of the Hatch Act, a substantial portion of the cost of agricultural research in the United States has been directly borne by the Federal Government, especially in the biological area. The private sector has developed more of the mechanical and chemical technologies. Government support for agricultural research was appropriate because it was difficult to protect biological research results, such as wheat breeding. A private firm carrying on such research would not be able to control the dissemination of the results to capture enough of the payoff to recoup its investment costs. The research results have been an important source of growth in agricultural production and exports. The annual rate of return to taxpayers from investing in agricultural research has been about 50 percent.

Farm Credit and Crop Insurance

Historically, the rural banking system was weakly integrated into the national financial markets. Between 1916 and 1933, an independent, federally funded farm credit system was established. Although now autonomous from the Federal Government, the close association of the system to the Federal Government means that it can borrow from the national financial markets at close to the same rate as the Federal Government. Because the Federal rate is always less than the prime rate, this provides to farmers an interest rate advantage over what they could get at commercial banks. The system, which is cooperatively owned by its member borrowers, holds about one-third of

all credit outstanding to farmers. The Commodity Credit Corporation of the Department of Agriculture also provides shorter-term credit at favorable interest rates to farmers who participate in price support programs.

The lending activities of the Farmers Home Administration, another agency of the Department of Agriculture, tend to involve a greater subsidy element and to incur a larger Federal budget cost. The Farmers Home Administration makes real estate loans and other loans to farm borrowers who cannot obtain credit from commercial sources. The borrowers are mainly new entrants, small farmers, and farmers who have lost their creditworthiness. Loans to these borrowers often result in higher risks and therefore larger losses than would be acceptable to private lenders.

The Farmers Home Administration also has made emergency loans at well under market interest rates in areas hit by natural disasters. This program has been criticized for making subsidized credit available to farmers who already had access to credit from commercial sources. Despite very generous repayment terms, this program has not been noted for restoring financially troubled farms to profitability. During the 1970s the government also made direct payments to farmers who suffered financial losses due to natural disasters. By shifting part of the risk of failure to the Federal Government, these programs have encouraged larger crop production in areas of the country where the risk of crop failure is greatest.

The direct disaster payment program is being phased out as a result of the 1981 farm bill. It is being replaced by Farmers Home Administration lending and by a new and expanded Federal Crop Insurance program. Participation rates in the former crop insurance program were low, in part because the premiums did not adequately reflect individual differences in risk or in individual farmers' resources and management skills. The program was redesigned to encourage more commercial producers to participate than under the previous program, and the government now subsidizes up to 30 percent of the cost of crop insurance to farmers.

Together, emergency loans, disaster relief, and subsidized crop insurance tend to induce excessive crop production in areas of the country that are subject to a wide range of weather-related yield variation. The programs do this by raising farmers' expected returns from crop production in such areas by shifting part of the risk of failure to the Federal Government.

Income Tax Policy

Several features of the income tax law, some of them unique to farming, may encourage greater investment in productive capacity and expanded production. First, most farms use cash accounting

rather than accrual accounting. Farmers enjoy some flexibility in reducing taxable income by paying for purchased materials in high revenue years and by delaying sales into years of lower revenue. Second, under current tax laws, depreciation schedules for many capital assets are considerably shorter than the economic life of the assets. Reducing near-term taxable income in effect gives the farmer interest-free funds during part of the productive life of an asset. Third, use of the investment tax credit lowers the effective cost of capital items. Finally, sales of breeding animals and dairy cattle held longer than 1 year are treated as capital gains rather than ordinary income. This can substantially reduce the tax on such receipts for higher-income taxpayers, especially those with high off-farm income.

Tax policy does not affect the profitability of all types of farms equally. The tax laws encourage the substitution of capital for labor. Larger farms, which generate higher incomes, appear to gain proportionately greater benefits than smaller farms. People in higher marginal tax brackets can benefit more from the tax provisions. This creates an incentive for higher-income people to invest in farming. In practice, losses from farm operations reduce taxes on other income by more than the total Federal tax revenue from farm profits, implying that total farm income for tax purposes is negative.

Input Subsidies

Some Federal policies raise agricultural output by stimulating the uneconomic use of certain inputs. For example, the government often sets the price of water artificially low by granting public subsidies to construct and maintain irrigation projects. These low prices give farmers an incentive to use water in arid regions on crops that require a great deal of water. If the price of water were set higher, farmers would tend to grow less water-intensive products, leaving production of crops that use more water to humid regions. Without these public subsidies, some products now produced in arid regions could not compete with the same goods from more humid regions of the country.

There are other input subsidies for U.S. agriculture. For example, in the name of conservation, the government has shared the cost of terracing and contouring the land, applying lime, and otherwise improving the soil. The United States' relatively low energy prices have also encouraged mechanization and energy-intensive practices, such as irrigation and grain drying.

Farm Labor Policy

Farm labor policy mainly affects the labor-intensive agricultural activities, principally fruit, vegetable, and sugar production. The extension of minimum wage legislation to agricultural labor in 1966 pro-

vided an incentive for farmers to accelerate the pace of mechanization. Only about 1 percent of farm workers belong to labor unions, which formed in the farm sector in the 1960s, compared with 20 percent of all American workers.

The farm labor market has been greatly affected by the entrance of foreign workers into the United States. Until 1965, about 100,000 workers per year, mostly from Mexico, were authorized to enter temporarily under the Bracero program. Since the passage of the Immigrant Nationality Act in 1952, migrant workers have been given temporary immigrant status, under Section H2, if they do not compete with American workers. In recent years, Section H2 has covered only about 20,000 workers, mostly for sugar and apple harvesting.

PRICE AND INCOME SUPPORT POLICIES

The policies of the 19th century increased supply and helped the farm sector satisfy the growing domestic and export demand. The drop in export demand in the 1920s sent the farm sector into depression, and the effect was reinforced in the 1930s when protectionism increased and demand fell further. Farm prices and cash flow fell so low that many farmers could not make their loan payments; foreclosures became widespread. The Federal Government then turned to policies to support farm prices and to restrict the supply of agricultural products.

Origins of Price Supports

Although the depression in agriculture continued through the 1920s, it was viewed as a transitory problem resulting from excess capacity relative to demand. The Congress appropriated \$500 million for the Federal Farm Board, created in 1929, to purchase cotton and wheat in order to bid up prices and thereby increase farm incomes. The Board was expected to resell these products when the market strengthened. The Board exhausted its capital stock in 3 years with no perceptible effect on prices.

After the Board's failure to support farm prices, the Agricultural Adjustment Act of 1933 created the Commodity Credit Corporation (CCC). The CCC was permitted to borrow funds directly from the U.S. Treasury to carry out its price support programs. These programs were viewed as a temporary expedient when they were initiated in 1933, but our present price support instruments are remarkably similar to those put in place 50 years ago.

The CCC employs two measures for supporting farm prices—direct commodity purchases and nonrecourse loans. Under the former, the CCC stands ready to acquire any quantity of a supported commodity offered in the market at a guaranteed minimum price, the support price. This technique is still used today to support the price

of milk. (Because of the perishability of fluid milk, the CCC supports its price by purchasing butter, cheese, and nonfat dry milk.) By authority of Section 32 of the Agricultural Adjustment Act of 1933, as amended in 1935, the Agricultural Marketing Service, an agency of the Department of Agriculture, purchases commodities whose prices are depressed. Chicken, pork, fruits, and vegetables are periodically purchased, although no formal support price is involved.

The CCC's other instrument is the nonrecourse loan. Under this program the CCC offers loans to farmers with their crops pledged as collateral. The size of the loan equals the support price (the "loan rate") times the quantity of the farmer's crop put under loan. Most loans are made for less than 1 year. If the market price rises sufficiently during the period of the loan, the farmer may pay off the loan plus interest and reacquire control of his crop. If the market price is not sufficiently above the loan rate when the loan comes due, the farmer can then freely default. The CCC accepts the commodity as payment in full and cancels the loan and interest. Loan rates were originally established to support the prices of wheat, corn and cotton. Rice, peanuts, and tobacco were soon added to the program.

In principle, both types of price support operations can be viewed as involving buffer stocks. A price support puts a floor under the market price in periods of slack demand, thereby protecting farmers' incomes. If the market price rises to a sufficiently high level, the CCC can sell the commodity back into the market at a profit, helping thereby to defray its cost of operation. It has to pay interest to the U.S. Treasury on its operating capital. A buffer stock is designed to protect farmers against abnormally low prices and consumers against unusually high prices. In practice, however, the support prices and loan rates have often been set above the long-run market-clearing level taking into account both domestic and international demand.

Although the loan rate has often been set above the market-clearing price for some commodities, farmers often argue that government stocks "hang over the market" and depress the price. They therefore lobby to ensure that government stocks are released in a manner that does not depress the price.

Rise of Restrictions on Input Use and Marketing

As government stocks of commodities accumulated under price support operations, it quickly became apparent that the programs were treating a symptom, not the root, of the problem—the excess capacity of the farm sector relative to market size at current prices. Three approaches have been used to address that—acreage allotments, marketing restrictions, and voluntary land retirement.

Acreage allotments are quantitative restrictions on the acreage a farmer may plant to a given crop. Although these have been used on

wheat, rice, cotton, tobacco, and peanuts, only the last two remain in effect. In practice, farmers tend to retire their least productive land first. They also raise crop yields on the acreage planted by using more fertilizer and other inputs per acre. Production, therefore, falls by proportionately much less than the reduction in land area. Marketing quotas have also been imposed, at times in conjunction with acreage allotments, such as with tobacco. Quotas based on historical sales freeze the structure of the industry. Later entrants are forced to buy or lease marketing rights from present quota holders.

While marketing restrictions were authorized in the Agricultural Adjustment Act of 1933, another variant was authorized when the act was amended in 1935. This 1935 act authorized the creation of marketing orders to regulate the sale of milk and various fruits, vegetables, and specialty crops. Once an order is approved by two-thirds of all producers, all regulated processors or handlers must comply with the regulations. While some marketing orders are only concerned with grading and packaging standards, or collective support for research or advertising, others regulate the flow of products to market and enforce price discrimination.

Allotments cause all producers to cut back jointly on marketing, just as if they had formed a cartel with the government agreeing to police the members. Examples include the marketing orders for brewers hops and spearmint oil. These are now being phased out.

Other marketing orders permit price discrimination among markets with different demand characteristics. A higher price is charged in markets for certain fresh fruits and fluid milk, where demand is less responsive to price, and a lower price is charged for identical fruit used in canning or for milk that goes into butter, cheese, or other manufactured dairy products. This raises producers' total revenue at the expense of consumers. There is nothing unique about the commodities regulated by such marketing orders that requires volume-control on sales of fresh produce. For example, sales of California and Arizona oranges and lemons, tart cherries and walnuts are controlled, while Florida citrus, sweet cherries and pecans are not.

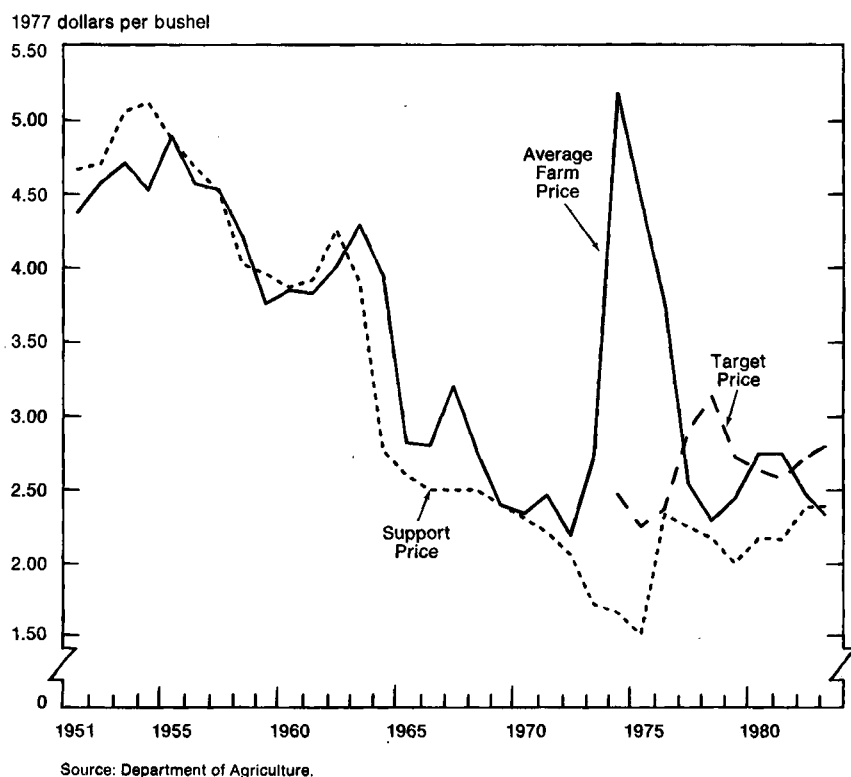
While World War II and the Korean war provided a period of high prices for U.S. agriculture, the lower farm prices and incomes which followed brought renewed attempts to restrict acreage or marketings. A voluntary land retirement program known as the Soil Bank was established in 1956, in which the government paid farmers to take land out of production. By the late 1960s, farmers had retired more than 60 million acres under this program.

Nevertheless, with rapid productivity increases, surpluses continued to mount despite the downward drift of real support prices through the 1960s. Chart 4-3 illustrates this trend for wheat. The in-

creasing overvaluation of the dollar in the late 1960s made this price reduction less pronounced when viewed from the perspective of importing countries. Despite their downward drift, the support prices appear to have exceeded market-clearing levels in most years through 1972, when the dollar was devalued and farm exports and prices increased dramatically. The effect of the dollar devaluation was reinforced by simultaneous crop failures in many parts of the world, the ready availability of credit, and a change in Soviet agricultural import policy that led to a large grain purchase from the United States.

Chart 4-3

Real Wheat Prices



The Last Decade

As farm exports expanded, government programs were adjusted to allow farmers to bring most of the retired land back into production. In 1973 farm incomes exceeded those in the rest of the economy for

the only time in history. The excess capacity of the 1950s and 1960s disappeared, and farmers quickly expanded their production capacity to satisfy the export demand.

The moves toward an increasingly market-oriented farm policy, begun in the late 1960s, culminated in the Agriculture and Consumer Protection Act of 1973. Recognizing that loan rates, by interfering with market prices, may limit our ability to compete in world markets, the 1973 act attempted to divorce the policy objective of farm income support from price supports. The act retained loan rates as a form of minimum price insurance, but established a system of target prices and deficiency payments to provide farm income insurance. Participating farmers can make production decisions based on the target price, but unlike loan rates, the entire crop is sold on the market for whatever it will bring. The difference between the target price and the average market price (or the loan rate, whichever is higher) in the first 5 months of the marketing year is paid to the farmer in the form of a deficiency payment per unit of production. By this means, the government avoids accumulating stocks unless the market price falls to the loan rate.

One disadvantage of target prices and deficiency payments is their large potential cost to the government, particularly if there is a wide spread between the target price and loan rate. To overcome the cost disadvantage and the tendency for target prices to encourage larger production, the program often requires a farmer to reduce the acreage planted as a condition for participating in the benefits of the program. The forgone production on this acreage is, in effect, the premium paid for the price insurance provided by the loan rate and the income insurance provided by the target price.

Because market prices were high during the export boom of the mid-1970s, the then-existing farm policies had little effect. Concern arose, however, about the much larger price instability that had accompanied the export growth in the absence of government stocks. A 3-year CCC loan program, known as the Farmer Owned Reserve, was established by the Food and Agriculture Act of 1977. In exchange for a higher loan rate, a farmer who satisfies any acreage reduction requirements can place commodities in the Farmer Owned Reserve for a 3-year period. After the first year, the loan is interest free. The Department of Agriculture pays for the storage cost for all years of the loan. In exchange, the farmer agrees not to sell the grain until the market price rises to a specified release price.

Although the Farmer Owned Reserve was designed as a buffer stock scheme for stabilizing market prices, in practice the price bands have been altered frequently. In particular, since the 1980 embargo of grain sales to the U.S.S.R., the Farmer Owned Reserve loan rate

has at times been set high enough to provide incentives to produce for storage under the program. This is contrary to its objective of providing price insurance when the market price falls below its long-run equilibrium level.

With the onset of the global recession and the strengthening of the dollar 2 years ago, farm exports fell and farm prices dropped well below loan rates. There were bumper crops in 1981 and 1982, and stocks in the Farmer Owned Reserve and in CCC inventories burgeoned. With no imminent increase in exports foreseen, a Federal policy decision was made early in 1983 to offer farmers payment-in-kind if they would reduce their crop acreage in 1983. Farmers found this proposition so lucrative that they cut back their harvested acreage by 55 million acres from the previous year. In addition, a devastating drought struck, drastically reducing production of corn, soybean, and cotton in particular. The payment-in-kind program is not viewed as a permanent addition to the instruments of Federal farm policy.

POLICIES THAT AUGMENT DEMAND

Farm production has grown more rapidly than demand during most of the past 50 years, exerting downward pressure on farm prices. Several Federal policies have attempted to increase domestic and foreign demand in order to provide some price support to farmers.

Consumer Policies

A number of Federal programs directly related to food have sought to aid low-income consumers, who spend a larger fraction of their income on food. When the government began purchasing agricultural commodities to support farm prices and farm income in the 1930s, certain commodities were distributed free to the urban poor and unemployed. Direct distribution of surplus commodities acquired by the CCC continues to this day, for example, the recent distribution of surplus cheese and other CCC-owned products. In addition, the government subsidizes school lunches and donates commodities to schools. These include meats, fruits, vegetables, eggs, and poultry.

The largest program is the food stamp program, which had a budget cost in fiscal 1983 of \$11.2 billion. This program distributes food stamps to low-income consumers to augment their purchasing power in a form that must be spent specifically on food. Nevertheless, because food stamps substitute for cash within a household budget, low-income consumers tend to spend only about 12 cents more on food for each dollar's worth of food stamps received. The food stamp program probably added less than 1 percent to aggregate consumer expenditures on food in 1983. This program is mainly a

welfare program for low-income consumers rather than a program to expand food demand.

Agricultural Trade Policy

A country's agricultural trade policy is generally a consequence of its domestic price support programs. Major changes in a country's trade policy, therefore, generally require changes in that country's domestic agricultural policy as well.

When price supports are set above the world market-clearing level, they have particularly adverse side effects for internationally traded commodities. Unless trade is constrained, a large trading country like the United States cannot support the domestic price of a commodity without also supporting its price for farmers in all other trading countries. When the support price exceeds the world market price on export products, the U.S. Government withdraws enough supplies from the market to raise the world price to the domestic support level. Exports fall, raising the world price for the commodity. This higher price encourages farmers in other countries to expand their production capacity. This has occurred for tobacco, cotton, and wheat—at various times among our most important export crops.

To support the domestic price of goods that we import, the government must buy up domestic production and even imported supplies until the world market price is bid up to the support level. This appears to be happening today under the price support program for honey, although this is not typical. Instead, by authority of Section 22 of the Agricultural Adjustment Act of 1933, as amended in 1935, quotas or fees can be imposed on imports of any product whose domestic program is threatened by imports because of price supports set above the market-clearing level. The United States currently has such import quotas on sugar, dairy products, cotton, and peanuts. The United States received a waiver for these quotas in the 1950s by the General Agreement on Tariffs and Trade.

Although there is no price support program for beef, the Meat Import Act of 1979 mandates annual quotas to limit imports when domestic supplies are large. Voluntary export restraints have been negotiated with the principal beef exporting countries to avoid triggering the beef import quota.

In 1954, Public Law 480 created the Food for Peace program as a means of reducing the large CCC stocks acquired through price support purchases. This act and subsequent amendments provided for donations of commodities to poor countries and sales for local currencies. These funds are used for development projects or local expenses of the U.S. Government, such as embassy operation. Almost 40 percent of all U.S. grain exports in the 1960s were under Public Law 480. While concessional sales have helped to reduce burden-

some government inventories and to develop new markets for U.S. farm products, the years when government stocks have been largest have often failed to coincide with years of crop shortfalls in developing countries.

Government stocks also have been reduced through export subsidies. Export subsidies on agricultural products are permitted under the General Agreement on Tariffs and Trade, subject to certain conditions. In particular, export subsidies must not be used to obtain more than an "equitable" share of world exports or to "materially undercut" other suppliers' prices. Export subsidies were used by the United States to avoid accumulating larger CCC stocks from the 1960s until 1972. In recent years, "blended credit" and special subsidized sales have been used to encourage other countries, particularly the EC, to reduce their farm export subsidies. "Blended credit" consists of a mixture of no-interest loans "blended" with guaranteed or nonguaranteed commercial credit.

Export subsidies set up a two-price system that permits producers collectively to charge a higher price in the domestic market, where demand is less price responsive, and a lower price in the export market, where demand is more sensitive to price changes. By this means, total revenue to producers is increased. Total revenue to producers is, of course, further enhanced by the fact that farmers receive the higher domestic price for all they sell, but taxpayers pay the entire cost of the export subsidy.

The target price system can also act as an export subsidy under certain circumstances. Unless sufficient acreage reduction is required, target prices tend to cause larger production and lower market prices than would otherwise occur. Such price reductions have the same effect, when viewed from other countries' perspective, as export subsidies, unless loan rates are set at or above the long-run world market-clearing prices. For example, it appears that the wheat loan rates were sufficiently low in 1977, 1978, and 1979, that the target prices did depress market prices. Since 1980, however, the wheat loan rates have been set at such high levels that exports have been reduced.

The United States generally endorses free trade. During the various rounds of multilateral trade negotiations, the United States has regularly urged that trade in agricultural commodities be treated simultaneously with other goods, only to see it split off for separate treatment. The various rounds of trade negotiations have significantly lowered tariffs but have been relatively unsuccessful at achieving similar reductions in nontariff barriers, the principal barriers to trade in agricultural commodities.

On several occasions in the 1970s, the U.S. Government embargoed exports of certain agricultural products—either globally or to selected destinations. Exports of soybeans, for example, were embargoed in 1973 to hold down domestic prices to livestock producers who use soybean meal as an input, and indirectly to protect domestic consumers from higher prices of livestock products. In 1980 a partial embargo was imposed on grain sales to the U.S.S.R. in response to the invasion of Afghanistan. As a result of these embargoes, questions have been raised about the reliability of the United States as a supplier and about the sanctity of U.S. export contracts. This Administration has publicly stated that farm exports will not be selectively embargoed in the future, and has entered into long-term sales agreements with China and the U.S.S.R.

Since 1981 the adverse trade effects of the strong dollar, third world debt problems, and high price supports have motivated legislative requests for special export assistance through price or credit subsidies and expanded export credit guarantees. Credit guarantees have become a major tool in the effort to maintain U.S. farm exports. In addition, public expenditures in support of U.S. agricultural export promotion and foreign market development activities have increased.

NET EFFECTS OF FARM PROGRAMS

Table 4-4 lists the major Federal farm programs for the most important American farm products. In fiscal 1983 the Federal price and income support programs cost the taxpayer more than \$28 billion, but this number tells only part of the story. Price supports and restrictive marketing and import practices impose an additional cost on consumers by reducing their purchasing power.

Federal farm policies tend to have two opposing effects on consumer prices. Public support for agricultural research and development has produced a stream of productivity-increasing, cost-reducing technological improvements, which have lowered market prices. Food price reductions benefit the poor in particular, because they spend a larger fraction of their income on food than do middle- and upper-income groups.

Offsetting this positive effect on consumer prices are public policies that artificially raise farm product prices above the market-clearing level through price supports and restrictive marketing and trade practices. By raising food prices, these policies tend to reduce consumers' purchasing power. Because the policies alter relative prices, they also distort the mix of products consumed. They have stimulated the development of synthetic substitutes for natural products, for example, high-fructose corn sweeteners and low-calorie sweeteners

TABLE 4-4.—Major Federal farm programs by commodity, 1982

Sales rank	Commodity	Billions of dollars		Nature of program
		Farm sales value	Value of net exports	
1	Beef cattle and calves.....	29.9	-1.2	Import restrictions.
2	Dairy.....	18.4	-.3	Price supports. Import quotas. Classified pricing.
3	Feed grains.....	16.1	6.4	Price supports. Deficiency payments. Acreage restrictions. Storage incentives for participants.
4	Soybeans.....	12.4	6.2	No effective program (price supports).
5	Hogs.....	10.6	-.5	Section 32 purchases.
6	Wheat.....	9.8	6.9	Price supports. Deficiency payments. Acreage restrictions. Storage incentives for participants.
7	Poultry and eggs.....	9.5	.4	Section 32 purchases.
8	Vegetables.....	8.1	.0	Some products free market, but some import restrictions and marketing orders. Section 32 purchases.
9	Fruits and tree nuts.....	6.7	.1	Some products free market, but some import restrictions and many marketing orders. Section 32 purchases.
10	Cotton.....	4.9	2.0	Price supports. Deficiency payments. Acreage restrictions. Import quotas.
11	Tobacco.....	3.3	1.2	Price supports. Acreage and marketing controls.
12	Hay.....	2.1	.0	No program.
13	Rice.....	1.7	1.0	Price supports. Deficiency payments. Acreage restrictions.
14	Sugar beets and cane.....	1.7	-.8	Price supports. Import quotas, fees, and duties.
15	Peanuts.....	.8	.2	Price supports. Acreage restrictions. Import quotas. Domestic marketing quotas.

Sources: Department of Agriculture and Council of Economic Advisers.

for sugar, synthetic fibers for cotton and wool, margarine for butter, nondairy creamers for cream, and artificial cheese for natural cheese on frozen pizzas. Such substitutions have offset part of the adverse effects of price-enhancing policies on consumer welfare. Finally, low-income consumers have realized some benefits through income-augmenting programs such as food stamps and commodity distribution.

Public policies also affect the farm sector's export performance. Past public investments in agricultural research account for part of the increase in farm exports. At least in the long run, export demand is elastic, so this export growth has increased agricultural export revenue. On the other hand, policies that administratively set U.S. farm support prices above the world market-clearing level tend to reduce

export revenue in the long run. This occurred in the 1960s and again for some commodities in the early 1980s. Such policies prevent agriculture from realizing its full potential as a trading sector.

What matters to producers is how government policy affects the net returns to their land, labor, and capital. For a given technology, any public policy that raises the price of products or lowers the cost of purchased goods and services raises net returns. This has been the effect of price supports, import quotas, and export subsidies, as well as of cheap water and cheap energy policies. On the other hand, the price supports on grains have raised the price of feed to the livestock and poultry sectors. In this way, public policy raises the net returns to one set of farmers, while lowering those to another.

Different rates of protection to different sectors tend to cause inefficient resource allocation. Resources tend to move to where they earn the highest returns. If public policy artificially raises the returns in one sector relative to another, this will attract excessive investment and result in excess capacity. Inefficient resource allocation lowers the potential production of the economy as a whole and reduces per capita income. When public policy diverts, say, investment capital or water from more to less productive uses, this lowers national income.

While farming has changed a great deal since the 1930s, farm policy instruments have not been adapted to the changing structure of farming and the environment in which it operates. Average sales of commercial farmers have grown rapidly, and the benefits from farm programs tend to be concentrated on the largest producers, despite payment limitations for some programs. Moreover, the benefits from the programs have tended to become capitalized into land values, thereby increasing landowners' wealth. Once this happens, land values can fall unless the government continues to support the product price. The threat of reduced land values and reduced returns on past capital investments provides farmers with a strong incentive to lobby against reductions in price supports, even when it has become obvious that existing price supports are well above market-clearing levels. The prospect of continued price supports thus creates false expectations and encourages investments that would be unprofitable if price supports fell. Farmers who act in good faith upon these expectations feel they have been cheated if price supports are later reduced or eliminated. Nevertheless, short of paying farmers to retire resources from production, the only way to induce the needed resource adjustment is to allow capital losses and attempt to ease the adjustment by reducing price supports gradually.

Public policy appears to have induced excessive investment in parts of U.S. agriculture at various times. The cost of these misallocations does not always show up in the Federal budget. For example, sugar

producers and processors enjoy substantial income transfers as a result of protection from imports. Because of the way the program operates, the consumer bears all of the cost of these income transfers. Nevertheless, the costs are no less real than if the prices were supported by direct Federal Government purchases.

GUIDELINES FOR FUTURE FARM POLICY

Modern American agriculture has become well integrated into the world market and into the rest of the U.S. economy. As exports have grown, total demand for American agricultural products has become more price responsive, but the variability of that demand has also increased. This deepens the sector's susceptibility to periodic excess capacity, as at the present. When the Agriculture and Food Act of 1981 was passed, most observers thought that real farm prices would rise through the 1980s. In less than a decade, we have gone from fears of worldwide food shortages to such large stocks that we paid farmers to reduce harvested acreage by 55 million acres in 1983. This experience illustrates the need for flexibility in setting farm support prices. The present U.S. farm policies support the price to farmers in countries that compete with us for export markets and impede our ability to export. We need to allow prices to reach market-clearing levels if we wish to compete in the export market. If this is not done, a significant part of the resources in American agriculture will remain underemployed until the total quantity of these resources is significantly reduced.

Price supports do little to help farmers with below-average income because benefits are distributed in proportion to sales. A more efficient and equitable way to help low-income farmers would be to transfer income to them directly. While most commercial farmers do not have low average incomes, their incomes are variable, because variability in weather and in exports create instability in both supply and demand. The resulting instability in cash flow makes modern American farming a risky business.

There are better ways to reduce risk besides outright price supports. One is through insurance. Historically, when farmers lacked insurance markets in which to insure against fluctuations in yield and prices, the government provided price supports and various forms of subsidized crop insurance. Today farmers can ensure a specific price through forward contracting or selling futures contracts, although relatively few avail themselves of this opportunity. Farmers generally prefer not to commit themselves early, worried that they may lose the opportunity to sell at a higher price later if the market price rises.

This year trading in commodity futures options is scheduled to recommence on a trial basis for the first time in 50 years. With a put option, crop producers will be able to buy the right to sell their future production at a specified price without incurring the obligation to sell at that price. This may be more attractive to producers than selling on the futures market. In a similar manner, livestock producers will be able to buy insurance against increases in the price of their feed by buying call options. Thus, the resumption of trading in commodity futures options will allow farmers to insure against price risk. If the experiment is successful, there will be less need for the Federal Government to provide price insurance through price supports.

Buffer stock programs such as the Farmer Owned Reserve are designed to reduce variability in agricultural commodity prices. If these programs are continued, the acquisition price should be set below the expected long-run world market-clearing price. Setting the acquisition price too high would reduce exports and support the whole world market price structure. Stocks would become excessive, as happened in 1981 and 1982. In addition, the price band needs to be adjusted over time on the basis of world price movements, as is now done with soybeans, to reflect long-run trends in market conditions.

Agriculture, like other trading sectors, is strongly affected by interest rates and the value of the dollar. Therefore, macroeconomic policy is as important to farmers as farm policy. Special measures to shield one sector from the adverse effects of macroeconomic policy draw resources away from other sectors and place a greater adjustment burden on them. It would be more efficient to alter the macroeconomic policies that are damaging the traded goods sectors.

Because the United States is a large agricultural trading country, it has a large interest in further liberalization of agricultural trade and in securing more satisfactory rules concerning use of agricultural export subsidies. In past rounds of multilateral trade negotiations, substantial progress was made in lowering tariff barriers to agricultural trade. However, little progress on reducing nontariff barriers, such as quotas and variable import levies, has occurred. If we hope to persuade other countries to liberalize access to their markets for our exports, we have to be ready to offer freer access to our market for their exports. Freer access would also tend to stimulate economic growth in developing countries, and, over the longer run, increase their demand for our exports.

American agriculture has a long and remarkable record of producing abundant supplies of wholesome food for a growing Nation and for export around the world. But, the budget cost of farm programs has reached a level that is not sustainable. We must adopt policies to

encourage the necessary resource adjustment. National income would likely increase as a result of more efficient resource allocation, consumers would pay an even smaller fraction of their income for food than they do now, and farmers would benefit from greater economic health of their industry.

CHAPTER 5

Financial Market Deregulation

OVER THE PAST FEW YEARS, financial markets have undergone sweeping changes of a magnitude not seen since the 1930s. Despite these changes, the process of market restructuring and regulatory reform remains incomplete. Additional regulatory changes of historic dimensions are being debated. The shape and scope of these reforms will be important to the American economy for decades to come.

The issues in financial regulation are many and complex. They include the safety and soundness of financial institutions, the problems of dealing constructively with changing technology, and the reduction of regulatory burdens to the maximum extent possible. Similar concerns are important in other industries where regulatory reform is being debated. But the financial regulatory reform issues are in many respects far larger.

Financial regulation is not simply a matter of protecting poorly informed investors—the usual focus of consumer protection regulation—but of protecting everyone. In the financial crises experienced in 1933 and earlier in U.S. history, well-informed, prudent investors and depositors found themselves ruined financially. From painful experience, we know that a failure of public policy with respect to financial markets can create damage that extends far beyond the financial services industry. Financial market failure can mean economy-wide failure—recession, widespread unemployment, and bankruptcies.

The essential functions of financial regulation are to ensure the safety and soundness of the financial system, and to foster efficient allocation of capital by promoting competition and limiting opportunities for fraud and self-dealing. The competitive capital markets in the United States, long encouraged by public policy, have provided highly efficient links between the providers of funds and the users of funds, directing resources into the most productive investments in the economy. But instability in financial markets has been a continual concern, and at times a highly disruptive fact, throughout U.S. history. The challenge for regulatory policy is to maintain stability while realizing the benefits of competition.

MAJOR HISTORICAL FORCES SHAPING FINANCIAL REGULATION

It is best to begin the analysis of the key financial regulatory issues by considering the major forces that have shaped the industry and led to the present regulatory environment. These forces have included public reaction to periods of financial instability that occurred in the 1930s and earlier, public concerns over the credit powers of financial institutions and their ties with other institutions, and strong competitive pressures coming from both within and among the various segments of the industry.

FINANCIAL INSTABILITY

Much of our inherited regulatory structure involves extensive and far-ranging legislation enacted in response to crisis. Periods of acute financial instability have resulted in the disappearance of major institutions and the introduction of new governmental regulations. For example, in the 1860s, problems of Civil War finance and increasing currency disorders led the Congress to establish the national banking system and the Office of the Comptroller of the Currency. The Congress also defined the arrangements under which national banks would issue a national currency. Later, a series of banking panics—periods of numerous bank failures and bank suspensions of payments—culminating with the panic of 1907, created demands for a stronger Federal mechanism to prevent instability. This led to the establishment of the Federal Reserve System in 1913.

In the 1930s, the collapse of the banking system and the Great Depression led to major banking and securities acts that set the basic structure of our banking and financial regulation. The legislation, among other things, established the Federal Deposit Insurance Corporation, the Federal Home Loan Bank System, and the Securities and Exchange Commission.

The basic problem of financial instability that existed before extensive Federal involvement to stabilize the system arose because banking is based on a fractional reserve system. Banks accept deposits payable on demand. To meet depositors' demands, banks maintain reserves of cash and liquid assets that are a fraction of total deposits. In normal circumstances, the net drain on a bank's cash and liquid assets is small, because some depositors are putting funds into the bank while others are taking funds out. Moreover, if one bank is running short, another bank ordinarily has surplus funds. Bank funds can be borrowed and lent in the interbank market, known as the Federal funds market. This market is extremely large and well developed.

In the financial panics that occurred in the 1930s and earlier, however, depositors came to distrust banks; they withdrew funds and held them in the form of currency. One bank's deposit drain was not offset by another bank's deposit inflow. Because bank assets consist partly of cash reserves but mostly of loans to households and businesses, banks experiencing cash drains were forced to curtail lending, and perhaps to liquidate outstanding loans. As a result, borrowers were forced to scramble for funds. Business activity and employment fell, and interest rates on business and consumer borrowing often rose.

As the business contractions continued, previously sound firms found that they could not service their debt, nor could unemployed workers pay theirs. Banks that had been unaffected by the developing crises found that their once sound loan portfolios had become shaky. Fearing more bank failures, depositors rushed to withdraw funds from those sound banks. As the downward pressures accumulated, the financial crises deepened.

This brief description of the development of financial crises shows that a financial system based on fractional reserve banking is potentially unstable: given a big enough shock or disturbance, rational and predictable responses by banks, businesses, and households will tend to make the problem worse. There need be no villains for a financial crisis to occur. A crisis could develop even though every participant acted responsibly.

Two types of governmental institutions now serve to prevent a financial panic from cascading into a collapse of the banking system. First, the Federal Deposit Insurance Corporation, the Federal Savings and Loan Insurance Corporation, and the National Credit Union Administration provide deposit insurance so that the failure of one unhealthy institution will not produce panic runs on healthy institutions. Second, the Federal Reserve System, as the Nation's central bank, stands ready to provide extra liquidity to the banking system. When a scramble for a relatively fixed amount of currency threatens to produce a crisis, the Federal Reserve can increase the total amount available, thus meeting extraordinary demands. A scramble for currency forces cumulative reductions in the total money stock, but the Federal Reserve can prevent the process from starting in the first place by using its policy instruments to keep the money stock growing reasonably smoothly.

CREDIT POWERS OF FINANCIAL INSTITUTIONS

A major theme running through U.S. financial history is that of concern over the power of financial institutions, primarily banks, as lenders, and not just as depositories. This concern is responsible for

many banking and financial market regulations. Issues of competition and concentration, of fair and reasonable interest rates, and of equitable access to credit, have long been controversial topics in the regulatory debates.

It is essential that monetary and credit issues be kept analytically separate. We have tended to extend regulation over the credit activities of financial firms because of incomplete understanding of the monetary functions of banks. For example, although there is no evidence to support this proposition, bank failures in the early 1930s were attributed in part to the role of banks in the securities business. This belief led to provisions in the Banking Act of 1933 (Glass-Steagall Act) requiring the separation of banking and securities activities. Similarly, regulations setting minimum margin requirements for securities purchases, prohibiting the payment of interest on demand deposits, and limiting the interest paid on time and savings deposits, were based on the view that regulation of the credit markets was necessary to ensure financial stability.

The evidence, however, indicates that banking abuses are not themselves the basic cause of financial instability. A steady stream of bank failures occurred in the 1920s without causing generalized financial stress. On the other hand, in the absence of a proper governmental monetary framework, there is a danger of banking system collapse even if all banks individually pursue sound and conservative banking policies.

THE FORCES OF COMPETITION

Competitive pressures have been an important force in shaping the financial industry. Yet much of the legislation of the 1930s, and in other periods as well, has been designed to restrict competition, particularly in banking, so as to maintain financial stability. Much of this legislation rested on faulty analysis. Indeed, restrictions on competition have not only led to costly inefficiencies in the provision of financial services and reduced consumer choice, but also may have contributed to instability.

The forces of competition in financial markets are powerful. The organized exchanges and over-the-counter markets in standardized financial instruments are obviously highly competitive. What is less obvious is the competitive nature of transactions involving nonmarketable financial instruments. For example, a bank's loan to a small business or a household, which is ordinarily not a marketable financial instrument, is often negotiated in a competitive setting. In many areas of the country borrowers can choose among numerous possible lenders. By shopping around, they can select the most favorable com-

bination of interest rate, terms, and service. In doing so, they constrain lenders to provide competitive loan rates and terms.

Although most financial markets are highly competitive for most participants, there are exceptions. In some cases geographical restrictions reduce the competition in local markets because financial firms from other areas are denied entry. The loss of competition primarily affects smaller local businesses and households; larger businesses can place deposits with, and obtain credit from, the larger financial firms competing in regional or national markets.

One measure of the depth of competition among financial firms in the United States is that there are more than 35,000 independent banks, mutual savings banks, savings and loan associations, and credit unions with approximately 100,000 offices nationwide. To be sure, some part of this large number may reflect unit banking and other restrictions, but it is likely that even without such restrictions the number of depository institutions would be large. In addition, insurance companies, securities firms, money market mutual funds, finance companies, and other types of financial institutions compete with the depository institutions in providing many services. Table 5-1 provides data on the numbers and assets of these institutions. Finally, many large borrowers can bypass financial intermediaries altogether by selling stocks, bonds, and commercial paper directly to the market.

TABLE 5-1.—*Number and assets of selected financial institutions as of December 31, 1982*

Type of institution	Number	Assets (millions)
Commercial banks.....	14,543	1,862,724
Branches.....	40,349	
Savings and loan associations ¹	3,833	706,045
Branches.....	18,712	
Mutual savings banks.....	424	174,197
Branches.....	2,777	
Credit unions ²	16,589	76,120
Money market mutual funds ³	255	221,558
Life insurance companies.....	2,060	588,163
SEC-registered broker-dealers.....	8,299	

¹ Data are preliminary.

² Excludes approximately 3,400 nonfederally insured State credit unions.

³ Data as of December 29, 1982 for funds reporting to Donoghue's Money Fund Report.

Source: Compiled by Council of Economic Advisers.

There is an important consequence of this competitive environment. Many of the regulations put in place in the 1930s that were designed to prevent "excessive competition" have been eroded by pressure for efficiency and innovation. In many instances profitability can be improved by avoiding costly regulation. When firms find ways to avoid regulation, other firms are attracted to similar strategies,

both to maintain their profitability and to protect their competitive positions.

Although the forces of competition usually prevail in the long run, the costs of unnecessary regulation should not be ignored. The amount of unproductive labor devoted to regulatory compliance and avoidance is far from trivial. Moreover, established firms can find their market positions, expertise, and capital eroded as they attempt to cope with outmoded regulatory constraints while competing against less constrained firms. Regulation, more than restraining competition, forces it into new channels. As a result, resource allocation is distorted and unnecessary costs are imposed on consumers, shareholders, and taxpayers.

The importance of the competitive constraint on financial regulation can hardly be overemphasized. But neglect of it in the past has led to many of the regulatory problems the Nation has faced. Important recent examples include the market distortions engendered by ceilings on the interest rates financial institutions were permitted to pay to their depositors, and the growing banking competition from nonbanking firms such as securities firms that are not subject to traditional banking regulations.

Many observers decry the effects of competition in breaking down regulation, but it is not possible to obtain the benefits of competition—the market constraint on interest rates, the incentives for efficiency and innovation, and the dispersion of economic power—without having these same forces work toward the avoidance of regulation. Indeed, competition may break down unwise regulation that never should have existed.

It is often the case that legislation designed to solve one problem creates others. Most observers agree that the danger of a financial crisis has been reduced to an extremely low level. However, deposit insurance, interest rate controls, and other restrictions on bank activities introduced in the 1930s—initiatives viewed at the time as contributing to financial stability—have had unexpected side effects.

Recent legislation, the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St Germain Depository Institutions Act of 1982, have begun to deal with these new issues. Fortunately, the new legislation has been enacted in a setting very different from the crisis atmosphere existing in the 1930s. To be sure, recent years have seen major stresses on the financial system; the failure rate of financial institutions has risen. But the driving force behind recent and newly proposed legislation has been an attempt to modernize the regulation of financial markets and institutions—to retain what is essential in earlier legislation and sweep away what has proved unnecessary or counterproductive.

CEILINGS ON INTEREST RATES

The market's response to interest rate ceilings on time and savings deposit accounts provides an example of regulatory avoidance in a highly competitive market and the unnecessary costs incurred in the process. Interest rate ceilings evolved from the legislation of the 1930s. The intent was to restrain "excessive price competition," then thought to have contributed to the banking collapse in 1933. It was also felt that the introduction of Federal insurance of bank deposits gave the government a special responsibility to protect the commercial banking industry from competitive pressures that might strain the resources of the insurance funds.

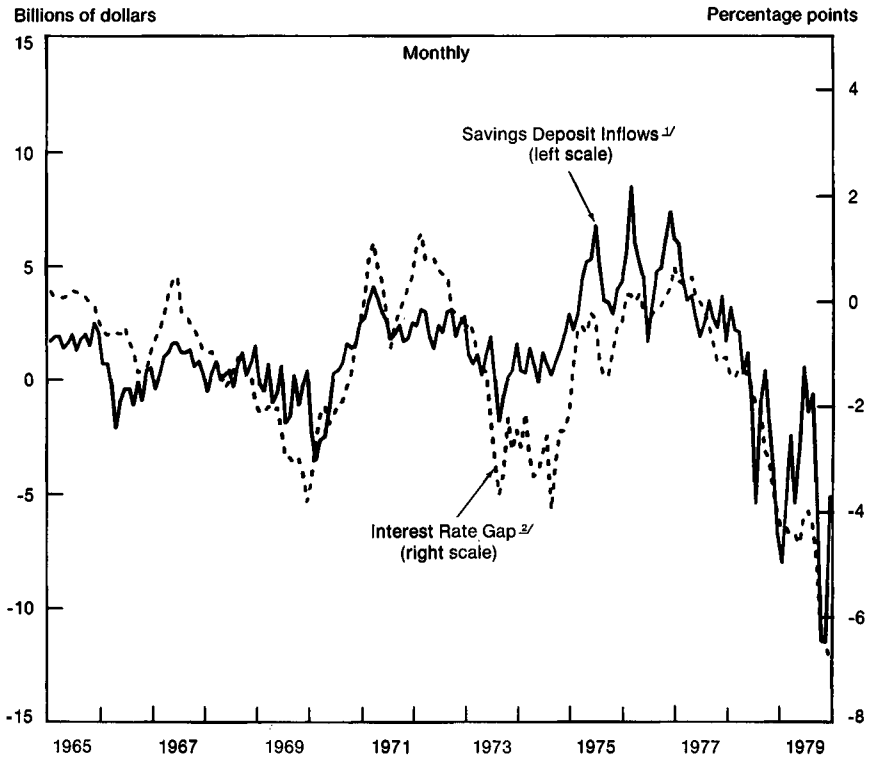
Until 1966 interest rate ceilings on commercial bank deposits were intermittently changed to remain above market interest rates. In 1966, however, market interest rates rose significantly above the rates thrift institutions were earning on their long-term mortgage portfolios, threatening their solvency. The ceilings on bank rates were allowed to become binding in an attempt to prevent commercial banks from bidding funds away from mortgage lending. To prevent thrift institutions from engaging in a self-destructive bidding war, ceilings were also extended to federally chartered savings and loan institutions and mutual saving banks.

In the short run, this emergency 1966 legislation may have helped to stave off the bankruptcy of some thrifts. However, as the "emergency" ceilings were extended year by year, the artificially low rate of interest on bank and thrift accounts encouraged savers to withdraw their funds from financial intermediaries in favor of other forms of saving. This phenomenon came to be known as disintermediation. Chart 5-1 shows savings deposit inflows at banks and thrifts against the interest rate gap between the ceiling on passbook accounts and market rates. It illustrates the volatility of deposit flows with binding interest rate ceilings in place.

In many ways the effects of the ceilings were the opposite of those intended. For example, the ceilings were intended to ensure a stable flow of mortgage funds. However, they actually led to widespread disintermediation whenever rising market interest rates made other savings vehicles more attractive, so that they effectively destabilized the flow of mortgage money. The ceilings were supposed to make it easier for lower-income families to afford housing by lowering mortgage rates. In fact, the interest rate ceilings advantaged wealthier investors who could meet minimum balance requirements on higher yielding accounts, and who had access to unregulated investments. As a result, the greatest burden of the regulation was borne by small-

Chart 5-1.

Savings Deposit Inflows versus the Interest Rate Gap



^{1/}Change in savings deposits at commercial banks and thrift institutions (seasonally adjusted averages of daily figures).

^{2/}Ceiling on passbook savings accounts at commercial banks less rate on 3-month Treasury bills (both measured in percent per annum).

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

er savers. Moreover there is little evidence to suggest that the rate ceilings were effective in keeping mortgage interest rates down.

Rate ceilings were often effectively circumvented through nonprice competition and through investment in unregulated instruments. Extensive branching, free checking and financial services, expensive promotions, and "free" gifts were among the many forms of implicit interest that banks and saving institutions used to attract customers. As market interest rates rose through the 1970s, the diversion of funds into unregulated instruments led to attempts to "tune" the ceiling structure for different categories of deposits. The number of different accounts subject to ceilings went from 2 in 1965 to 24 by

1979. These attempts to restrain disintermediation were not very successful. A new ceiling-free investment vehicle, the money market mutual fund, became increasingly popular. Balances in these accounts jumped from \$6.4 billion in 1978 to \$150.9 billion by 1981.

Unintended effects and widespread opportunities for avoiding the ceilings, among other things, led to the passage of the Depository Institutions Deregulation and Monetary Control Act in 1980, which mandated the gradual removal of ceilings by 1986. At the Administration's request the Depository Institutions Deregulation Committee has accelerated the phaseout of rate ceilings. By the end of 1983 fewer than one-fourth of interest-bearing deposits were in rate-restricted accounts.

DEREGULATION AND MONETARY CONTROL

Interest rate ceilings not only provoked bouts of disintermediation, but also damaged the ability of the Federal Reserve to measure and control the money stock. The ceilings also reduced the stability of the link between changes in the monetary aggregates and changes in nominal income, making the task of managing monetary policy more difficult.

When market interest rates rose significantly above ceiling rates, funds flowed out of traditional financial intermediaries, new deposit categories were defined by the regulators, and money market mutual funds emerged to offer deposit-like accounts that were beyond the direct control of the monetary authorities. As a result, market reaction to binding interest rate controls resulted not only in a less predictable environment for making monetary policy, but also in conceptual changes in the definitions of the monetary aggregates.

The 1980 Depository Institutions Deregulation and Monetary Control Act contained provisions that, when full adjustment to them is completed, will significantly improve the potential for accurate Federal Reserve control over the monetary aggregates. For one, the act mandated a phaseout of interest rate ceilings on interest-bearing accounts. The Garn-St Germain Depository Institutions Act of 1982 continued the process by authorizing a new ceiling-free account, the money market deposit account. Both steps should prevent circumstances in which these components of the broader monetary aggregate, M2, become suddenly less attractive than savings vehicles not included in M2. As a result, new episodes of large-scale disintermediation are unlikely to occur.

A proposal currently being discussed, that would go still further in the direction of decontrolling deposit interest rates, would allow banks to pay interest on ordinary demand deposit accounts, and

would require the Federal Reserve to pay interest on required reserves held against deposits. The cost of paying interest on reserves could be offset by increasing taxes or charges on institutions subject to reserve requirements. There are good arguments for such a proposal. Paying interest on reserves would eliminate the disadvantage that deposit accounts subject to reserve requirements have in relation to nonreservable accounts, such as money market mutual fund accounts. But perhaps the strongest is that once portfolio adjustments associated with the change are completed, paying interest on deposits and reserves would tend to stabilize M1 velocity—the ratio of gross national product (GNP) to the narrowly defined money stock, M1—and therefore facilitate monetary policy.

One cause of fluctuations in velocity is changes in the opportunity cost of holding money—the difference between market interest rates and interest rates on deposit accounts. Because ordinary demand deposits do not earn interest, the willingness of individuals and businesses to hold deposit balances changes inversely with market interest rates. For example, when market rates rise, depositors may attempt to economize on their holdings of non-interest bearing deposits by acquiring interest-earning assets. In the process, monetary velocity rises; for any given level of GNP, depositors hold less money.

Changes in the velocity of money complicate the job of stabilizing nominal incomes. If interest were paid on both demand deposits and reserves, the spread between the rate that competition would force banks to pay on those deposits and the rate that could be earned on other assets would reflect the resource costs associated with providing transactions services to depositors. As a result, the opportunity cost of holding money would be more stable, and it is likely that this would tend to stabilize M1 velocity.

Another provision in the Depository Institutions Deregulation and Monetary Control Act that has improved the climate for monetary control is the imposition of uniform reserve requirements for most types of accounts. Under the legislation, the Federal Reserve is empowered to set reserve requirements, not only for member banks, but also for nonmember banks and nonbank depository institutions, such as savings and loans, mutual savings banks, and credit unions. The reserve requirements cover all transaction accounts, including negotiable order of withdrawal (NOW), Super-NOW, and other automatic transfer accounts. Uniform reserve requirements are being phased in gradually. The process will be complete in 1987.

When uniform reserve requirements are fully phased in, the link between reserves and transactions balances should be tighter than in the past. Transaction deposits at depository institutions have been subject to widely varying treatment. These institutions have faced dif-

ferent reserve requirements depending on their size, location, and whether they were members of the Federal Reserve System. Some State-chartered institutions have not been subject to any reserve requirements. As deposits have shifted among accounts subject to different reserve requirements, the lending and money-creating capacity of the banking system would change without any change in the supply of reserves. Thus, the relationship between reserves and deposits has been subject to unexpected changes. Uniform reserve requirements will reduce this source of variability, and enhance the ability of the Federal Reserve to control the money stock.

GEOGRAPHICAL AND LINE-OF-BUSINESS RESTRICTIONS ON DEPOSITORY INSTITUTIONS

Depository institutions have historically been subject to a number of Federal and State laws that restrict their entry into new geographical markets and nonbanking lines of business. These laws were generally intended to prevent capital outflows from rural areas into financial centers and to stabilize the banking system. However, there is little evidence that they have served either purpose. Instead, they have impeded the development of integrated financial service companies and resulted in a financial services sector with smaller and more numerous firms than would have otherwise developed. They also have impeded the development of businesses that offer both financial and nonfinancial services, despite possible economies from such a structure.

Technological changes, limited deregulation, and the introduction of bank-like services by securities firms and others have eroded the force of these legal prohibitions and encouraged some expansion and diversification by banking firms. These changes have intensified the debate over further loosening geographical and line-of-business restraints. At issue is whether further deregulation will lead to more efficient and competitive financial services markets or promote concentration, instability, and undesirable trade practices.

GEOGRAPHICAL MARKET REGULATION

A complex set of Federal and State laws governs expansion of depository institutions into new geographical markets. In general, the controlling law depends on the type of institution, whether it is chartered under Federal or State law, and the State in which it is located.

The most cumbersome restrictions are those imposed on commercial banks. With few exceptions, interstate branching is prohibited for banks, whether national or State chartered. Intrastate branching of both national and State banks is controlled by the law of the host

State. Historically, most States have restricted intrastate branching, either by prohibiting it altogether or limiting the number or location of branches (Table 5-2). Some relaxation of these restrictions has occurred, but approximately half the States still place some limitations on intrastate branching. Federal geographical restrictions generally conform to State policies.

TABLE 5-2.—*State restrictions on intrastate branch banking, selected years, 1929-83*

[Number of States]				
Classification	1929	1951	1961	1983
Branching prohibited.....	28	17	16	8
Branching permitted but geographically limited.....	11	14	15	18
Unlimited branching.....	9	17	19	24

Sources: American Bankers Association and Board of Governors of the Federal Reserve System.

The restrictions on geographical expansion by State savings and loan associations are similar to those on banks, except that many fewer States limit intrastate branching. There are no statutory limitations, intrastate or interstate, on branching by Federal savings and loan associations. However, the Federal Home Loan Bank Board limits interstate branching except where necessary to rescue failing institutions, and it observes the limitations imposed by the few States that do restrict intrastate branching of State-chartered savings and loans.

States generally enacted geographical restrictions on bank expansion for two reasons. First, it was thought that such restrictions would prevent the outflow of funds from localities into financial centers and thereby increase the availability of loans to farmers and small businesses. Second, the laws were intended to preserve local ownership and management of banks.

There is no evidence that branching limitations do in fact constrain the flow of loanable funds. Interinstitutional and interregional capital markets are so well developed that local deposits are as easily loaned out across the country as across the neighborhood.

Even the effect of these laws in promoting local control is questionable. Depository institutions have been able to circumvent the prohibitions either by using holding companies or by offering only limited services in geographical areas where they cannot establish regular branches. In all but five of the States that impose restrictions on intrastate bank branching, for example, bank holding companies may be used to create a statewide banking system by acquiring multiple charters. The growth in the use of multibank holding companies over the past 20 years, from approximately 50 independent companies holding less than 10 percent of total bank deposits to more than 600 companies with over 57 percent of total bank deposits, is attrib-

utable in substantial part to the ease with which they can be used to circumvent intrastate branching limitations.

Until the enactment of the Bank Holding Company Act of 1956, the holding company structure could be used to circumvent interstate as well as intrastate branching prohibitions. Provisions of the act, however, prevent a bank holding company from acquiring more than a small interest in a bank outside the States in which it is already engaged without the approval of the State to be entered.

In 1970 changes to the Bank Holding Company Act permitted most banking-related services to be offered interstate, except for deposit-taking. The 1970 changes also narrowed the definition of "bank" to include only institutions that both accept demand deposits and make commercial loans. As a result, bank holding companies and others have been able to establish interstate networks of "nonbank banks," consumer finance companies, mortgage companies, and the like, that escape regulation by either not accepting deposits or not making commercial loans. More recently, the Garn-St Germain Depository Institutions Act of 1982 empowered bank regulatory authorities to permit acquisition of failing institutions across State lines.

These changes, plus recent advances in communications and data processing technologies that appear to have reduced the costs of managing multi-office banks, have led to a substantial increase in the level of interstate banking activity. Of approximately 55,000 offices engaging in banking-related activities, more than 7,800 are now located outside the home State of the parent entity. Even these numbers understate the amount of interstate banking activity because they do not reflect the substantial use of shared interstate automated teller machine networks or the phenomenal growth in the provision of bank-like services by interstate securities firms.

The rapid pace at which *de facto* interstate banking is emerging—despite seemingly substantial legal barriers—is one obvious indication of the strength of the forces for change within the financial services industry. These forces are also manifest in the numerous proposals for changes in both Federal and State law. Three New England States have recently adopted laws that provide for entry by out-of-State banks headquartered in other New England States with similar laws, and similar regional reciprocal entry arrangements are under active consideration in several other areas of the country. Other States have modified their banking laws to permit at least some entry from out-of-State, and the evolutionary movement away from intrastate limitations continues. At the Federal level, a number of legislative proposals are now pending that would reduce Federal restrictions on interstate banking.

If geographical restrictions are relaxed, the number of independent banking entities would almost certainly be reduced. States with unit-banking laws presently have approximately 107 independent banking entities per million residents, compared with 72 for limited branching States and only 20 for States with unrestricted branching. The most credible explanation is that branching restrictions impede access by large banks to deposit accounts and small loan business outside their home territories. Deposit accounts have historically been the lowest cost source of funds for banks, and full-service branches are important in marketing consumer and small business loans. Impeded access has therefore inhibited the growth of large firms and favored smaller firms.

However, geographical market deregulation would probably increase the number of banking offices operating in most communities. "Unit-banking" States, those that prohibit all branching, have approximately 182 commercial bank offices per million residents compared with 243 offices per million residents for other States. Although other factors may contribute to the difference, branching prohibitions are probably a significant reason for the lower ratio of banking offices to population in unit-banking States.

On balance, these two changes should increase competition and benefit consumers. The relevant market for retail deposits and small loan customers is compact—the locality or even the neighborhood. Although geographical market deregulation is likely to decrease the total number of depository institutions nationally, each competitor will compete in more local markets. Moreover, the number of potential entrants into each local market will also increase.

Nor would deregulation eliminate all smaller institutions. A recent study concluded that there are unlikely to be large, if any, economies of scale for most important banking services. The best existing data indicate that the costs of providing traditional banking services reach a minimum for institutions in the \$50 million to \$100 million asset range. Moreover, it does not appear that most bank customers will pay a premium to bank with interstate firms. The experience in States without intrastate branching restrictions is that many small institutions survive and prosper. In fact, smaller banks and thrifts not only coexist with larger ones, but generally have higher profitability on bank assets. Although some institutions, particularly less well-managed ones, will disappear as separate entities, they will most likely be acquired by more efficiently run organizations that will operate them as branches.

LINE-OF-BUSINESS RESTRICTIONS

Federal law embodies a long-standing policy of separating banking from unrelated lines of commerce. Today, as a general rule, banks may not engage in nonfinancial businesses unrelated to banking, either directly or through subsidiaries, nor may bank holding companies or their affiliates. Similar, though somewhat less stringent, prohibitions apply to savings and loan associations and holding companies controlling two or more savings and loan charters. Holding companies that control a single savings and loan association or any number of "nonbank" banks, however, are not subject to Federal line-of-business limitations.

The line separating commercial banking from other financial services is much less distinct. Until the 1930s, State and national banks regularly engaged in underwriting and dealing in securities, often circumventing legal prohibitions by pursuing such activities through affiliated companies. Because of the popular belief that banks had contributed to the Great Crash by promoting speculative securities and unloading worthless issues into trust and customer accounts, the Banking Act of 1933 (the Glass-Steagall Act) was passed. Provisions of the act attempted to divorce banking and the securities industry by barring banks from underwriting or dealing in nonbank securities, whether debt or equity.

The Glass-Steagall separation is incomplete in a number of ways. First, the act's prohibitions against the affiliation of banks with securities firms apply only to banks that are members of the Federal Reserve System, and not to the many State-chartered nonmembers. All banks, however, are prohibited from underwriting securities directly, and securities firms may not take deposits. Second, Glass-Steagall allows all banks to distribute and trade in general obligation government securities. Third, the act authorizes banks to buy and sell any securities for the account of bank customers, provided that such transactions are "without recourse" against the bank.

Until recently, the gaps in the Glass-Steagall Act, except those permitting trading in government securities, were inconsequential. Banks did not aggressively pursue brokerage business because regulatory restraints made it unprofitable. In January 1983 these restraints were relaxed, and as a result thousands of depository institutions now engage in securities brokering.

ECONOMIC ISSUES IN LINE-OF-BUSINESS DEREGULATION

Proposals to ease line-of-business restrictions on depository institutions have spurred much debate. Proponents argue that economic efficiency would be increased by permitting these institutions to underwrite and deal in securities and by expanding their power to engage

in collateral lines of business such as insurance underwriting and sales, real estate development, and management consulting. Opponents argue that these changes would increase the riskiness of banking, result in unacceptable concentrations of market power, lead to self-dealing and conflict-of-interest abuses by banking firms, and be unfair to bank competitors.

Product-line deregulation may promote economic efficiency in two ways. First, it may reduce the total cost of providing multiple services by consolidating their provision within a firm. Such savings can result from spreading fixed costs over more activities, improving communications, and effecting synergies in production. Second, customers may benefit from the extra convenience associated with conducting their business with a single firm.

The magnitude of the economic benefits from relaxing line-of-business restrictions is uncertain. Specific cost data for depository institutions and their customers are limited, and reliable estimates of the cost savings from product line deregulation do not exist. Over the past several years, however, several large firms have integrated over a broad spectrum of businesses, including insurance, real estate, and securities underwriting and brokering. Although it is too early to assess the economic success of these ventures, their development is evidence that the market believes that substantial economies from the integration of these businesses are possible. Indeed, much of the pressure for reconsidering line-of-business restrictions on banks has come from members of the banking community who argue that relaxation of these restrictions is necessary for them to meet competition from nonbanking firms offering integrated services.

Product line diversification does, however, raise issues of some concern regarding banking stability. The existence of Federal deposit insurance gives insured institutions an incentive to take undue risks in the hope of earning greater than normal returns. Accordingly, much of the supervisory efforts of banking regulators is directed at preventing excessively risky banking practices. As a practical matter, as the range of business activities increases, it may become much more difficult for regulators to thwart excessive risk-taking.

The Administration's proposed legislation, the Financial Institutions Deregulation Act, strikes a balance by easing restrictions on nonbanking activities but requiring that they be conducted only by separate corporate affiliates that are not bank subsidiaries. This approach has two significant advantages. First, by removing nonbanking activities to affiliates, the bank itself can be regulated and supervised on the basis of the traditional methods developed by the regulatory agencies over many years. Second, because the affiliates are to be subsidiaries of the holding company rather than of the bank itself,

the bank would be insulated from any financial problems that occur in the subsidiary.

There is, of course, no way to guarantee that difficulties in an affiliate will not affect the bank. But with proper safeguards the problems can be minimized. Moreover, it is important to recognize that attempts to seal off banking from collateral activities is a recipe for an endless expansion of regulation. Brokerage firms are now expanding bank-like activities rapidly. Extending regulation to these bank competitors would simply push regulatory avoidance to another channel. There is, in addition, far more danger of financial instability from unregulated banking substitutes than from properly supervised banks permitted to expand their powers within well-designed corporate structures.

A similar point may be made with respect to predictions that increases in self-dealing and conflicts of interest will result from repeal of Glass-Steagall. The potential for these abuses is already present in both commercial and investment banking. For example, broker-dealers already represent both purchasers and sellers, deal for their own account, provide investment advice, manage mutual funds, and act as fiduciaries with respect to trust or discretionary accounts. Bank trust departments may transact in the securities of bank customers.

In fact, legal and market forces have limited self-dealing and conflict-of-interest abuses. Legal standards governing fiduciary behavior are strict, and the conduct of fiduciaries is subject to regulation. In addition to legal mechanisms, market forces are extremely important. Systematic abuses by a bank's trust department would, for example, reduce the return on the portfolios it manages, causing it to lose business to competitors. Although one cannot say that no such abuses will occur, existing controls should keep them to a minimum.

Line-of-business deregulation also poses issues of fairness. Opponents of changes to existing law have argued that depository institutions could operate collateral lines of business with low-cost capital, benefiting from access to the Federal Reserve's discount window, and an implicit subsidy from Federal deposit insurance. They charge, for example, that some industrial companies and retailers have acquired a deposit-taking "nonbank" bank or a single savings and loan association to finance their own activities or customer purchases of their products and services with low-cost capital.

This argument ignores the fact that the profitability of a consolidated enterprise cannot be increased by charging an affiliated business or customer a submarket rate of interest. Any attempt to do so will reduce the profitability of the bank, leaving the earnings of the enterprise unchanged. In other words, if a bank has access to low-cost capital, it will be profitable to its owner even if the bank pro-

vides no financing whatsoever for the parent company or its customers. As long as the capital market is competitive, the cost-of-funds differential between financing customers from bank deposits on the one hand and from selling commercial paper on the other will only be enough to cover the costs of operating the bank and to earn the going rate of return on the assets invested in the bank.

Another argument is that financial intermediaries would be able to compete unfairly by tying loans to the purchase of other services. It is not likely, however, that many financial intermediaries would find tying arrangements advantageous. Tying arrangements are a way in which a firm with market power can circumvent laws against price discrimination and increase its profits by selling different customers different quantities of tied-in products. It is unlikely that many banks have such market power, but even if some do, they could directly price discriminate by charging different interest rates to different customers.

Banking organizations, however, enjoy certain regulatory and tax advantages over nonbank competitors, particularly securities firms. Banks are largely exempt from regulation under Federal and State securities laws and, therefore, could enjoy a cost advantage in broker-dealer, underwriting, and investment management activities. Moreover, in determining taxable income depository firms may deduct interest paid on deposits, even if they are used to finance holdings of tax-free securities. This provision of the tax law may give them an advantage in carrying inventories of securities relative to nonbank securities dealers.

The problem of asymmetrical tax and regulatory treatment could be solved, either by modifying tax and securities laws or by allowing only affiliated entities to undertake such activities. The latter approach has been adopted in the Administration's Financial Institutions Deregulation Act. Under this act affiliated entities would not be exempt from the securities laws, nor be subject to favorable tax treatment.

DEPOSIT INSURANCE REFORM

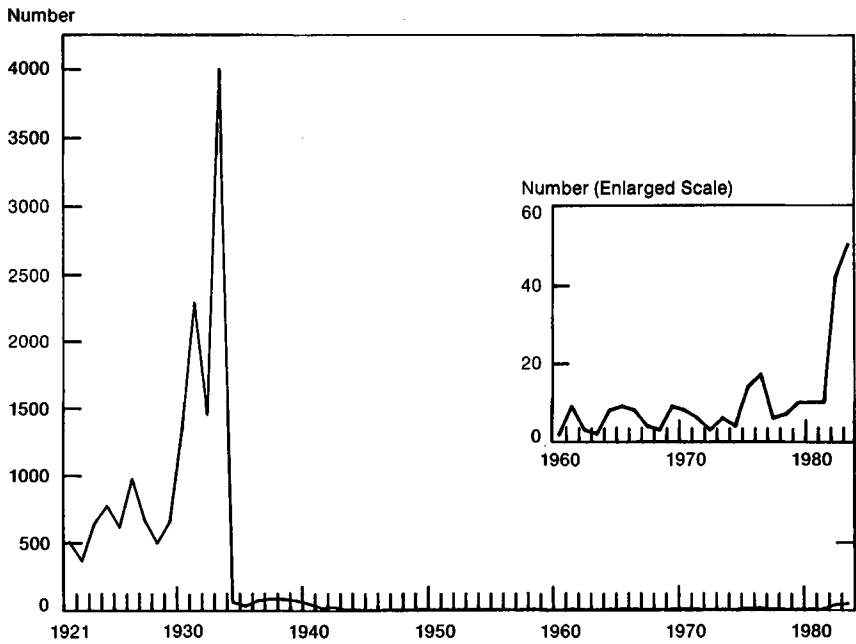
In today's financial market, the traditional depository institutions, commercial banks, and thrifts compete with money market mutual funds and brokerage firms in offering highly liquid deposit accounts that pay competitive rates of interest. Commercial banks and thrifts, however, retain a unique position relative to their newer competitors, because their liabilities are federally insured. The system of Federal deposit insurance was created as part of the Banking Act of 1933. Under this law the Federal Deposit Insurance Corporation (FDIC) in-

asures deposit accounts for banks that are members of the corporation. A year later the Federal Savings and Loan Insurance Corporation (FSLIC) was established to provide a similar arrangement for the savings and loan industry.

The purpose of the FDIC was to eliminate the financial panics and bank runs that had long plagued the economy, one of which culminated in the collapse of the banking system in 1933. Measured by that criterion, deposit insurance has been tremendously successful. There is wide agreement that earlier problems with financial market instability were not solved by creating a national currency, nor by imposing reserve requirements on banks, nor by the establishment of the Federal Reserve System, but by deposit insurance. Chart 5-2 illustrates the dramatic decline in bank failures after the FDIC was established.

Chart 5-2

Bank Failures



Note.—Data for 1983 estimated.
Sources: Comptroller of the Currency and Federal Deposit Insurance Corporation.

The volume of deposits insured by the FDIC and FSLIC has increased greatly in recent years as coverage limits have been raised and as new insured accounts have been introduced. Since 1950, the limits have increased at faster rates than inflation, and now stand at \$100,000 per depositor. The introduction of money market deposit accounts in mid-December 1982 and ceiling-free Super-NOW accounts in January 1983, and the elimination of ceilings on most small time deposit accounts in October 1983 have also produced increases in the amount of insured deposits, as many customers have switched out of the uninsured accounts issued by money market mutual funds into the insured deposit accounts issued by banks and thrifts.

Federal deposit insurance gives banks, savings and loans, and credit unions an advantage in the competition for funds, and alters the structure of incentives in the industry. To some extent these advantages have been offset by competition-inhibiting restrictions on the amount of interest payable on deposit accounts, on allowable activities, and on opportunities for expansion into new markets. In recent years, deregulation and private market innovation have eliminated or reduced the force of many of these restrictions on competition, thereby increasing efficiency in the industry. However, the FDIC and the Federal Home Loan Bank Board, the parent of FSLIC, have argued that their ability to control risk-taking by institutions offering insured accounts has been impaired in the new environment. As a result, the deposit insurance system is currently being reassessed.

Because most of the expansion in the range of opportunities available to insured depository institutions has taken place only recently, conclusive evidence on the effect of these changes on failure rates of insured institutions and the dollar magnitude of actual payouts is difficult to determine. There has been a large increase in the number of failures in recent years. But this increase can be attributed primarily to the depth of the recent recession, which has exacerbated problems associated with insufficient diversification and mismatches between asset and liability maturity structures at some institutions that have long existed.

Nevertheless, changes in the risk characteristics of financial institutions that are taking place now may have a significant effect on failure rates in the future. In addition, financial institutions are still refining their strategies and tactics in the new financial environment, and so further changes in market practices can be expected.

THE IMPACT OF DEPOSIT INSURANCE

If deposit insurance were unavailable, depositors would have incentives to evaluate the riskiness of a depository institution's balance sheet and policies, because their deposits would be at risk. The exist-

ence of these incentives, and competition among intermediaries for funds, would impose strong discipline on managers to adopt sound portfolio policies. One obvious consequence of insuring deposits is that the incentives of insured depositors to evaluate risk are eliminated, so that market discipline is greatly diminished. As a result, it is up to the insurer either to design an insurance system that provides the correct incentives for the intermediaries or to impose restrictions on intermediaries that limit possibilities for excessive risk-taking.

Currently, the premiums charged by the FDIC and FSLIC are proportional to the amount of assessable deposits regardless of the riskiness of the intermediary's assets. Under this system, insured institutions have an incentive to take on more risk than they would otherwise, either by making riskier loans or by increasing leverage. Doing so does not subject them to higher premiums, and they obtain the benefits of the higher yields that normally accompany the assumption of greater risk.

With premiums unrelated to risk, therefore, regulation of insured intermediaries is justified. It is not coincidental that many restrictions on competition accompanied the introduction of deposit insurance in the Banking Act of 1933. In fact, the primary thrust of financial legislation through the 1930s, much of which is still in place, was to supplant or limit competition in the market for financial services, both to prevent bank failures and to protect the assets of the insuring agencies.

The undesirable consequences associated with many of these restrictions have already been discussed. To some extent the restrictions have simply redirected competition into other areas, some of which are socially wasteful, and have caused the industry to evolve in a less efficient manner than it otherwise would have. Moreover, to the extent that competition has been limited, the restrictions have served to reduce incentives to lower costs, and therefore prices. Reform must focus on incentives for limiting risk, rather than on restrictions on competition.

PROPOSALS FOR REFORM

Many proposals have been advanced to strengthen private incentives to control risk-taking by institutions offering insured accounts. The proposals can be grouped into the following categories:

- Tie insurance premiums to some measure of risk.
- Strengthen capital requirements.
- Increase the risk exposure of large depositors.
- Strengthen disclosure requirements.
- Privatize all or part of the deposit insurance system.

It appears that none of these proposals, taken alone, offers a completely satisfactory solution, but a combination could accomplish the goal of strengthening private incentives to control risk-taking, while preserving stability of the financial system.

Relate Insurance Premiums to Risk

Charging insurance premiums that reflect the riskiness of an institution's balance sheet and management capabilities is a solution with great theoretical appeal. If the premium paid to the insurer were actuarially fair, in the sense of covering the expected losses of the insurer given the risk and capital of the firm and the terms of the insurance contract, the incentive to take on additional risk at the expense of the insuring agency would disappear. This approach would seem to obviate the need for extensive regulatory constraints. Insured institutions would be free to structure their assets and liabilities and to compete in the financial marketplace on terms of their own choosing. Those electing to adopt aggressive strategies with respect to risk and return would simply pay higher premiums to compensate the insurer for their higher expected claims.

There are problems with risk-related premiums, however, stemming from the difficulties associated with measuring risk properly and determining an appropriate schedule of premiums. One important measurement problem arises from the role that diversification plays in reducing risk. The riskiness of a portfolio cannot be evaluated simply by examining the riskiness of individual assets. Portfolio risk depends more on the interrelationships among the assets and how they match up with the structure of liabilities.

Banks and thrifts have traditionally faced different types of portfolio risks. This is reflected in the experiences of failed or troubled institutions in these two industries. A major cause of bank problems and failures has been insufficient diversification. For example, many of the banks that have recently failed, or are now experiencing difficulties, had heavily invested in real estate loans, loans to the oil and gas industry, or to foreign borrowers. For savings and loans the principal problem has been excessive exposure to interest rate risk—the result of borrowing short, by accepting deposits either payable on demand or with comparatively short duration, and lending long, by writing long-term, fixed-rate mortgages. Until recently, savings and loans were subject to regulatory and tax provisions that encouraged them to accept substantial interest rate risk, since the provisions provided strong incentives to invest in long-term fixed-rate mortgages and since they were prohibited from reducing their exposure by other means.

In principle it is possible to quantify certain types of risk, for example, interest rate risk, provided that complete enough balance sheet

information is available. However, other types of portfolio risks are more difficult to assess objectively. The bank examination process, though important, contains subjective elements that make it unsuitable as an exclusive basis for setting premiums.

For these reasons, sole reliance on risk-based insurance premiums is impracticable. However, risk-based premiums may play a useful role as part of a package of reforms designed to deter excessive risk-taking. To implement a risk-based system, the elements of risk that are measured must be clearly related to failure, and the premium structure must not create perverse incentives for institutions to assume other risks that are not used as a basis for premiums. Given the limited present ability to meet these criteria, premium differentials across risk categories should probably be kept small, at least initially.

Strengthen Capital Requirements

Ratios of deposits to bank capital for the banking and thrift industries have increased steadily over the past 30 years. Under the present policy for pricing insurance, it may be advantageous for owners of insured intermediaries to drive these ratios to very high levels, unless other restrictions are in place. Strengthening capital requirements would be advantageous for two reasons. First, the additional capital would directly provide an extra margin of safety both for the insuring agencies and uninsured depositors. Second, by placing more of an intermediary's own capital at risk, incentives to control risk-taking would be strengthened.

It may be desirable to allow strengthened capital requirements to be satisfied either through the issuance of new equity or subordinated debt—bonds whose claim on bank assets is subordinate to the claims of depositors and the insuring agencies, but prior to the claims of equity holders. Bondholders would be another class of investors with incentives to monitor an intermediary's practices.

Proposals that rely solely on strengthened capital requirements without any other reforms have some serious drawbacks. For one, the question of the appropriate level of capital should not be addressed apart from the riskiness of the rest of an institution's portfolio—two institutions with identical ratios of deposits to capital can represent very different risks to the insuring agency. There are also problems with properly measuring net worth. Large discrepancies can exist between true and accounting values of assets and liabilities. The measure of true net worth that many prefer—the market's estimate—is generally not available since the majority of financial institutions are not publicly held. Further, the market value of banks that are publicly traded may reflect the guarantees that are implicit in deposit insurance.

Increase the Risk Exposure of Large Depositors

Many observers have argued that any reform of the deposit insurance system should include provisions that would increase the risk exposure of large depositors as a way of imposing greater market discipline. Insured depositors presently have little or no incentive to evaluate the soundness of an intermediary. If virtually all depositors are effectively insured, the discipline of the market that would come from private sector scrutiny of the intermediary's policies is lost. The existence of ceilings on the amount of insured deposits in any given account suggests that some large depositors are at risk, so that intermediaries competing for their business would be subject to private sector scrutiny. However, this discipline has not been important in recent years.

The reasons for the current lack of market discipline differ somewhat for savings and loans and commercial banks. Savings and loans have few uninsured deposits—fewer than 4 percent of total deposits at the end of 1982. In contrast many banks have sizable uninsured deposits. The FDIC has estimated that as of June 1983 approximately 27 percent of all domestic deposits in commercial banks were uninsured. For large banks with more than \$10 billion in deposits the figure is approximately 40 percent, and for the largest money center banks the figure approaches 80 percent. However, particularly for medium- and large-sized banks, the FDIC's procedure for handling failures—which involves arranging a merger with a sound bank while covering the failed bank's losses—has meant that few uninsured depositors have suffered losses. Since the establishment of the FDIC, no depositor has ever incurred a loss as a result of a failure of a member bank with more than \$1 billion in total deposits.

A recent FDIC report submitted to the Congress on the subject of deposit insurance reform stresses the importance of restoring the perception that large depositors are at risk, possibly by abandoning the policy of arranging mergers. However, as recently as October 1983, the FDIC provided *de facto* insurance for uninsured depositors at a large bank by arranging a merger. The FDIC appears to face a classic problem in its management of bank failures: it would like to represent itself as being willing to permit uninsured depositors to suffer losses so as to restore private incentives to monitor risk, but for any given failure the FDIC often finds it cheaper to assume the losses in the process of arranging a merger. Moreover, under present arrangements, doing otherwise might require a lengthy bankruptcy proceeding perhaps lasting years and tying up billions of dollars of assets and deposits. If the institution were large, this could be highly disruptive.

One factor complicating the task of increasing the risk exposure of large depositors is the emergence of the deposit brokerage industry. In recent years a network of brokers has emerged to parcel large deposits into insurable increments and place them in financial institutions nationwide. Deposit brokers perform the useful function of facilitating interregional flows of funds. However, they also have been known to place insured funds in banks without any credit analysis, or worse yet, place them in known problem banks in order to collect higher fees. In an attempt to check this type of activity, both the FDIC and FSLIC have recently announced that problem institutions would be subject to limitations on the amount of brokered deposits they could accept.

A common prescription for increasing market discipline is to lower the limits on insured accounts. However, the emergence of the deposit brokerage industry suggests that unless the limits are lowered very substantially, the impact may be slight. A more promising way to accomplish large reductions in the coverage levels, and at the same time protect small depositors, would be to return to the fractional coverage scheme that was a part of the original Federal deposit insurance legislation. The act President Roosevelt signed into law called for full coverage of the first \$10,000 of a deposit, 75 percent coverage of the amounts between \$10,000 and \$50,000, and 50 percent coverage for amounts above \$50,000. This plan never took effect, as a temporary plan adopted by the Congress was extended indefinitely. A partial coverage plan of this type is in effect in the United Kingdom, where 75 percent of deposits in failed banks are reimbursed up to a ceiling amount.

There is one significant advantage of a fractional coverage system. When a failure takes place, depositors maintaining funds above the ceiling amount for full coverage could receive immediate payment up to the amount of their coverage. Additional amounts could be paid later, depending on what is realized from the failed institution's portfolio. As a result, the disruptive effects on the payments system that could be associated with the liquidation of a large institution's portfolio would be minimized.

There is, however, an important tradeoff associated with implementing a fractional coverage system. In order for market discipline to be a credible deterrent to excessive risk-taking by financial intermediaries, uninsured depositors must be prepared to move funds out of troubled institutions. Exposing large depositors to greater risk, therefore, increases the likelihood of deposit flight from those institutions. Because deposits can be moved quickly and cheaply to a new institution, such a system might mean that an intermediary subject to moderate but well-reported problems would experience deposit out-

flows that could prevent its recovery. The recent expansion of access to the Federal Reserve discount window to both nonmember banks and thrift institutions should be important in preventing unwarranted deposit flights from causing the failure of marginal institutions.

Improve Disclosure

Any proposal that relies heavily on increased market discipline should be accompanied by improved disclosure and strengthened reporting requirements. Federal bank regulators have not required insured institutions to carry assets and liabilities on their balance sheets at market value, or until recently to report financial information that would permit an assessment of the interest rate risk and credit risk to which an institution is exposed. However, the Securities and Exchange Commission does now require bank holding companies to report some market value data and data that could lead to an assessment of interest rate and credit risk.

Privatize Deposit Insurance

The provision of deposit insurance is now a virtual Federal monopoly. Consequently, it is impossible to use market measures to assess the performance of the FDIC and FSLIC in setting premiums, either under the current system or under a new system with variable premiums. Further, if incorrect assessments were applied under a system of risk-related premiums, the insured institutions might have few other sources of insurance. In principle, a private market for deposit insurance would seem to avoid these problems; market forces could be relied upon to guarantee that intermediaries were evaluated fairly. In addition, private insurers would have an incentive to share many of the costs of monitoring their behavior. Privatizing deposit insurance might, therefore, be another means of bringing the discipline of the market to bear on financial institutions.

It may be possible to introduce some elements of a joint public-private deposit insurance system. There is already some private participation in the market for financial guarantees. For example, at least one major money market mutual fund has obtained private insurance for its shareholders, and private insurance of mortgages and credit union deposits is well established.

It is not likely, however, that responsibility for insuring deposits can be shifted to any great extent to the private sector. Some ultimate Federal guarantee may be necessary to maintain public confidence. In addition deposit insurance was established primarily to protect against the risk of a banking crisis—the prospect of many bank failures occurring simultaneously. It is precisely this kind of risk that the private insurance industry is least equipped to handle.

SUMMARY

The benefits of a credible deposit insurance system should be achievable in an environment with fewer restrictions than the present one, provided certain basic reforms are implemented. A deposit insurance system tied to risk would be a significant reform. Strengthened capital requirements, the introduction of fractional coverage for relatively large accounts, and improved disclosure should also play roles. A deposit insurance system relying more heavily on incentives of this kind can be expected to involve significantly lower net costs than restrictions on entry, activities, and the pricing of financial services that serve either to limit competitive pressures in the marketplace, or to redirect competition into other areas.

REFORM OF THE REGULATORY STRUCTURE

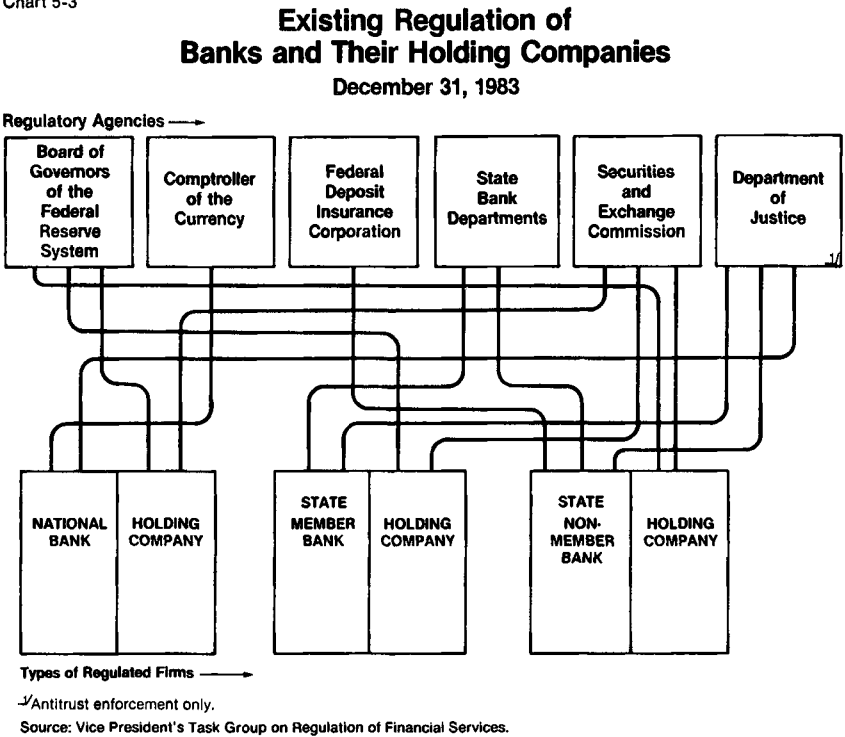
Today the regulatory structure is characterized by considerable overlap and duplication of function among numerous Federal and State authorities. In December 1982 the Administration announced the creation of the Task Group on Regulation of Financial Services, chaired by the Vice President to study Federal regulation of financial institutions and to develop proposals for comprehensive reform. A principal objective of the Task Group has been to address the overlap and duplication in Federal banking regulation.

The regulatory structure for depository institutions developed in a piecemeal fashion over many decades. Until the Civil War, all banking activities, with only minor exceptions, were conducted by State-chartered institutions. Between 1863 and 1865 the Congress enacted legislation that was designed to force State banks to recharter under Federal law. State-chartered banks did not disappear, however, largely because State bank regulations were often less stringent than Federal regulations. Hence a dual banking system developed, in which banks could operate with either a Federal or State charter, under the jurisdiction of separate regulatory authorities. This aspect of the regulatory structure for banking, and more recently thrifts, has played an important role in shaping the industry. It has fostered innovation by permitting many possible paths of evolution instead of one. Two important examples of innovations first permitted by State regulators are branch banking and NOW accounts.

Successive layers of Federal regulation of commercial banks were applied in response to financial crises and the emergence of new institutions and forms of organization. A bank today can hold a national charter, in which case it is supervised by the Comptroller of the Currency, or a State charter. All nationally chartered banks are also members of the Federal Reserve System, but State-chartered banks

can be either members, in which case they are regulated by the Federal Reserve Board, or nonmembers, in which case they are regulated by the FDIC. However, holding companies of both national banks and State nonmember banks also fall under the jurisdiction of the Federal Reserve. Because of tax, regulatory, and financing advantages, the holding company form of organization has become dominant. As a result, the Federal Reserve has at least some jurisdiction over the majority of commercial banking entities, particularly the larger ones. Although Federal deposit insurance is not mandatory for State-chartered banks, virtually all commercial banks are members of the FDIC, and so come under its jurisdiction as well. Chart 5-3 illustrates the complexity of current arrangements.

Chart 5-3



Because several agencies typically share responsibility for regulating a particular bank, and because different banks are regulated by different agencies, depending on their charter and form of organization, gaps and overlaps of regulatory power among the many agencies have developed. In addition, these agencies have sometimes had conflicting objectives and motivations in dealing with regulatory

issues. For example, the Federal Reserve has traditionally exerted a conservative influence, while the chartering agencies at both the Federal and State levels have been more inclined to encourage growth and development.

An advantage of the regulatory structure for the savings and loan industry is that the problems of duplication of effort and gaps and overlaps of authority are much less pronounced, since the FHLBB performs the functions that three separate Federal agencies—the Federal Reserve, the Comptroller of the Currency, and the FDIC—now perform for commercial banks. Of course, if federally insured, a State-chartered savings and loan association is regulated by both FSLIC and its State-chartering agency.

In the 1930s when separate regulatory structures were established for commercial banks, thrifts, and securities dealers, those firms comprised distinct industries with little competition across industry lines. Because of differences in the products and services offered (for example, between brokerage houses and commercial banks), or between customer groups (for example, commercial borrowers using commercial banks and small savers and home buyers using savings and loan associations), regulatory decisions applying to those industries could be made independently. Consequently, there was, at first, little reason to consider reform of the regulatory structure.

In recent years the lending and investment powers of thrift institutions have been broadened as a result of both Federal and State legislation. As a result of these new powers, thrift institutions may now engage, with some limitations, in virtually all the activities that are lawful for commercial banks. This new state of affairs has highlighted differences in their regulation and supervision. For example, it is now legally possible for a thrift institution to become functionally equivalent to a commercial bank, while remaining eligible for regulatory programs designed to create incentives for traditional thrift activities.

In addition, banks and thrifts now face aggressive new competition from brokerage firms, money market mutual funds, and “nonbank” banks in their traditional markets. At the same time, technological change, notably computer-based accounting and communication, has opened up opportunities for substantial increases in the scope of business across a broadening range of products and customer groups. As a result, there has been renewed interest in reforms that would produce a level playing field on which the various providers of financial services could compete on equal terms, and that would permit emerging economies in the provision of financial services to be exploited to the fullest extent possible.

The long-standing opportunities banks have had for selecting a charter and form of organization that places them under different

primary regulators, and the growing similarities in the legal powers of banks and thrifts, have implications for the behavior of the regulatory agencies. The various regulatory agencies must offer sufficiently attractive terms to institutions operating under their charters to maintain their existing clientele bases and to attract new firms. There are different opinions as to whether this situation is desirable. One view is that the present scheme leads to "competition in laxity" and therefore insufficient restraints on unsound practices. Another view is that it tends to eliminate the most onerous regulatory strictures, and fosters innovation and efficiency.

Because of the enormous changes that have occurred in financial markets in recent years, the regulatory structure has become progressively out of date. As a result the case for regulatory reform is now very strong. The Administration's Task Group on Regulation of Financial Services is expected to issue its report in early 1984. The report will focus debate and attention on a specific set of legislative proposals to streamline Federal regulation and reduce the overlap between Federal and State regulators.

CONCLUSIONS

Of all the goals of financial regulation the goal of financial stability is paramount. In the 1930s, financial instability was widely attributed to the natural operation of competitive markets, and this view supported a very substantial extension of regulatory controls over financial markets. More recently, however, a renewed respect for the efficiency of competitive markets has developed, as well as increased recognition of the costs of regulation. Regulation tends to spread in unproductive directions and often causes industries to evolve less efficiently than they otherwise would. For these reasons, the promotion of efficiency by furthering competition is also an important regulatory goal. The purpose of regulation should not be to protect poorly managed individual firms from failure, but rather to prevent such failures from shaking the stability of the financial system as a whole. Regulations should be designed to achieve stability of the system, while individual firms are afforded the maximum possible freedom to compete and innovate.

CHAPTER 6

Review and Outlook

IN 1983 THE U.S. ECONOMY experienced a year of vigorous cyclical recovery. As the economy snapped back from recession, employment increased by 4.0 million persons and the unemployment rate fell by 2.5 percentage points. Real gross national product (GNP), the broadest measure of output, rose by 6.1 percent, while industrial production rose by 16.1 percent. These gains in employment and output were achieved in an environment in which the rate of inflation continued to decline—the increase in the consumer price index of 3.8 percent was the lowest in 11 years. Both productivity and real wages rose, continuing an advance that began in 1982. For both series the 2-year increase was the largest in 6 years. Major stock price indexes rose significantly through the first half of the year and then leveled off, while interest rates increased somewhat starting in the spring. The U.S. dollar appreciated in the foreign exchange market, continuing a trend that began in late 1980.

The performance of the economy involved much more than a simple reversal of the output declines experienced during the recession. The decline in inflation and resumption of productivity growth are expected to provide the base for a long continuing expansion in coming years. The Administration's outlook for 1984 and economic assumptions through 1989 are described in the final section of this chapter, following the review of the economy's performance in 1983.

REVIEW OF THE 1983 ECONOMY

Gains in output were widespread across most sectors of the economy. By the end of 1983 the expansion was 1 year old—the quarterly dating of the business cycle trough is the fourth quarter of 1982, while the monthly dating is November 1982. In discussing the 1983 recovery a comparison with other recoveries is useful. Table 6-1 provides summary information on the other recoveries since 1949. From Table 6-1 it can be seen that in 1983 real GNP grew slightly less and employment considerably more than over the comparable period of a typical recovery. Indeed, the employment gain was larger than experienced in any of the seven recoveries reported in Table 6-1 with the

exception of the recovery following the 1949 trough. Industrial production in 1983 rose somewhat more rapidly than over the first year of a typical recovery.

TABLE 6-1.—*Growth in output and employment over first year of business cycle recoveries*

[Percent change, except as noted]

Quarter and month of business cycle trough	First 4 quarters after trough	First 12 months after trough		
	Real GNP	Industrial production	Civilian employment	Civilian unemployment rate (percentage point change)
1982 IV (November).....	6.1	15.7	3.6	-2.3
1949 IV (October).....	13.3	27.7	4.4	-3.7
1954 II (May).....	7.4	14.0	2.9	-1.6
1958 II (April).....	8.4	20.9	3.4	-2.2
1961 I (February).....	7.0	13.4	1.4	-1.4
1970 IV (November).....	4.7	6.2	2.1	.1
1975 I (March).....	6.7	15.2	3.3	-1.0
1980 III (July).....	4.2	9.7	1.9	-.5
Average of seven recoveries ¹	7.4	15.3	2.8	-1.5
Average of five recoveries ²	6.8	13.9	2.6	-1.2

¹ Excludes 1982.

² Excludes 1949, 1980, and 1982.

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

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

In order to provide a reference standard for interpreting the growth of GNP and its components in 1983, a "typical" recovery may be defined by averaging the first year of business expansion following the earlier cyclical troughs listed in Table 6-1 excluding those in 1949 and 1980. The strength of the recovery from the 1949 trough was greatly distorted by the outbreak of the Korean war in mid-1950 and the accompanying expectation of a renewal of wartime production and price controls. The expansion from the 1980 trough lasted only 12 months—a recovery only half the length of any recovery in the last 50 years.

A perspective on the composition of the expansion in real GNP is provided in Table 6-2. The major categories of real GNP are reported in terms of percentage point contributions to the total change in GNP over the four quarters of 1983. For example, real personal consumption expenditures accounted for 3.6 percentage points of the total 6.1 percent growth in real GNP; by comparison, during the first four quarters of the typical postwar recovery, personal consumption accounted for 3.6 percentage points out of the total 6.8 percent increase in real GNP. The major conclusion to be drawn from Table 6-2 is that the magnitude and composition of the 1983 expansion was similar in most respects to the typical first four quarters of business expansion following a cyclical trough.

TABLE 6-2.—*Contribution of GNP components to total GNP growth over first year of business cycle recoveries*

[Percentage point change]

Item	1982 IV to 1983 IV ¹	Typical postwar recovery ²
Real GNP.....	6.1	6.8
Personal consumption expenditures	3.6	3.6
Durable goods	1.4	1.3
Nonresidential fixed investment	1.2	.5
Producers' durable equipment	1.3	.5
Structures.....	-.1	.0
Residential investment	1.0	1.0
Change in business inventories	2.0	1.8
Net exports of goods and services.....	-1.4	-.4
Exports.....	.3	.0
Imports (minus denotes increase)	-1.7	-.4
Government purchases of goods and services	-.4	.3
Federal.....	-.5	-.2
Federal excluding CCC ³	.3	-.3
State and local.....	.1	.5
Final sales ⁴	4.0	5.0

¹ Preliminary.

² Recoveries following business cycle troughs in 1954 II, 1958 II, 1961 I, 1970 IV, and 1975 I.

³ Memo item not usually reported in national income and product account tables.

⁴ Real GNP less change in business inventories.

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

Source: Department of Commerce (Bureau of Economic Analysis).

Fluctuations in output over the business cycle are ordinarily larger for durable consumption and investment goods than for other sectors. In 1983 despite apparently high real (inflation adjusted) interest rates, durable consumption, business fixed investment, residential investment, and inventories all experienced growth matching or exceeding that of the typical postwar recovery, based on the accounting in Table 6-2. Business investment in equipment was especially strong.

This strong performance can be attributed to several factors. Both disposable personal income and after-tax business profits recovered significantly from their 1982 levels. Relative prices for consumer durable goods and fixed investment goods fell. Tax policies, especially accelerated depreciation allowances, increased the after-tax return on business investment. The rising stock market probably also contributed both to the demand for durable goods and business fixed investment. The decline in mortgage rates that began in mid-1982 was important for the housing recovery.

Rising profits and incomes are likely to have a large effect on investment expenditures in the early stages of the recovery when the swing in output from contraction to expansion is relatively large and disposable personal income and business cash flow increase significantly. Later in the expansion, output and income growth tend to

slow relative to business investment as firms approach high utilization rates. At this stage, interest rates become more important in determining the level of investment and subsequent growth in total output.

In addition, business fixed investment may have been subject to "accelerator" effects. As final demand rises, so too does the capital stock needed to produce the higher volume of goods and services efficiently. With a resumption of economic expansion, even a relatively small increase in the desired capital stock may result in a substantial increase in the rate of investment spending. Inventory investment also tends to increase with rising final sales in order to keep the ratio of inventories to sales within the desired range. An expansion of inventories requires additional production, further increasing the use of existing capacity. These types of effects are likely to play a significant role through 1984.

Expenditures on consumer durables and housing may have been affected by a similar phenomenon. During recessions, with real income growing slowly or falling, desired stocks of housing and consumer durables rise slowly if at all. Most purchases reflect replacement demand. In the early recovery phase, with rising employment and income, purchases of consumer durables may expand rapidly as efforts to increase stocks of durables and housing create additional demand above normal replacement demand.

In 1983 total real domestic demand rose by 7.4 percent, and export demand added another 0.3 percent. However, of this 7.8 percent increase of aggregate demand, 1.7 percentage points were satisfied by imports of goods and services. Thus, U.S. real output and income rose by 6.1 percent; in an accounting sense, net exports reduced real GNP growth by 1.4 percentage points in 1983 compared to a reduction of 0.4 percentage point for a typical recovery. As can be seen from Table 6-2, the decline in net exports in 1983 was more a reflection of growing imports than of declining exports. However, exports had declined significantly in 1982; thus, the small growth in exports in 1983 was from a depressed base.

Government purchases of goods and services declined over the four quarters of 1983 by an amount sufficient to lower GNP by 0.4 percentage point in the accounting reported in Table 6-2. State and local government purchases grew more slowly than is typical of the first four quarters of recovery. Total real Federal purchases actually declined somewhat as a rise in Federal defense purchases was more than offset by a fall in nondefense purchases. It is important to note, however, that a comparison of real Federal purchases in the fourth quarter of 1983 with those in the fourth quarter of 1982 is distorted by a large shift from net purchases to net sales (which include pay-

ment-in-kind) of agricultural commodities by the Commodity Credit Corporation (CCC). As shown in Table 6-2, Federal expenditures excluding CCC contributed 0.3 percentage point of GNP growth compared to a negative contribution of 0.3 percentage point for the typical recovery.

In summary, the major differences in the composition of GNP growth between the 1983 and the typical recovery are these: a) non-residential fixed investment rose more than usual in the 1983 recovery; b) net exports, which fall somewhat in the typical recovery, fell substantially in 1983; and c) Federal purchases, which are usually about unchanged, fell in 1983 due to an atypical swing in CCC purchases.

PERSONAL INCOME AND CONSUMPTION

Over the course of the year real personal income rose by 4.0 percent, while real disposable income grew somewhat more rapidly, by 5.1 percent, reflecting the third stage of the Administration's tax reduction program. These increases in both personal and disposable income continued advances that started in 1982.

As shown in Table 6-3, the 4.0 percent rise in real personal income reflected a 5.1 percent rise in real payroll disbursements and related fringe income. Higher employment and hours worked and an increase in real hourly earnings all contributed to this increase. Other sources of income including interest and dividend income, rental income, and proprietors' income recorded a 4.7 percent increase. Real net transfer payments declined 3.7 percent as unemployment payments dropped, and as the surge in employment produced a large increase in contributions to social insurance. Federal personal income tax liabilities fell by 6.2 percent while other taxes—largely State and local—rose by 11.1 percent.

Increases in consumption expenditures were widespread across various product categories. As is typical of periods of cyclical recovery, the expansion of real consumption expenditures was led by expenditures on durable goods. Real consumer durables expenditures, which in 1982 were below their 1978 level, rose substantially in 1983. Expenditures on automobiles, representing about 43 percent of total consumer durables expenditures, rose by 19.3 percent. Furniture and household equipment, linked to the housing recovery, grew by 11.5 percent and other durables by 8.4 percent.

In real terms, the services component of personal consumption expenditures has grown every quarter since the first quarter of 1954, reflecting stable growth of services generally, and especially of imputed services of owner-occupied dwellings which represent one-quarter of total services outlays. The nondurable goods sector—of which

TABLE 6-3.—*Real household income, consumption, saving, and residential investment, 1979-83*

[Percent change, fourth quarter to fourth quarter and 5-year average]

Item	1979	1980	1981	1982	1983 ¹	5-year aver- age ^{1,2}
Income by type:						
Labor income ³	1.2	-0.2	1.1	-0.9	5.1	1.2
Other income ⁴	3.5	-3	11.9	-3.6	4.7	3.2
Net transfer payments ⁵	4.4	13.5	-1	11.8	-3.7	5.2
Personal income	2.0	1.0	3.4	-3	4.0	2.0
Less: Federal tax payments	5.6	1.6	3.0	4.5	-6.2	1.2
Other tax and nontax payments ⁶	1.8	.7	3.8	-4.9	11.1	3.9
Disposable personal income	1.5	.9	3.4	.1	5.1	2.1
Personal consumption expenditures	2.1	.1	1.7	2.5	5.4	2.3
Personal saving	-11.4	19.1	29.1	-27.6	-1.2	-2.4
Personal saving rate (percent) ⁷	5.9	6.0	6.6	5.8	4.8	5.8
Housing starts ⁸	-23.1	-4.0	-42.2	44.9	34.2	-3.4
Single family	-29.2	-5.0	-44.9	50.1	26.6	-5.7
Multifamily	-7.9	-2.0	-37.1	36.6	47.8	1.6
Mobile (manufactured) home shipments ⁹	-9.9	-4.3	-12.3	11.7	*25.5	*1.3
Residential investment	-8.3	-13.6	-19.6	3.0	38.2	-3.3

¹ Preliminary.² Based on annual data.³ Wage and salary disbursements and other labor income.⁴ Proprietors' income, rental income, personal dividend income, and personal interest income.⁵ Transfer payments less personal contributions for social insurance.⁶ State and local tax and nontax payments plus Federal nontax payments.⁷ Annual average.⁸ Units.⁹ Based on data through November 1983.

Note.—Income items, consumption, and saving deflated by the personal consumption deflator; residential investment deflated by the residential deflator.

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

food represents about one-half and clothing about one-quarter—fluctuates over the cycle but is dominated by trend. Real nondurable consumption rose 4.7 percent over the year.

By the second quarter of 1983, the vigorous recovery had already lifted durable consumption expenditures above the prior peak quarter in 1978. The increase began in the fourth quarter of 1982 when special promotional efforts by the automobile industry and declining fuel prices increased auto sales and substantially reduced inventories.

The growth of consumer spending in 1983 exceeded that of disposable income. Hence, the personal saving rate fell over the course of the year. The average rate for the year, 4.8 percent, was below the 5.8 percent rate in 1982 and substantially below the 6.9 percent average for the 1950-80 period. In comparing 1983 to prior recoveries, it is better to examine the average saving rate for the year because the personal saving rate can be rather volatile from quarter to quarter. There has been no consistent pattern for the saving rate over the first year of business cycle recoveries. In this stage of the cycle, sub-

stantial declines on the order of the 1983 decline are certainly not unknown; for example, in the first year of recovery following the 1954 trough the saving rate averaged 6.0 percent, down from an average of 7.2 percent over the preceding four quarters. The main issue concerning the 1983 personal saving rate is that it declined from a 1982 level that was already considerably below the average for the last three decades.

The decline in the saving rate in 1983 may reflect in part the effects of a vigorous stock market advance in encouraging rising consumer spending. After rising 27 percent from its July low to December 1982, the Standard & Poor's composite index rose by another 19 percent over the 6 months ending June 1983. The index ended the year at about its June level, having increased the value of outstanding stock held by households by about \$500 billion from July 1982. This stock market advance was somewhat larger than the average over comparable phases of previous business cycles.

RESIDENTIAL INVESTMENT

In 1983 monthly housing starts fluctuated between an annual rate of 1.5 million and 1.9 million units, averaging 1.7 million units, the highest level since the 1.75 million units reached in 1979. The increase in starts from 1982 was the largest year-to-year advance in over 35 years. In addition, mobile homes—not included in the starts figure—averaged about 300,000 units, bringing total new dwelling units to about 2 million. About two-thirds of the starts were single-family units and one-third were in structures with two units or more, a split that was about typical of the average in the 1970s. Expenditures on residential housing construction increased 38.2 percent in real terms from the fourth quarter of 1982.

The recovery in new housing construction was accompanied by a rise in sales of existing homes, which rose 16.4 percent in the first 11 months of 1983. Total gross mortgage originations for one- to four-family nonfarm housing in the first 9 months of 1983 was over \$148 billion compared to \$65 billion in 1982. The proportion of mortgage loans devoted to refinancing was the highest ever recorded, with a major portion devoted to refunding short-term financing, which was widely used in 1981–82 when long-term mortgage money was scarce and rates high.

Over the first three quarters of 1983, thrift institutions provided about one-half of the net increase in mortgage borrowings, including mortgages and mortgage-backed pool and agency securities. This marked a return to the market share that prevailed in the 1970s. In 1982 thrift institutions contributed less than 10 percent of the increase in net mortgage borrowings, as mortgages were swapped for

agency securities in an attempt to increase liquidity. The rising share for the thrifts reflects a variety of factors including a lower average level of mortgage rates and the introduction of new, more competitive savings instruments. There was a large flow of savings into the thrifts; their total deposits were at a rate of \$143 billion over the first three quarters of 1983 compared to \$55 billion for the same period in 1982.

Of even more significance, perhaps, has been the growth of mortgage-backed certificates. Unfortunately much of this growth reflects governmental activity that has probably stunted the growth of privately issued certificates. Federally sponsored mortgage-backed pool purchases of home mortgages that are used to back pass-through certificates exceeded \$67 billion at an annual rate over the first 9 months of 1983. Combined with a total of \$12 billion of home mortgages acquired by Federal, State, and local government credit agencies, government participation—chiefly as a mortgage market intermediary—exceeded two-thirds of the \$116 billion net dollar volume in the home mortgage market.

The increase in housing construction and mortgage lending was spurred by increases in disposable income and employment and by the decline in mortgage interest rates that occurred over the second half of 1982. Compared to mortgage rates in the middle of 1982 the average rate in 1983 reduced the monthly payment on a 20-year term \$60,000 mortgage by about \$120.

BUSINESS FIXED INVESTMENT

Real nonresidential fixed investment grew by 11.5 percent over the four quarters of 1983. Strength was concentrated in business equipment while nonresidential structures investment declined 2.7 percent.

Real expenditures on producers' durable equipment rose 18.3 percent from the fourth quarter of 1982 to the fourth quarter of 1983. This rapid growth reflected the relatively short lead times on many equipment purchases, a rising capital utilization rate as the recovery proceeded, and the investment incentives in the 1981 and 1982 tax legislation. The growth was particularly strong in the office, computing, and accounting machinery category, and in cars and trucks. Real outlays for office equipment have almost doubled since 1979, reflecting the high productivity of computers in many lines of activity. Growth in business purchases of motor vehicles accounted for 29 percent of the total rise in equipment expenditures.

The decline in real expenditures on structures reflects the depressing effects of high interest rates, long lead times in large construction projects, and excess capacity existing at the beginning of 1983. Office

building had been especially strong before 1983; office construction peaked in late 1982 at a level three times greater than in 1977.

A sharp drop in the relative price of business fixed investment was an important element in the rise in investment. The fixed-weight price index for nonresidential fixed investment rose by 1.3 percent in 1983. By comparison, the fixed-weight index for final sales rose by 4.2 percent in 1983.

INVENTORY INVESTMENT

Inventory fluctuations are important in the business cycle process. Inventories have a buffer stock role, permitting a more constant rate of production in the face of transitory demand fluctuations. Under normal circumstances demand fluctuations for individual firms' products largely offset one another; growth in aggregate demand and in aggregate inventories is relatively smooth. Over a business cycle, however, demand fluctuations are larger and more pervasive. Then, inventories tend to be destabilizing as aggregate inventory adjustments move in the same direction as final demand. The impact on total output of a change in aggregate demand is then amplified by an inventory cycle. In 1983 inventory accumulation did not begin until the third quarter, in contrast to the usual recovery pattern in which accumulation begins somewhat sooner. In each of the first two quarters of 1983 the decline in inventories was smaller than in the prior quarter. Consequently, the swing in inventory investment from an unusually large liquidation of \$22.7 billion (1972 dollars) in the last quarter of 1982 to an accumulation of \$7.5 billion in the last quarter of 1983 added significantly to the growth in production over the year.

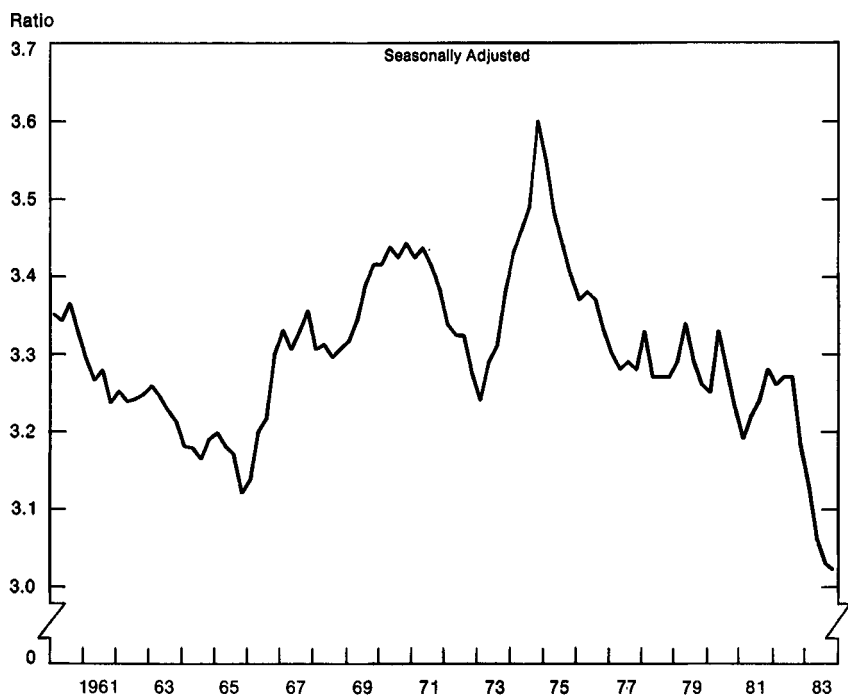
With final sales rising and inventories declining in the first half of the year and rising only modestly in the second half, the real business inventories/final sales ratio, shown in Chart 6-1, fell substantially over the course of 1983. By the fourth quarter of the year that ratio, at 3.02, was below the average of 3.33 in the fourth quarter of previous recoveries. The lean inventory situation at the close of the year reflects the effects of high interest rates and conservative inventory management policies. It could also be a consequence of underestimating the growth of final demand. With inventories lean at the end of 1983, predicted future gains in final demand will likely be met by increases in production and employment rather than by reductions in inventories.

THE FARM ECONOMY

Reflecting the combined effects of a severe drought and the payment-in-kind (PIK) program, agricultural output fell in 1983. From

Chart 6-1

Real Business Inventories/Final Sales Ratio



Source: Department of Commerce.

the fourth quarter of 1982 to the fourth quarter of 1983 real farm output fell 16.5 percent to \$33.9 billion. Reflecting the decline in output, real farm inventories, excluding those under government loans, fell \$2.9 billion. Real exports of agricultural products were roughly unchanged, falling only \$0.4 billion. Nominal exports, however, rose 13.6 percent, to \$37.6 billion, in the fourth quarter of 1983 as agricultural export prices rose 16.3 percent over the year.

The cost of Federal programs to support farm incomes probably exceeded total net farm income in 1983. Farm production expenses fell in 1983, for only the third time since 1940. This was primarily due to the reductions in acreage under cultivation that farmers made in response to the PIK program. The decline had significant adverse effects on producers of farm inputs including fertilizers, other chemicals, and seeds. The farm situation is discussed in detail in Chapter 4 of this *Report*.

THE INTERNATIONAL SECTOR

Exports of goods and services in constant (1972) dollars rose slowly in 1983, but imports of goods and services grew at a much faster rate (Table 6-2). The result was a decline of net exports in constant dollars, from a surplus of \$23.0 billion in the fourth quarter of 1982 to a surplus of only \$2.5 billion in the fourth quarter of 1983.

In the national income and product accounts net exports measured in constant (1972) dollars registered a surplus while net exports in current dollars registered a deficit. The difference is due to a higher price deflator for imports than for exports. Further, the current account deficit in the balance of payments accounts, which is widely discussed, is considerably larger than the net exports deficit in the national income accounts. Most of that difference is accounted for by the fact that the balance of payments accounts include, and the national income accounts exclude, transfer payments and government interest payments to foreigners. However, the interpretation of major trends in the foreign sector is little affected by alternative accounting systems. By either measure, the deficit has been rising in current dollars, and the surplus has been declining in constant dollars.

The merchandise trade balance, which has been in deficit since 1976, further deteriorated in 1983. However, the United States has a substantial surplus from investment income and a smaller surplus in the "other services" component of net exports.

One cause of the decline in net exports in 1983 was the strong dollar, which made imported goods and services relatively less expensive to American buyers and exported goods and services relatively more expensive to foreign buyers. U.S. exports also were limited by the problems of financially troubled debtor nations, particularly those in Latin America. Another cause was the earlier recovery in the United States relative to that abroad. In 1983 the rate of increase of real GNP in the United States was three times that expected for the other 23 industrialized countries that are members of the Organization for Economic Cooperation and Development (OECD). As output and income in the United States grew rapidly over the course of the year, imports of goods and services also grew. However, with the expansions in the economies of major trading partners lagging behind that in the United States, growth in demand for U.S. exports of goods and services was restrained.

These events demonstrated an important result of the growing integration of the world economy. In 1983 countries outside the United States had a substantial influence on U.S. output, and the vigorous recovery in the United States was a source of stimulus to the

world economy. These matters are discussed in more detail in Chapter 2 of this *Report*.

GOVERNMENT PURCHASES OF GOODS AND SERVICES

Growth in government purchases of goods and services was not a major element propelling the expansion of output in the economy in 1983.

Over the year, Federal purchases of goods and services in 1972 dollars fell by \$7.5 billion. The decline was a consequence of a special factor not likely to recur in 1984, namely a swing in CCC purchases of \$12.6 billion. CCC purchases in the fourth quarter of 1982 were unusually large, while the PIK program and the drought led to net sales of commodities in the fourth quarter of 1983. Excluding the CCC component, real Federal purchases rose by 4.4 percent over the four quarters of the year. In 1972 dollars national defense purchases rose from \$81.4 to \$85.6 billion, while the nondefense purchases other than CCC rose from \$33.3 to \$34.1 billion.

The growth in State and local government purchases of goods and services was small in real terms. Over the four quarters of the year expenditures rose by only 0.6 percent. The small growth in purchases continues a pattern that has been apparent for several years. Indeed, in real terms, purchases for the entire year of 1983 are slightly below their level in 1979.

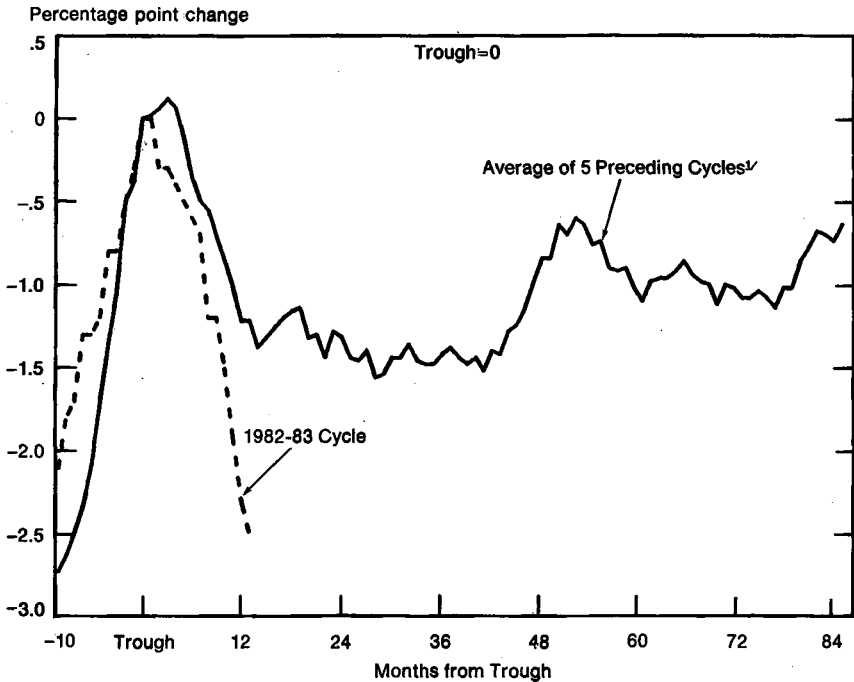
The fixed-weight price index for Federal purchases increased 2 percent over 1983, while the State and local price index rose 5.4 percent.

EMPLOYMENT, UNEMPLOYMENT, AND PRODUCTIVITY

Employment, as measured by the household survey, rose by 4.0 million persons over the 12 months of 1983. As shown in Chart 6-2, the civilian unemployment rate, after reaching a peak in November and December of 1982, dropped by 2.5 percentage points over the next 12 months, the largest 12-month decline in 32 years.

Changes in the unemployment rate are the result of conditions determining labor force growth—growth in the working-age population, and changes in the fraction of that population participating in the labor force—and changes in employment. Labor force participation rates and employment details are reported in Table 6-4. The increase in employment was by far the largest determinant of the decline in the unemployment rate. Civilian employment, as measured by the household survey, grew by 3.6 percent over the 12 months following the cycle trough in November 1982, an above-average increase compared to previous postwar recoveries.

Civilian Unemployment Rate



^{1/}Excludes 1949 and 1980 cycles.

Sources: Department of Labor and Council of Economic Advisers.

Lower growth in working-age population, taken alone, reduced the unemployment rate by 0.4 percentage point compared to what it would have been with average population growth. The number of 16 to 19 year olds, the population group that provides many of the new additions to the labor force, actually declined over the year. The labor force participation rate was essentially unchanged over the year. Thus the slower-than-average labor force growth in this recovery is a demographic phenomenon; it is not an unusual economic response of participation rates to labor market conditions.

Above-average growth in employment raised the employment to population ratio—the ratio of civilian employment to working-age population—by 1.7 percentage points. At the end of 1983, 58.8 percent of the population was employed, compared to postwar peaks of 60.1 percent in February and December 1979.

All demographic groups have shared in the recovery. Employment gains were strong among blacks, particularly among black men over 20 years of age, who experienced an 8.5 percent employment gain

TABLE 6-4.—*Labor market developments, 1979-83*

[Fourth quarter of indicated year]

Component	1979	1980	1981	1982	1983
	Percent change from year earlier ¹				
Change in civilian employment.....	2.3	-0.2	0.6	-1.0	3.5
Males 20 years and over.....	1.5	-0.5	.2	-1.4	3.6
Females 20 years and over.....	4.1	1.6	2.8	.8	4.0
Both sexes 16-19 years.....	-8	-6.2	-8.6	-7.3	-6
White.....	2.2	-.1	.7	-1.2	3.4
Black and other.....	3.3	-.6	-.1	.4	4.2
	Percent ¹				
Civilian unemployment rate ²	5.9	7.4	8.2	10.6	8.5
Males 20 years and over.....	4.4	6.2	7.1	9.9	7.8
Females 20 years and over.....	5.7	6.7	7.2	9.0	7.2
Both sexes 16-19 years.....	16.2	18.2	21.0	24.1	20.6
White.....	5.2	6.5	7.2	9.5	7.4
Black and other.....	11.2	13.8	15.4	18.7	16.4
Participation rate ³	63.8	63.7	63.8	64.0	64.0
Males 20 years and over.....	79.6	79.1	78.7	78.7	78.4
Females 20 years and over.....	51.0	51.5	52.3	52.9	53.2
Both sexes 16-19 years.....	57.8	56.2	54.6	54.1	53.2
White.....	64.0	64.0	64.1	64.4	64.5
Black and other.....	62.3	61.8	61.5	62.1	61.5

¹ Seasonally adjusted.² Unemployed as percent of civilian labor force.³ Civilian labor force as percent of civilian noninstitutional population.

Note.—Data relate to persons 16 years and over.

Source: Department of Labor, Bureau of Labor Statistics.

over the year. However, the employment picture for black teenagers (aged 16 to 19) remains bleak. Compared to white teenagers, black teenagers have lower participation rates. In addition, the unemployment rate for black teenagers was twice as high as that for white teenagers. Consequently, fewer than 20 percent of black teenagers are employed, compared with almost 50 percent of white teenagers.

Job opportunities for Hispanics improved markedly during 1983. Employment among Hispanics grew by 10.4 percent, more than twice the increase in the working-age Hispanic population. The Hispanic unemployment rate fell from 15.5 percent in December 1982 to 11.6 percent in December 1983.

Following a period of little growth from 1977 to early 1982, labor productivity began to rise in the third quarter of 1982. Productivity trends in the economy are most reliably measured for the nonfarm business sector, which accounts for about 83 percent of total GNP. Nonfarm business output and related measures are shown on Table 6-5.

Productivity began to rise before the end of the last recession as employment continued to drop after output leveled off. Productivity in the nonfarm business sector rose at a 1.8 percent annual rate in

TABLE 6-5.—*Output, productivity, costs, and prices in the nonfarm business sector, 1979-83*

[Percent change, fourth quarter to fourth quarter and 5-year average]

Item	1979	1980	1981	1982	1983 ¹	5-year average ^{1 2}
Output	0.2	-0.8	1.0	-2.6	8.3	1.0
Output per hour	-2.1	.2	1.2	.8	3.5	.6
Compensation per hour	9.2	10.8	9.0	7.2	4.9	8.5
Unit labor cost	11.6	10.5	7.7	6.3	1.3	7.9
Implicit price deflator	8.5	10.6	9.4	3.7	3.6	7.5

¹ Preliminary.² Based on annual data.

Note.—Data relate to all persons.

Source: Department of Labor, Bureau of Labor Statistics.

the last two quarters of 1982 and at a 3.5 percent rate over 1983. In the recovery unemployment fell without a lag. Consequently, the unemployment rate fell more rapidly than usual for the increase in output.

PRICES, WAGES, COMPENSATION, AND PROFITS

Over the 12 months from December 1982 to December 1983 consumer prices rose by 3.8 percent and producer prices by 0.6 percent. For consumer prices the increase was the smallest since 1972; for producer prices the 12-month increase was the lowest for any calendar year since 1964. Table 6-6 provides detail for major components of the price indexes, and also a comparison of the past year's inflation with the average rate over the last 5 years.

TABLE 6-6.—*Price changes, 1979-83*

[Percent change, fourth quarter to fourth quarter and 5-year average]

Item	1979	1980	1981	1982	1983 ¹	5-year average ^{1 2}
GNP price measures:						
Fixed-weighted index	9.3	10.1	8.8	5.1	4.3	7.9
Implicit deflator	8.2	10.2	8.7	4.4	4.0	7.5
Consumer prices: ³						
All items	12.8	12.5	9.5	4.5	3.3	8.8
All items less food and energy	10.7	12.2	10.2	5.2	4.3	8.7
Producer prices—finished goods:						
Total	12.8	12.4	7.3	3.6	.9	7.8
Consumer goods	14.0	12.6	6.8	3.5	.4	7.9
Capital equipment	8.9	11.7	9.1	4.1	2.3	7.6

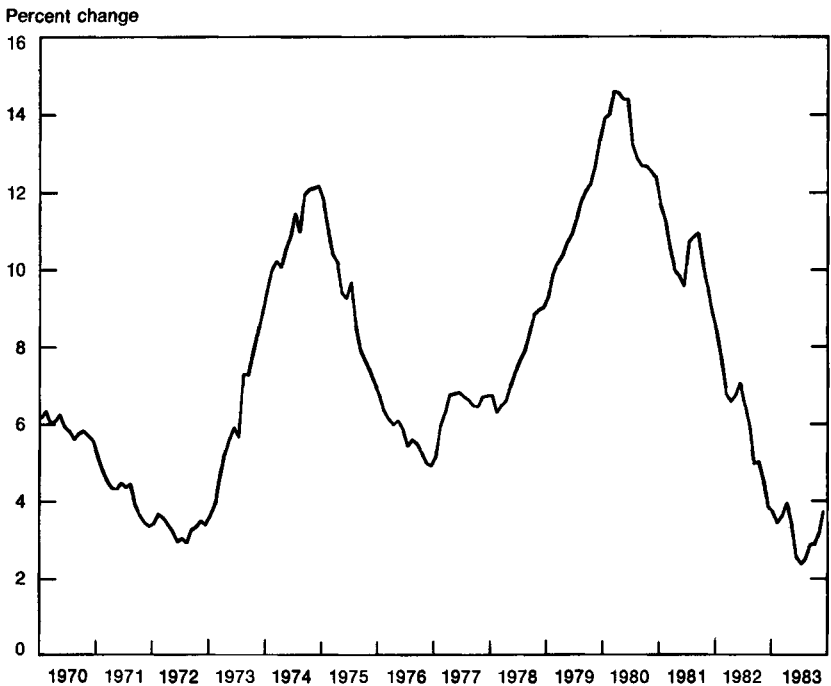
¹ Preliminary.² Based on annual data.³ All urban consumers.

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

Inflation as measured by the consumer price index for all urban consumers (CPI-U) was somewhat higher over the second half than over the first half of 1983 (Chart 6-3). Over the 6 months ending June the CPI-U rose at a 2.9 percent annual rate; over the 6 months ending December, the annual rate was 4.7 percent. To some extent the slight increase in inflation over the course of the year reflected the timing of changes in energy prices which fell in the first quarter due to reductions in crude petroleum prices.

Chart 6-3

Change in the Consumer Price Index **12-Month Change in the CPI-U**



Source: Department of Labor.

Reflecting the drought and unexpectedly large acreage reductions for the PIK program, food prices rose more rapidly in the second half of the year than they had in the first. The tendency toward slightly higher inflation as the year progressed is indicated by the fact that the CPI-U, excluding food, energy, and shelter, rose at a 4.1 percent rate over the first 6 months and at a 5.8 percent rate over the 6 months ending in December.

The tendency toward a slight increase in inflation over the year was also registered by the producer price index. Over the 6 months ending June, the index for total finished goods fell at an annual rate of 0.9 percent, but over the second half of the year this index rose at a 2.0 percent annual rate. Even so, inflation by this measure was lower than that in the recession phase of the cycle. The GNP implicit price deflator, the broadest measure of inflation, rose by 4.0 percent over the four quarters of the year.

The rate of increase of money wages declined in 1983. An important contributor to this decline was the slack in labor markets. However, the reduction in the rate of inflation was also important as many wage increases are tied, formally or informally, to the rate of price inflation. Collective bargaining agreements with escalator clauses ordinarily tie wages to the consumer price index for urban wage earners and clerical workers (CPI-W), which differs from the CPI-U primarily with respect to the method used to measure housing costs. Over the 12 months ending December, the CPI-W rose 3.2 percent, slightly less than the CPI-U increase of 3.8 percent.

Based on the first three quarters of 1983, it appears that for the second consecutive year both union and nonunion wage increases were less than the previous year, as contracts and wage patterns established in the highly inflationary 1980-81 environment represented a diminishing portion of wage agreements. Major collective bargaining agreements negotiated in the first three quarters of 1983 have resulted in wage adjustments that are the lowest for the entire 15-year period over which these data have been collected, and less than half the rate of increase when the parties last negotiated.

Because price increases in 1983 were lower than wage increases, real hourly wages rose, as they had in 1982. As shown in Table 6-7, the adjusted hourly earnings index for the private nonagricultural sector (production or nonsupervisory workers) rose by 3.9 percent over the four quarters of 1983, compared to 6.0 percent for the previous four quarters. In constant (1977) dollars the increase in the hourly earnings index was 0.9 percent in 1983 compared to 1.5 percent in 1982. These gains in real hourly earnings may be compared to declines averaging 2.7 percent per year from 1978 to 1981.

In addition to the higher real hourly earnings, an increase in average weekly hours worked raised average weekly earnings. Average weekly hours in the nonagricultural sector rose from 34.8 in December 1982 to 35.2 in December 1983. The net result of higher hours and higher real hourly earnings was an increase of 2.4 percent in average real weekly earnings over the 12 months ending in December.

TABLE 6-7.—*Changes in wages and compensation, 1979-83*

[Percent change, fourth quarter to fourth quarter and 5-year average]

Measure	1979	1980	1981	1982	1983 ¹	5-year average ^{1 2}
Adjusted hourly earnings index ³	8.0	9.6	8.3	6.0	3.9	7.5
Real adjusted hourly earnings index.....	-4.3	-2.7	-9	1.5	.9	-1.2
Employment cost index ⁴	8.7	9.0	8.8	6.3	⁵ 5.0	7.6
Union workers.....	9.0	10.9	9.6	6.5	⁵ 5.2	8.3
Nonunion workers.....	8.5	8.1	8.5	6.1	⁵ 5.0	7.2
Nonfarm business sector: ⁶						
Compensation per hour.....	9.2	10.8	9.0	7.2	4.9	8.5
Real compensation per hour.....	-3.2	-1.6	-5	2.6	1.5	-3

¹ Preliminary.² Based on annual data.³ Private nonfarm employees.⁴ Wages and salaries, private nonfarm industry workers.⁵ Third quarter 1982 to third quarter 1983.⁶ All persons.

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

Overall, 1983 was an excellent year for real incomes. With a higher real hourly wage, higher average hours worked by those employed, rising employment, and the third stage of the Administration's tax reduction program, real per capita disposable personal income rose 4.1 percent over the year. This increase was the highest since 1977.

The combination of restrained increases in money wages and continued productivity growth served to hold the increase in unit labor costs to only 1.3 percent. This increase was the lowest since 1965.

Corporate profits before tax totaled about \$205 billion in 1983. Corporate profits after tax were about \$130 billion, a level well above 1982 but still below 1981.

FINANCIAL MARKETS

Most market interest rates rose somewhat over the 12 months of 1983. In December 1982 the 3-month Treasury bill rate averaged 7.9 percent; in December 1983 it averaged 9.0 percent. Over this same period 30-year Treasury bonds rose from 10.5 percent to 11.9 percent, and Aaa corporate bonds rose from 11.8 percent to 12.6 percent. The effective new home mortgage closing rate fell over the course of the year, from 13.7 percent in December 1982 to 12.5 percent in December 1983.

The Standard & Poor's composite stock price index rose sharply over the year, with all of the gains coming in the first half. In December 1983 the average was 17.9 percent above its level 12 months earlier. This rise was on top of the 27 percent increase in the second half of 1982.

As shown in Table 6-8, the credit markets absorbed a very large flow of financing in 1983. Reflecting record U.S. Government deficits, Treasury debt in the hands of the public rose by \$187 billion over the year. As noted above, the markets also financed a very large flow of mortgages.

TABLE 6-8.—*Funds raised in credit markets by the nonfinancial sector of the economy, 1979-83*
[Billions of dollars, except as noted]

Sector	1979	1980	1981	1982	1983 ¹
Total funds raised.....	406.2	370.4	404.4	411.0	509.1
Households.....	176.4	117.5	120.6	86.3	149.4
Business.....	151.7	126.1	159.6	111.5	95.9
Federal Government.....	37.4	79.2	87.4	161.3	205.9
State and local government.....	20.5	20.3	9.7	36.3	42.7
Foreign.....	20.2	27.2	27.2	15.7	15.0
Funds raised as percent of GNP.....	16.8	14.1	13.7	13.4	15.6

¹ Average of first three quarters at seasonally adjusted annual rate.

Note.—Detail may not add to total due to rounding.

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

The nonfinancial corporate sector did not place significant demands on the credit markets in 1983. As cash flow rose markedly due to the strength of the recovery, corporations obtained most of their funds from internal sources. Despite increases in business fixed investment outlays and a move from inventory liquidation to accumulation within the year, the nonfinancial corporate sector is estimated to have borrowed about \$33 billion in the first three quarters of 1983, well below the amount borrowed over the same period in 1982. The 1983 borrowing was also considerably less than the amount borrowed in the second half of 1981. The strong stock market led to a significant increase in common stock offerings. Over the first three quarters of the year, gross proceeds from primary public offerings of common stock totaled \$33.8 billion, compared to \$25.4 billion over the entire year of 1982. As reported in Table 6-8, funds raised by nonfinancial business through debt and equity issues together have been falling since 1981.

Growth in the monetary aggregates in the first half of 1983 was high. M1 grew at a 14.5 percent annual rate, up somewhat from the 11.2 percent annual rate over the last 6 months of 1982. The two other monetary aggregates reported by the Federal Reserve, M2 and M3, grew at rates of 16.4 percent and 10.5 percent, respectively, over the same period. These two aggregates had grown at rates of 10.5 percent and 10.7 percent, respectively, over the last 6 months of 1982. The high rates of money growth in the first half of the year were the result of an accommodative monetary policy stance that had

the effect of avoiding sizable changes in interest rates during a period in which the Federal Reserve was uncertain about the significance of the large deposit flows associated with new deposit instruments.

The new money market deposit accounts (MMDAs), first offered by depository institutions in mid-December 1982, attracted \$320 billion by March 1983. Funds in MMDAs, which are included in M2 and M3 but not in M1, grew to about \$370 billion at the end of the year. Another significant innovation was the introduction in early January of Super-NOW Accounts which have unlimited checkwriting privileges and are not subject to interest rate ceilings. Funds in these accounts, which are included in M1, grew to about \$27 billion by the end of March, and to \$37 billion by the end of the year.

Most of the adjustment to the new accounts appears to have taken place early in the year. In addition, most of the funds flowing into MMDAs seem to have come from other components of M2. Between December 1982 and March 1983, while MMDAs were attracting \$320 billion, general purpose and broker/dealer money market mutual funds lost \$28 billion and conventional time and savings accounts lost \$162 billion. The components of M1 and M2 are shown in Table 6-9.

TABLE 6-9.—*Components of M1 and M2, 1979-83*

(Averages of daily figures; billions of dollars; seasonally adjusted, except as noted)

Item	December				
	1979	1980	1981	1982	1983 ¹
Currency	106.3	116.2	123.2	132.8	146.0
Plus: Demand deposits ²	265.7	270.9	240.9	244.0	247.9
Other checkable deposits	17.0	26.9	76.6	101.3	127.1
Equals: M1	389.0	414.1	440.6	478.2	521.1
Plus: Savings deposits	423.1	400.7	344.4	359.3	312.3
Money market deposit accounts (MMDAs) ^{3 4}	0	0	0	43.2	372.4
Small time deposits	635.9	731.7	828.6	859.1	792.1
Overnight repurchase agreements (RPs) and overnight Eurodollars ⁴	21.2	28.4	36.1	44.3	56.1
Money market mutual fund balances (excluding institution accounts) ⁴	33.4	61.4	150.9	182.2	138.0
Equals: M2 ⁶	1,497.5	1,630.3	1,794.9	1,959.5	2,184.6

¹ Preliminary.

² Includes travelers checks.

³ Introduced December 14, 1982.

⁴ Not seasonally adjusted.

⁶ M2 will differ from the sum of components by a consolidation adjustment that represents the estimated amount of demand deposits and vault cash held by thrift institutions to service time and savings deposits.

Source: Board of Governors of the Federal Reserve System.

In the middle of 1983 the Federal Reserve became less accommodative in its provision of reserves. As a result, interest rates rose moderately. Also, the greatest part of the portfolio adjustment to the introduction of the new deposit accounts was probably complete by that time. Growth of the monetary aggregates slowed; over the 6 months ending in December, M1, M2, and M3 grew at annual rates of 3.7 percent, 6.8 percent, and 8.2 percent, respectively.

In February the Federal Reserve announced 1983 target growth ranges for M2 and M3. But because of the uncertainty it felt over the effect of the new accounts on the demand for money, the Federal Reserve announced only a "monitoring" range for M1, which was set at 4 to 8 percent from its average level in the fourth quarter of 1982. The M2 target growth range was set at 7 to 10 percent from its average level in February and March. The M3 range was set at 6.5 to 9.5 percent from its average level in the fourth quarter of 1982. Following rapid growth in M1 over the first half of 1983, in July the Federal Reserve revised the M1 growth range to 5 to 9 percent from its average level in the second quarter. Chart 6-4 shows M1 and its target ranges in 1983.

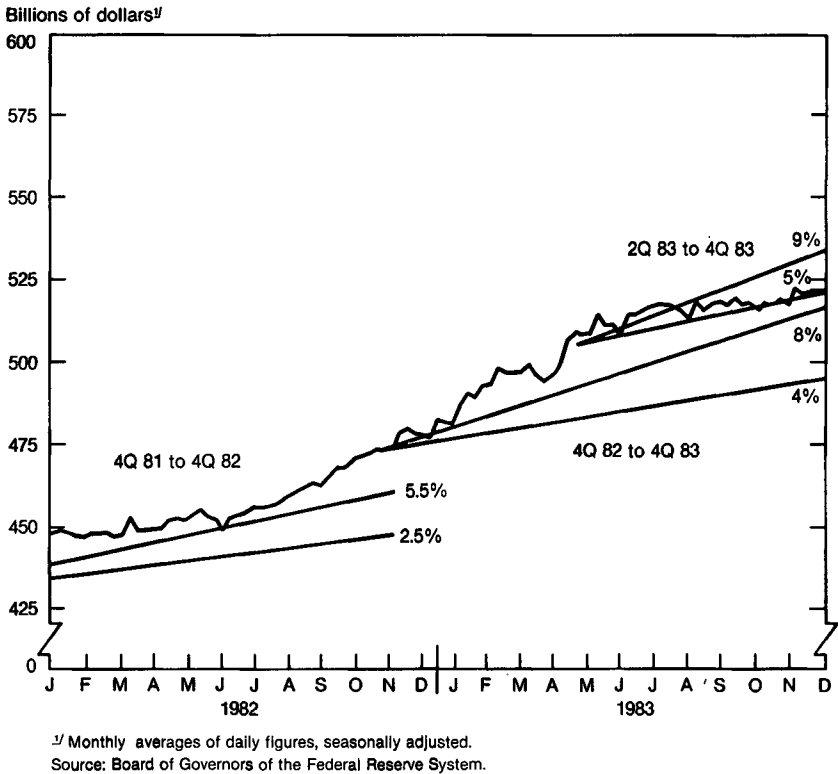
THE OUTLOOK FOR 1984

Table 6-10 summarizes the basic elements in the Administration's economic projections for 1984 and corresponding data for 1983. The rate of growth in real GNP is expected to decline as is typical in the second year of expansion. Real GNP is projected to grow at 4.5 percent over 1984. The unemployment rate is expected to fall to an average of 7.6 percent in the fourth quarter of the year.

The inflation rate as measured by the GNP implicit price deflator is expected to rise slightly in 1984, to 5.0 percent over the four quarters of the year. The slight increase in projected inflation reflects the view that 1983 inflation was depressed to some degree by cyclical factors and two special factors that seem unlikely to recur in 1984. The two special factors were the decline in energy prices early in 1983 and the continuing appreciation of the foreign exchange value of the dollar over the year. These cyclical and special factors should be viewed as transitory disturbances to the underlying rate of inflation determined by money growth and trends in the income velocity of money.

The Administration's economic outlook is based on an analysis of business cycle regularities and other information, including forecasts, obtained from the private sector. The projections for real GNP and inflation in 1984 are close to the median of private sector forecasts

M1: Actual versus Target Range



for those variables. Further details on the Administration's outlook are reported in Table 6-10.

THE OUTLOOK FOR 1985-89

The Administration's economic assumptions for 1985-89 are reported in Table 6-11. These economic assumptions reflect the Administration's view on probable basic economic trends under the assumption that the Federal budget deficit and the rate of money growth decline over time. A different set of economic assumptions would, of course, be appropriate if different policies were pursued.

Because economic outcomes are dependent on numerous conditions other than the assumed economic policies, it is appropriate that the long-run economic assumptions reflect underlying trends. Moreover, because the primary use of the long-term economic assump-

TABLE 6-10.—*Economic outlook for 1984*

Item	1983 ¹	1984 forecast
Percent change (fourth quarter to fourth quarter):		
Real gross national product.....	6.1	4.5
Personal consumption expenditures	5.4	2.0
Nonresidential fixed investment	11.5	9.5
Residential investment	38.2	6.0
Federal purchases	-6.0	3.7
State and local purchases	.6	4.2
GNP implicit price deflator	4.1	5.0
Compensation per hour ²	4.6	5.5
Output per hour ²	3.2	2.1
Level in fourth quarter: ³		
Unemployment rate (percent) ⁴	8.4	7.6
Housing starts (millions of units, annual rate).....	1.7	1.8

¹ Preliminary.² Nonfarm business, all persons.³ Seasonally adjusted.⁴ Unemployed as percent of total labor force including persons in the Armed Forces stationed in the United States.

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 6-11.—*Administration economic assumptions, 1984-89*

[Calendar years, except as noted]

Item	1984	1985	1986	1987	1988	1989
Level						
Employment (millions) ¹	106.3	108.4	110.7	113.2	116.0	118.3
Unemployment rate (percent) ²	7.8	7.6	7.3	6.8	6.1	5.7
Percent change						
Consumer prices ³	4.4	4.6	4.5	4.2	3.9	3.6
Real GNP.....	5.3	4.1	4.0	4.0	4.0	3.9
Real compensation per hour ⁴	.5	1.3	1.5	1.9	1.9	1.8
Output per hour ⁴	1.9	2.1	1.8	1.5	1.0	.9

¹ Employment series includes persons in the Armed Forces stationed in the United States.² Unemployed as percent of total labor force. See footnote 1.³ Wage earners and clerical workers.⁴ Nonfarm business, all persons.

Source: Council of Economic Advisers.

tions is program and budget planning, no issue of Federal policy depends on precise predictions of year-to-year fluctuations in GNP.

The Administration's economic assumptions for 1985-89 involve higher real growth and lower inflation than many private forecasters are predicting; Administration and private sector nominal GNP growth rates are similar. Compared to many private forecasts the Administration's higher real growth assumption probably reflects a different fiscal policy assumption and a different analysis of the growth

prospects for the U.S. economy. The underlying fiscal assumption is that reduced growth in Federal spending and lower budget deficits will enhance the economy's long-run growth. The Administration's real growth assumptions are based on the assumption that labor productivity growth will be higher than that over the last decade, reflecting an environment of lower inflation and higher rates of saving and capital formation. In contrast, many private forecasters seem to be anticipating a continuation of the low productivity growth that characterized the 1970s.

GROWTH IN REAL GNP

Administration policies are designed to achieve a long, sustainable economic expansion that takes the economy back to full employment with declining inflation. The assumption of 4.0 percent growth in real GNP for the 1985-88 period is a trend or average growth rate projection; the economy may grow somewhat more or less rapidly in any given year. In the Administration's view, any attempt to induce a substantially higher real growth rate by monetary stimulus might be temporarily successful, but growth accelerated in this way would not be sustainable. The result would soon be rising inflation and another recession.

The Administration's real growth assumption falls to 3.6 percent by the fourth quarter of 1989. This assumption for 1989 does not reflect a "forecast" as that term is normally used, but rather the recognition that the economy's long-run growth potential most likely is below 4 percent. For example, over the 33-year period between the business cycle troughs in 1949 and 1982, real growth averaged 3.4 percent per year.

The Administration's economic assumption of 4 percent real growth for the 1985-88 period, therefore, assumes a gradual increase in the utilization of the economy's labor and capital resources. For a number of reasons, however, it is impossible to determine the specific year in which real GNP growth will slow. One of the principal reasons for this indeterminacy is that the sustainable level of resource utilization is not known with precision; moreover, that level can be altered through changes in microeconomic policies. The underlying rate of growth of the economy is not known with precision either. The importance of this factor is well illustrated by a simple calculation. A difference of only 0.1 percentage point in the underlying growth rate accumulates to 0.5 percentage point in 5 years, sufficient in one direction to permit 4.0 percent real GNP growth to continue after 1989, or, in the other direction, to cause growth to slow in 1988 instead of 1989. The year-to-year variations in real GNP growth rates

require an allowance for errors several times the size of the one in this illustration.

Another perspective on the Administration's real growth assumptions may be obtained by comparing them with real growth following prior business cycle troughs. Under the Administration's economic assumptions, average annual real GNP growth over the 7 years from the cycle trough in the fourth quarter of 1982 to the fourth quarter of 1989 is 4.3 percent. Real growth over comparable periods following prior business cycle troughs, excluding the ones in 1949 and 1980, averaged 3.8 percent. The highest of these 7-year growth rates followed the 1961 trough; the rate for that period was 5.0 percent. The lowest was 3.0 percent following the 1954 and 1975 troughs.

A visual perspective on the Administration's real GNP assumptions through 1989 can be obtained from Chart 6-5. This chart shows actual quarterly real GNP from 1970 through 1983, and projected real GNP from 1984 through 1989. Superimposed on the chart is a trend line fit to the data from the business cycle peak in the fourth quarter of 1969 to the business cycle peak in the third quarter of 1981 and then projected forward.

From the chart it can be seen that the Administration's economic assumptions take real GNP back to the indicated trend line by 1989. Differences in the way the trend is fit would affect the relationship between the 1989 trend and assumed levels of real GNP.

INFLATION

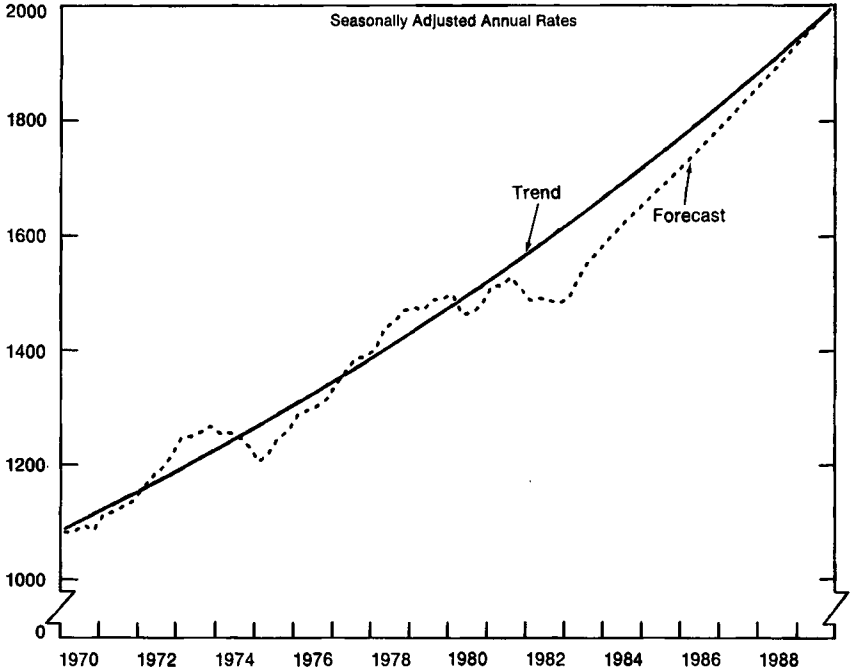
As seen in Table 6-11, the Administration has assumed a gradually declining rate of inflation over the 1985-89 period. This assumption reflects the view that the goal of stability in the general price level is appropriate because inflation not only is costly and inequitable in and of itself but also is disruptive of economic growth and employment stability. Also, eliminating inflation can be expected to reduce volatile changes in inflationary expectations, which are a major contributing factor to business cycle fluctuations.

The gradual reduction in inflation assumed by the Administration does not depend on a policy assumption that such a result will be "forced" by deliberate actions to choke off economic growth whenever there is any sign of a rise in inflation. Rather, the decline in inflation is the anticipated outcome of the assumed steady and predictable monetary and fiscal policies. As with real growth, it is expected that inflation may sometimes be higher and sometimes lower than the Administration's assumption, but that the trend will be downward as indicated.

Chart 6-5

Real Gross National Product Forecast and Trend

Billions of 1972 dollars



Note.—Trend fitted from data for 1969 fourth quarter through 1981 third quarter.
Sources: Department of Commerce and Administration Forecast.

INTEREST RATES

Given the assumed decline in the inflation rate, it is reasonable to assume that the expected rate of inflation will also decline, thereby reducing the inflation premium in nominal interest rates. In addition, under the assumptions of a declining budget deficit and a more stable economic environment, the real rate of interest should decline, ultimately reaching a level approximating the real rate prior to the onset of the inflationary 1970s.

Interest rates, of course, have been quite variable historically and very difficult to forecast. Although the Administration's economic policies are designed to produce a more stable economy than in the 1970s, interest rate fluctuations around the declining trend should be anticipated.

THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

The Full Employment and Balanced Growth (Humphrey-Hawkins) Act of 1978 sets certain national economic goals and requires that the *Economic Report of the President*, together with the *Annual Report of the Council of Economic Advisers*, provide an analysis of the Nation's progress toward meeting those goals. This section contains such an analysis. In addition, as required by the act, it contains an Investment Policy Report. The requirement for such a report reflects the finding of the Congress, stated in this act, that "high rates of capital formation are necessary to ensure adequate rates of capacity expansion and productivity growth, compliance with governmental health, safety, and environmental standards, and the replacement of obsolete production equipment."

ECONOMIC GOALS

In setting goals for the unemployment and inflation rates in the Balanced Growth Act, the Congress was mindful of the fact that "aggregate monetary and fiscal policies alone have been unable to achieve full employment and production . . . and reasonable price stability." In the act, the Congress made clear that exclusive concentration on any one goal could impede progress in achieving other goals.

A central economic goal of the Congress, as indicated by the title "Full Employment and Balanced Growth Act," was and is the achievement of full employment. That goal is also a high priority for this Administration.

A key observation from experience over the last two decades is that rising inflation has been associated with rising unemployment. Each time inflation accelerated, as measured by the change in the consumer price index—to 6.0 percent over the 12 months of 1969, to 12.2 percent in 1974, and to 13.4 percent in 1979—a temporary boost in employment was achieved at the cost of a subsequent recession. Moreover, the recessions became more serious. The unemployment rate rose from a monthly low of 3.4 percent in May 1969 to a monthly peak of 6.1 percent in December 1970; from 4.6 percent in October 1973 to 9.0 percent in May 1975; from 5.6 percent in May 1979 to 7.8 percent in July 1980; and from 7.2 percent in April 1981 to 10.7 percent in November 1982. As interest rates rose to new peaks—the monthly 3-month Treasury bill rate reached 7.9 percent in 1970, 9.0 percent in 1974, 15.5 percent in 1980, and 16.3 percent in 1981—strains accumulated in the financial system. Few accurately forecasted the severity of these recessions, and consequently it was

difficult for both the private sector and the Federal Government to deal with them. During each recession some businesses were forced into bankruptcy and unemployment rose sharply.

From this experience it is clear that rising unemployment and rising inflation can occur together. Indeed, each time prices accelerated substantially it proved impossible to avoid higher unemployment. Moreover, economic expansion and essentially stable, or declining, inflation can also occur together, as they did in the early 1960s, 1975-76, and most especially 1983. The tradeoff from inflationary economic policies is between lower unemployment temporarily and higher unemployment a short time later.

The Administration is committed to macroeconomic policy designed to avoid this boom-bust cycle and to achieve long-run balanced growth through steady and sustainable policies. Stable and predictable policies offer the greatest promise of achieving a high rate of employment over an extended period of years, with the smallest risk that the economy will experience severe recession.

The Balanced Growth Act set a goal that unemployment not exceed 3 percent among individuals aged 20 and over, and 4 percent among individuals aged 16 and over, by 1983. The act also set an inflation goal of 3 percent by 1983 and zero by 1988, provided that achieving the inflation goal did not impede achieving the unemployment goal. Finally, the act provided that the President could, if he deemed necessary, recommend modification of the timetables for reaching these goals.

Given the experience of the last two decades, recounted very briefly above, it is clear that the essential ingredient of Federal policies to further the employment and inflation goals of the Balanced Growth Act must be sustainability. Table 6-11 above, which reports the Administration's economic assumptions for 1984-89, provides a timetable for progress toward the employment and inflation goals of the act. This table is pursuant to the act's requirement that this *Annual Report* contain numerical goals. Reflecting the situation inherited by the Administration when it assumed office and the severity of the 1981-82 recession, the table does not project complete realization of the act's unemployment and inflation rate goals, but substantial progress toward them.

INVESTMENT POLICY REPORT

The 1983 *Annual Report of the Council of Economic Advisers* contained, in Chapter 4, an extensive analysis of capital formation issues. That analysis serves as the foundation for this much briefer report.

Updating the information published a year ago, and as discussed in more detail earlier in this chapter, 1983 was a year of rising invest-

ment spending from the recession trough. Nevertheless, for the full year 1983 real gross business fixed investment rose by only 1.1 percent over 1982 and real net investment fell by 11.4 percent. However, rising equipment investment over the course of 1983 suggests that the investment incentives in the tax acts of 1981 and 1982 are now having the desired effect.

In addition to the investment incentives in the tax law, a higher rate of investment is being encouraged by the lower rate of inflation. Lower inflation increases the real value of capital depreciation allowances. Lower inflation also helps to provide the more stable economic environment needed to reduce risks and make business planning easier.

The Administration's efforts to provide a stable and more productive business environment conducive to rising investment also include a number of microeconomic policies. Deregulation reduces costs and promotes efficient use of the economy's resources. A general policy of relying on the market reduces the risks to the profitability of investment from future extensions of regulation. Financial deregulation, discussed in Chapter 5 of this *Annual Report*, can be expected to improve the efficiency with which financial capital is allocated. Expanding international trade by resisting protectionism, as discussed in Chapter 2, will also assist in raising real growth.

Appendix A
REPORT TO THE PRESIDENT ON THE ACTIVITIES
OF THE
COUNCIL OF ECONOMIC ADVISERS DURING 1983

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., December 31, 1983.

MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1983 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,

MARTIN FELDSTEIN, *Chairman*

WILLIAM A. NISKANEN

WILLIAM POOLE

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.....	Vice Chairman.....	August 9, 1946.....	
	Acting Chairman.....	November 2, 1949.....	
	Chairman.....	May 10, 1950.....	January 20, 1953.
John D. Clark.....	Member.....	August 9, 1946.....	
	Vice Chairman.....	May 10, 1950.....	February 11, 1953.
Roy Blough.....	Member.....	June 29, 1950.....	August 20, 1952.
Robert C. Turner.....	Member.....	September 8, 1952.....	January 20, 1953.
Arthur F. Burns.....	Chairman.....	March 19, 1953.....	December 1, 1956.
Neil H. Jacoby.....	Member.....	September 15, 1953.....	February 9, 1955.
Walter W. Stewart.....	Member.....	December 2, 1953.....	April 29, 1955.
Raymond J. Saulnier.....	Member.....	April 4, 1955.....	
	Chairman.....	December 3, 1956.....	January 20, 1961.
Joseph S. Davis.....	Member.....	May 2, 1955.....	October 31, 1958.
Paul W. McCracken.....	Member.....	December 3, 1956.....	January 31, 1959.
Karl Brandt.....	Member.....	November 1, 1958.....	January 20, 1961.
Henry C. Wallich.....	Member.....	May 7, 1959.....	January 20, 1961.
Walter W. Heller.....	Chairman.....	January 29, 1961.....	November 15, 1964.
James Tobin.....	Member.....	January 29, 1961.....	July 31, 1962.
Kermit Gordon.....	Member.....	January 29, 1961.....	December 27, 1962.
Gardner Ackley.....	Member.....	August 3, 1962.....	
	Chairman.....	November 16, 1964.....	February 15, 1968.
John P. Lewis.....	Member.....	May 17, 1963.....	August 31, 1964.
Otto Eckstein.....	Member.....	September 2, 1964.....	February 1, 1966.
Arthur M. Okun.....	Member.....	November 16, 1964.....	
	Chairman.....	February 15, 1968.....	January 20, 1969.
James S. Duesenberry.....	Member.....	February 2, 1966.....	June 30, 1968.
Merton J. Peck.....	Member.....	February 15, 1968.....	January 20, 1969.
Warren L. Smith.....	Member.....	July 1, 1968.....	January 20, 1969.
Paul W. McCracken.....	Chairman.....	February 4, 1969.....	December 31, 1971.
Hendrik S. Houthakker.....	Member.....	February 4, 1969.....	July 15, 1971.
Herbert Stein.....	Member.....	February 4, 1969.....	
	Chairman.....	January 1, 1972.....	August 31, 1974.
Ezra Solomon.....	Member.....	September 9, 1971.....	March 26, 1973.
Marina v.N. Whitman.....	Member.....	March 13, 1972.....	August 15, 1973.
Gary L. Seever.....	Member.....	July 23, 1973.....	April 15, 1975.
William J. Fellner.....	Member.....	October 31, 1973.....	February 25, 1975.
Alan Greenspan.....	Chairman.....	September 4, 1974.....	January 20, 1977.
Paul W. MacAvoy.....	Member.....	June 13, 1975.....	November 15, 1976.
Burton G. Malkiel.....	Member.....	July 22, 1975.....	January 20, 1977.
Charles L. Schultze.....	Chairman.....	January 22, 1977.....	January 20, 1981.
William D. Nordhaus.....	Member.....	March 18, 1977.....	February 4, 1979.
Lyle E. Gramley.....	Member.....	March 18, 1977.....	May 27, 1980.
George C. Eads.....	Member.....	June 6, 1979.....	January 20, 1981.
Stephen M. Goldfeld.....	Member.....	August 20, 1980.....	January 20, 1981.
Murray L. Weidenbaum.....	Chairman.....	February 27, 1981.....	August 25, 1982.
Jerry L. Jordan.....	Member.....	July 14, 1981.....	July 31, 1982.
William A. Niskanen.....	Member.....	June 12, 1981.....	
Martin Feldstein.....	Chairman.....	October 14, 1982.....	
William Poole.....	Member.....	December 10, 1982.....	

Report to the President on the Activities of the Council of Economic Advisers During 1983

The Employment Act of 1946 (P.L. 304-79th Congress), as amended, provides the statutory base for the activities of the Council of Economic Advisers. The Council, through the Chairman, provides advice to the President on a wide range of domestic and international economic policy issues, assists in the preparation of the President's Economic Report to the Congress, and conducts analyses and studies on a wide range of economic issues in support of its primary mission.

Martin Feldstein, William A. Niskanen, and William Poole continued to serve as Council Members in 1983, with Mr. Feldstein as Chairman. Mr. Feldstein is on leave from Harvard University where he is a Professor of Economics. 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 1983 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 areas 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. The Chairman of the Council continued his responsibility for presenting to the President the economic assumptions developed with the Office of Management and Budget and the Department of the Treasury.

MICROECONOMIC POLICIES

A wide variety of microeconomic issues received Council attention during the year. Council Members chaired or participated in numerous Cabinet level groups dealing with such issues as international trade, economic statistics, Federal credit programs, alternatives to Federal regulation, Federal housing programs, and fuel economy

standards. Mr. Niskanen chaired Cabinet Council working groups dealing with employee pension legislation.

The Chairman actively participated during the early months of the year, and then during the late fall budget cycle, in Cabinet level reviews of the Federal budget.

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. He 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 1983. Mr. Poole assumed primary responsibility for domestic and international macroeconomic analysis, economic projections, and monetary and financial issues. Mr. Niskanen is primarily responsible for

microeconomic and sectoral analysis, international trade questions, and regulatory issues.

PROFESSIONAL STAFF

At the end of 1983 the professional staff consisted of the Special Assistant to the Chairman, the Senior Statistician, nine senior staff economists, five junior staff economists, and three research assistants.

The professional staff and their special fields at the end of 1983 were:

Geoffrey O. Carliner Special Assistant to the Chairman

Senior Staff Economists

Lincoln F. Anderson..... Macroeconomic Analysis
Jeffrey A. Frankel..... International Finance
Stephen K. Halpert..... Legal and Regulatory Policy
William S. Haraf Macroeconomic Analysis and Financial Regulation
David R. Henderson..... Health and Energy
Lawrence B. Lindsey Public Finance and Taxation
Robert L. Thompson..... Food and Agriculture
Kathleen P. Utgoff..... Labor and Employment
Robert S. Villanueva..... Macroeconomic Analysis and Housing Policy

Statistician

Catherine H. Furlong Senior Statistician

Junior Staff Economists

Kenneth A. Froot..... International Trade and Finance
Gail G. Ifshin Transportation and Regulation
William S. Milberg..... International Trade
John F. Navratil Taxation
Charles N. Schorin Macroeconomic Analysis and Labor

Research Assistants

Andrew G. Berg..... Fiscal Policy
Suzanne G. Greenspun..... Current Economic Conditions
Andrew R. Myers Macroeconomic Analysis

Catherine H. Furlong, Senior Statistician, continued to be in charge of the Council's Statistical Office. Mrs. Furlong has primary responsibility for managing the Council's statistical information system. She supervises the publication *Economic Indicators* and the preparation of all statistical matter in the *Economic Report*. She also oversees the verification of statistics in memoranda, testimony, and

speeches. Natalie V. Rentfro, Linda A. Reilly, and Barbara L. Sibel assist Mrs. Furlong.

In preparing the *Economic Report* the Council relied upon the editorial services of Joseph Foote. Donald Uttrich worked at the Council during the fall as an intern.

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.

Members of the secretarial staff for the Chairman and Council Members during 1983 were Patricia A. Lee, Susan A. Lindsey, Georgia A. O'Connor, and Alice H. Williams. Secretaries for the professional staff were Carolyn L. Bazarnick, Bessie M. Lafakis, Rosemary M. Rogers, Margaret L. Synder, and Lillie M. Sturniolo.

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 Daniel J. Frisch (Department of the Treasury), Thomas J. Kniesner (University of North Carolina), Paul R. Krugman (Massachusetts Institute of Technology), Evan R. Kwerel (Federal Communications Commission), Thomas S. McCaleb (Florida State University), Stephen K. McNees (Federal Reserve Bank of Boston), Glenn L. Nelson (University of Minnesota), Lawrence H. Summers (Harvard University), Adrian W. Throop (Federal Reserve Bank of San Francisco), and Benjamin Zycher (California Institute of Technology). Eric I. Hemel, Special Assistant to the Chairman, joined the Federal Home Loan Bank Board.

Staff economists who resigned during the year were N. Gregory Mankiw (Harvard Law School and the Massachusetts Institute of Technology) and Robert H. Meyer (The Brookings Institution).

Junior staff economists who resigned in 1983 were Christopher B. Ballinger (University of California, Berkeley), John H. Cochrane (University of California, Berkeley), John S. Earle (Stanford University), Thomas W. Gilligan (Washington University, St. Louis), David S. Reitman (Stanford University), and Dan C. Roberts (Chase Manhattan Bank).

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, 1929-83

(Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment										Change in business inventories
		Total	Durable goods	Non-durable goods	Services	Total	Fixed investment									
							Nonresidential				Residential					
							Total	Structures	Producers durable equipment	Total	Non-farm structures	Farm structures	Producers durable equipment			
1929	103.4	77.3	9.2	37.7	30.3	16.2	14.5	10.6	5.1	5.5	3.9	3.6	0.2	0.1	1.7	
1933	55.8	45.8	3.5	22.3	20.1	1.4	3.0	2.4	1.0	1.4	.6	.5	.0	.0	-1.6	
1939	90.9	67.0	6.7	35.1	25.2	9.3	8.8	5.9	2.0	3.9	2.9	2.7	.1	.1	.4	
1940	100.0	71.0	7.8	37.0	26.2	13.1	10.9	7.5	2.3	5.2	3.4	3.2	.2	.1	2.2	
1941	125.0	80.8	9.7	42.9	28.2	17.9	13.4	9.4	3.0	6.4	4.0	3.6	.2	.1	4.5	
1942	158.5	88.6	6.9	50.8	31.0	9.9	8.1	6.0	1.9	4.1	2.2	1.9	.2	.1	1.8	
1943	192.1	99.4	6.5	58.6	34.3	5.8	6.4	5.0	1.4	3.7	1.4	1.2	.2	.0	-6	
1944	210.6	108.2	6.7	64.3	37.1	7.2	8.1	6.9	1.9	5.0	1.3	1.1	.1	.0	-1.0	
1945	212.4	119.5	8.0	71.9	39.6	10.6	11.7	10.1	2.8	7.3	1.5	1.4	.1	.0	-1.0	
1946	209.8	143.8	15.8	82.7	45.3	30.7	24.3	16.9	6.9	9.9	7.4	6.7	.5	.2	6.4	
1947	233.1	161.7	20.4	90.9	50.4	34.0	34.4	23.0	7.7	15.3	11.4	10.4	.7	.3	-5	
1948	259.5	174.7	22.9	96.6	55.3	45.9	41.1	26.3	9.0	17.3	14.9	13.7	.9	.3	4.7	
1949	258.3	178.1	25.0	94.9	58.2	35.3	38.4	24.4	8.7	15.7	13.9	12.8	.8	.3	-3.1	
1950	286.5	192.0	30.8	98.2	63.0	53.8	47.0	27.3	9.5	17.8	19.8	18.6	.8	.4	6.8	
1951	330.8	207.1	29.8	108.8	68.5	59.2	48.9	31.3	11.4	19.9	17.6	16.4	.8	.4	10.3	
1952	348.0	217.1	29.1	113.9	74.0	52.1	49.0	31.3	11.6	19.7	17.7	16.5	.8	.4	3.1	
1953	366.8	229.7	32.5	116.5	80.6	53.3	52.9	34.5	12.9	21.5	18.4	17.3	.8	.4	4.4	
1954	366.8	235.8	31.8	118.0	86.1	52.7	54.3	34.2	13.4	20.8	20.1	19.0	.7	.4	-1.5	
1955	400.0	253.7	38.6	122.9	92.1	68.4	62.4	38.5	14.6	23.9	23.9	22.8	.6	.4	6.0	
1956	421.7	266.0	37.9	128.9	99.2	71.0	66.3	44.0	17.7	26.3	22.3	21.2	.7	.5	4.7	
1957	444.0	280.4	39.3	135.2	105.9	69.2	67.9	47.0	18.4	28.6	20.9	19.7	.7	.5	1.3	
1958	449.7	289.5	36.8	139.8	112.8	61.9	63.4	42.0	17.2	24.9	21.4	20.3	.7	.5	-1.5	
1959	487.9	310.8	42.4	146.4	121.9	78.1	72.5	45.9	17.6	28.3	26.6	25.3	.7	.6	5.7	
1960	506.5	324.9	43.1	151.1	130.7	75.9	72.9	48.5	18.8	29.7	24.5	23.3	.6	.5	3.0	
1961	524.6	335.0	41.6	155.3	138.1	74.8	72.5	48.0	19.1	28.9	24.5	23.2	.7	.5	2.3	
1962	565.0	355.2	46.7	161.6	147.0	85.4	79.2	52.2	20.1	32.1	27.0	25.8	.6	.5	6.3	
1963	596.7	374.6	51.4	167.1	156.1	90.9	84.9	54.8	20.5	34.4	30.1	28.9	.7	.6	6.0	
1964	637.7	400.5	56.4	176.9	167.1	97.4	91.7	61.0	22.4	38.7	30.7	29.4	.7	.6	5.6	
1965	691.1	430.4	63.0	188.6	178.7	113.5	103.7	72.7	27.0	45.8	30.9	29.6	.6	.7	9.9	
1966	756.0	465.1	68.0	204.7	192.4	125.7	111.6	83.1	30.1	53.0	35.8	34.7	.7	.7	14.1	
1967	799.6	490.3	70.1	212.6	207.6	122.8	112.5	83.9	30.3	53.7	38.6	37.2	.7	.7	10.3	
1968	873.4	536.9	80.5	230.6	225.8	133.3	125.4	90.7	32.4	58.2	34.8	33.3	.6	.9	7.9	
1969	944.0	581.8	85.7	247.8	248.2	149.3	139.5	101.3	36.7	64.6	38.2	36.5	.7	1.0	9.8	
1970	992.7	621.7	85.2	265.7	270.8	144.2	141.0	103.9	38.7	65.2	37.1	35.4	.6	1.1	3.2	
1971	1,077.6	672.2	97.2	278.8	296.2	166.4	158.8	107.9	40.5	67.4	50.9	48.9	.7	1.3	7.7	
1972	1,185.9	737.1	111.1	300.6	325.3	195.0	184.8	121.0	44.1	76.9	63.8	61.5	.7	1.5	10.2	
1973	1,326.4	812.0	123.3	333.4	355.2	229.8	211.3	143.3	51.0	92.3	68.0	65.6	.7	1.7	18.5	
1974	1,434.2	888.1	121.5	373.4	393.2	228.7	214.5	156.6	55.9	100.7	57.9	54.8	1.3	1.8	14.1	
1975	1,549.2	976.4	132.2	407.3	437.0	206.1	213.0	157.7	55.4	102.3	55.3	52.4	1.0	1.9	-6.9	
1976	1,718.0	1,084.3	156.8	441.7	485.7	257.9	246.0	174.1	58.8	115.3	72.0	68.8	1.1	2.1	11.8	
1977	1,918.3	1,204.4	178.2	478.8	547.4	324.1	301.0	205.2	64.4	140.8	95.8	92.0	1.5	2.3	23.0	
1978	2,163.9	1,346.5	200.2	528.2	618.0	386.6	360.1	248.9	78.7	170.2	111.2	107.0	1.7	2.5	26.5	
1979	2,417.8	1,507.2	213.4	600.0	693.7	423.0	408.8	290.2	98.3	191.9	118.6	114.0	1.7	2.9	14.3	
1980	2,631.7	1,668.1	214.7	668.8	784.5	401.9	411.7	308.8	110.9	197.9	102.9	98.1	1.8	3.0	-9.8	
1981	2,954.1	1,857.2	236.1	733.9	887.1	474.9	456.5	352.2	133.4	218.8	104.3	99.8	1.3	3.2	18.5	
1982	3,073.0	1,991.9	244.5	761.0	986.4	414.5	439.1	348.3	141.9	206.4	90.8	86.0	1.5	3.2	-24.5	
1983 P.	3,309.5	2,158.6	278.6	804.3	1,075.7	471.3	478.2	347.7	131.4	216.3	130.5	125.5	1.5	3.6	-6.9	
1981:																
I.	2,866.6	1,802.8	236.9	716.3	849.6	455.5	444.7	333.1	121.6	211.5	111.6	107.5	.9	3.2	10.9	
II.	2,912.5	1,835.8	233.4	730.6	871.8	472.1	457.1	347.6	129.4	218.3	109.5	105.2	1.1	3.2	15.0	
III.	3,004.9	1,886.1	243.5	741.1	901.5	495.8	462.2	360.6	137.0	223.6	101.7	97.0	1.5	3.2	33.6	
IV.	3,032.2	1,904.1	230.8	747.7	925.6	476.2	461.8	367.6	145.5	222.1	94.3	89.5	1.6	3.3	14.3	
1982:																
I.	3,021.4	1,938.9	239.4	749.7	949.7	422.9	448.6	361.3	144.7	216.5	87.3	83.2	.9	3.2	-25.7	
II.	3,070.2	1,972.8	242.9	754.7	975.2	432.5	443.7	352.7	144.2	208.5	91.0	86.1	1.6	3.3	-11.2	
III.	3,090.7	2,008.8	243.4	766.6	998.9	425.3	430.2	342.3	140.0	202.2	87.9	83.4	1.3	3.3	-4.9	
IV.	3,109.6	2,046.9	252.1	773.0	1,021.8	377.4	433.8	337.0	138.6	198.4	96.8	91.2	2.3	3.3	-56.4	
1983:																
I.	3,171.5	2,073.0	258.5	777.1	1,037.4	404.1	443.5	332.1	132.9	199.3	111.3	106.7	1.3	3.4	-39.4	
II.	3,272.0	2,147.0	277.7	799.6	1,069.7	450.1	464.6	336.3	127.4	208.8	128.4	123.3	1.5	3.5	-14.5	
III.	3,362.2	2,181.1	282.8	814.8	1,083.5	501.1	492.5	351.0	130.9	220.2	141.5	136.3	1.6	3.6	8.5	
IV P.	3,432.0	2,233.1	295.2	825.9	1,112.0	529.8	512.1	371.2	134.5	236.8	140.8	135.6	1.6	3.7	17.7	

See next page for continuation of table.

TABLE B-1.—Gross national product, 1929-83—Continued

(Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates)

Year or quarter	Net exports of goods and services			Government purchases of goods and services					Final sales	Percent change from preceding period ¹	
	Net exports	Exports	Imports	Total	Federal			State and local		Gross national product	Final sales
					Total	National defense	Non-defense				
1929	1.1	7.0	5.9	8.8	1.4			7.4	101.7	6.6	
1933	.4	2.4	2.0	8.2	2.1			6.1	57.4	-4.2	-5.6
1939	1.2	4.6	3.4	13.5	5.2	1.2	3.9	8.3	90.5	7.0	5.3
1940	1.8	5.4	3.6	14.2	6.1	2.2	3.9	8.1	97.8	10.0	8.1
1941	1.5	6.1	4.7	24.9	16.9	13.7	3.2	8.0	120.6	25.0	23.2
1942	-2	5.0	4.8	59.8	52.0	49.4	2.6	7.8	156.7	26.7	30.0
1943	-1.9	4.6	6.5	88.9	81.3	79.7	1.6	7.5	192.8	21.3	23.0
1944	-1.7	5.5	7.2	97.0	89.4	87.4	2.0	7.6	211.6	9.6	9.8
1945	-5	7.4	7.9	82.8	74.6	73.5	1.1	8.2	213.5	.9	.7
1946	7.8	15.1	7.3	27.5	17.6	14.8	2.8	9.9	203.5	-1.2	-4.7
1947	11.9	20.2	8.3	25.5	12.7	9.0	3.7	12.8	233.5	11.1	14.8
1948	6.9	17.5	10.5	32.0	16.7	10.7	6.0	15.3	254.8	11.3	9.1
1949	6.5	16.3	9.8	38.4	20.4	13.2	7.2	18.0	261.4	-5	2.6
1950	2.2	14.4	12.2	38.5	18.7	14.0	4.7	19.8	279.7	10.9	7.0
1951	4.4	19.7	15.3	60.1	38.3	33.5	4.8	21.8	320.5	15.5	14.6
1952	3.2	19.1	15.9	75.6	52.4	45.8	6.5	23.2	344.8	5.2	7.6
1953	1.3	18.0	16.7	82.5	57.5	48.6	8.9	25.0	366.3	5.4	6.2
1954	2.5	18.7	16.2	75.8	47.9	41.1	6.8	27.8	368.4	.0	.6
1955	3.0	21.0	18.0	75.0	44.5	38.4	6.0	30.6	394.1	9.0	7.0
1956	5.3	25.0	19.8	79.4	45.9	40.2	5.7	33.5	417.0	5.4	5.8
1957	7.3	28.1	20.8	87.1	50.0	44.0	5.9	37.1	442.6	5.3	6.1
1958	3.3	24.2	21.0	95.0	53.9	45.6	8.3	41.1	451.2	1.3	1.9
1959	1.4	24.8	23.4	97.6	53.9	45.6	8.3	43.7	482.2	8.5	6.9
1960	5.5	28.9	23.4	100.3	53.7	44.5	9.3	46.5	503.6	3.8	4.4
1961	6.6	29.9	23.3	108.2	57.4	47.0	10.4	50.8	522.2	3.6	3.7
1962	6.4	31.8	25.4	118.0	63.7	51.1	12.7	54.3	558.8	7.7	7.0
1963	7.6	34.2	26.6	123.7	64.6	50.3	14.3	59.0	590.7	5.6	5.7
1964	10.1	38.8	28.8	129.8	65.2	49.0	16.2	64.6	632.1	6.9	7.0
1965	8.8	41.1	32.3	138.4	67.3	49.4	17.8	71.1	681.2	8.4	7.8
1966	6.5	44.6	38.1	158.7	78.8	60.3	18.5	79.8	741.9	9.4	8.9
1967	6.3	47.3	41.0	180.2	90.9	71.5	19.5	89.3	789.3	5.8	6.4
1968	4.3	52.4	48.1	199.0	98.0	76.9	21.2	101.0	865.5	9.2	9.7
1969	4.2	57.5	53.3	208.8	97.6	76.3	21.2	111.2	934.2	8.1	7.9
1970	6.7	65.7	59.0	220.1	95.7	73.6	22.2	124.4	989.5	5.2	5.9
1971	4.1	68.8	64.7	234.9	96.2	70.2	26.0	138.7	1,070.0	8.6	8.1
1972	.7	77.5	76.7	253.1	101.7	73.1	28.5	151.4	1,175.7	10.1	9.9
1973	14.2	109.6	95.4	270.4	102.0	72.8	29.1	168.5	1,307.9	11.8	11.2
1974	13.4	146.2	132.8	304.1	111.0	77.0	33.9	193.1	1,420.1	8.1	8.6
1975	26.8	154.9	128.1	339.9	122.7	83.0	39.7	217.2	1,556.1	8.0	9.6
1976	13.8	170.9	157.1	362.1	129.2	86.0	43.2	232.9	1,706.2	10.9	9.6
1977	-4.0	182.7	186.7	393.8	143.4	92.8	50.6	250.4	1,895.3	11.7	11.1
1978	-1.1	218.7	219.8	431.9	153.6	100.3	53.3	278.3	2,137.4	12.8	12.8
1979	13.2	281.4	268.1	474.4	168.3	111.8	56.5	306.0	2,403.5	11.7	12.4
1980	23.9	338.8	314.8	537.8	197.0	131.2	65.9	340.8	2,641.5	8.8	9.9
1981	26.3	368.8	342.5	595.7	229.2	154.0	75.2	366.5	2,935.6	12.2	11.1
1982	17.4	347.6	330.2	649.2	258.7	179.4	79.3	390.5	3,097.5	4.0	5.5
1983 ^a	-10.6	335.8	346.4	690.2	275.2	200.3	74.9	415.0	3,316.4	7.7	7.1
1981:											
I	31.9	367.3	335.4	576.3	215.7	143.3	72.4	360.5	2,855.7	20.5	16.1
II	21.1	369.2	348.1	583.5	220.4	151.2	69.2	363.2	2,897.5	6.6	6.0
III	22.8	367.5	344.7	600.3	232.4	154.9	77.5	367.9	2,971.4	13.3	10.6
IV	29.2	371.0	341.7	622.8	248.5	166.7	81.8	374.3	3,017.9	3.7	6.4
1982:											
I	29.9	358.4	328.5	629.8	249.7	168.1	81.7	380.0	3,047.1	-1.4	3.9
II	33.3	364.5	331.2	631.6	244.1	175.2	68.9	387.5	3,081.4	6.6	4.6
III	.9	346.0	345.0	655.7	261.7	183.6	78.1	394.0	3,095.6	2.7	1.9
IV	5.6	321.6	316.1	679.7	279.2	190.8	88.5	400.5	3,165.9	2.5	9.4
1983:											
I	17.0	326.9	309.9	677.4	273.5	194.4	79.1	404.0	3,210.9	8.2	5.8
II	-8.5	327.1	335.6	683.4	273.7	199.4	74.3	409.7	3,286.6	13.3	9.8
III	-18.3	341.1	359.4	698.3	278.1	201.2	76.9	420.2	3,353.7	11.5	8.4
IV ^a	-32.6	348.1	380.7	701.7	275.6	206.2	69.4	426.1	3,414.3	8.6	7.4

¹ 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, 1929-83
[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment										Change in business inventories
		Total	Durable goods	Non-durable goods	Services	Total	Fixed investment									
							Total	Nonresidential			Residential					
								Total	Structures	Producers' durable equipment	Total	Non-farm structures	Farm structures	Producers' durable equipment		
1929.....	315.7	215.1	20.9	98.1	96.1	55.8	51.2	37.5	21.1	16.4	13.7	13.0	0.6	0.1	4.6	
1933.....	222.1	170.5	10.7	82.9	76.9	8.4	13.2	10.4	5.0	5.5	2.8	2.5	.2	.1	-4.9	
1939.....	319.8	219.8	18.6	115.1	86.1	33.6	32.0	20.9	8.7	12.1	11.1	10.4	.6	.1	1.6	
1940.....	344.1	229.9	21.2	119.9	88.8	44.5	38.3	25.8	10.0	15.8	12.5	11.6	.8	.1	6.2	
1941.....	400.4	243.6	24.2	127.6	91.8	55.8	43.8	30.4	12.0	18.5	13.3	12.3	.9	.2	12.0	
1942.....	461.7	241.1	15.7	129.9	95.5	29.5	24.3	17.6	6.8	10.9	6.7	6.0	.6	.1	5.2	
1943.....	531.6	248.2	14.0	134.0	100.2	18.1	18.0	14.0	4.2	9.8	4.0	3.5	.4	.0	1.1	
1944.....	569.1	255.2	13.0	139.4	102.8	19.7	22.0	18.7	5.5	13.2	3.4	3.0	.4	.0	-2.3	
1945.....	560.4	270.9	14.4	150.3	106.3	27.7	31.4	27.6	8.3	19.2	3.8	3.4	.3	.1	-3.6	
1946.....	478.3	301.0	25.4	158.9	116.7	70.9	58.7	42.1	18.9	23.2	16.6	15.3	1.1	.2	12.2	
1947.....	470.3	305.8	30.1	154.8	120.9	70.0	70.2	48.9	17.4	31.5	21.3	19.7	1.3	.3	-2.2	
1948.....	489.8	312.2	32.5	155.0	124.7	82.1	76.6	51.1	18.4	32.6	25.6	23.8	1.5	.3	5.5	
1949.....	492.2	319.3	35.5	157.4	126.5	65.4	69.8	46.0	17.9	28.1	23.8	22.1	1.4	.3	-4.4	
1950.....	534.8	337.3	42.6	161.8	132.9	93.5	83.0	50.0	19.2	30.8	33.0	31.3	1.3	.3	10.6	
1951.....	579.4	341.6	39.1	165.3	137.2	93.9	80.2	52.9	20.7	32.2	27.3	25.7	1.3	.3	13.7	
1952.....	600.8	350.1	38.0	171.2	140.9	83.0	78.7	52.1	20.6	31.5	26.6	25.1	1.2	.3	4.3	
1953.....	623.6	363.4	42.1	175.7	145.6	85.3	83.8	56.3	22.6	33.7	27.5	26.1	1.2	.3	1.5	
1954.....	616.1	370.0	42.5	177.0	150.5	83.1	85.3	55.4	23.6	31.8	29.9	28.5	1.1	.3	-2.2	
1955.....	657.5	394.1	51.1	185.4	157.6	103.8	96.1	61.3	25.4	35.9	34.8	33.5	.9	.4	7.7	
1956.....	671.6	405.4	48.8	191.6	165.0	102.6	96.8	65.4	28.3	37.0	31.5	30.0	1.0	.4	5.8	
1957.....	683.8	413.8	48.6	194.9	170.3	97.0	95.5	66.2	28.4	37.8	29.2	27.8	1.0	.4	1.5	
1958.....	680.9	418.0	45.3	196.8	175.9	87.5	89.3	59.3	26.8	32.5	30.0	28.6	.9	.5	-1.8	
1959.....	721.7	440.4	50.7	205.0	184.8	108.0	100.9	63.6	27.4	36.2	37.4	35.9	1.0	.6	7.0	
1960.....	737.2	452.0	51.4	208.2	192.4	104.7	101.2	66.9	29.5	37.4	34.2	32.9	.8	.5	3.5	
1961.....	756.6	461.4	49.3	211.9	200.2	103.9	100.9	66.7	30.2	36.5	34.3	32.8	1.0	.5	3.0	
1962.....	800.3	482.0	54.7	218.5	208.8	117.6	109.7	72.0	31.6	40.4	37.7	36.3	.9	.6	7.8	
1963.....	832.5	500.5	59.7	223.0	217.8	125.1	117.5	75.1	31.9	43.1	42.5	40.9	.9	.6	7.5	
1964.....	876.4	528.0	64.8	233.3	229.8	133.0	125.9	82.7	34.4	48.3	43.1	41.5	.9	.7	7.1	
1965.....	929.3	557.5	72.6	244.0	240.9	151.9	140.1	97.4	40.6	56.8	42.7	41.2	.8	.7	11.8	
1966.....	984.8	585.7	78.4	255.5	251.8	163.0	146.2	108.0	43.4	64.5	38.2	36.6	.9	.8	16.8	
1967.....	1,011.4	602.7	79.5	259.5	263.7	154.9	142.7	105.6	42.0	63.6	37.1	35.4	.9	.8	12.2	
1968.....	1,058.1	634.4	88.3	270.5	275.6	161.6	152.6	109.5	42.8	66.8	43.1	41.3	.8	.9	9.0	
1969.....	1,087.6	657.9	91.8	277.3	288.8	171.4	160.4	116.8	45.0	71.8	43.6	41.7	.9	1.1	11.1	
1970.....	1,085.6	672.1	89.1	283.7	299.3	158.5	154.8	113.8	43.9	69.9	41.0	39.2	.6	1.1	3.8	
1971.....	1,122.4	696.8	98.2	288.7	309.9	173.9	165.8	112.2	42.8	69.3	53.7	51.6	.7	1.3	8.1	
1972.....	1,185.9	737.1	111.1	300.6	325.3	195.0	184.8	121.0	44.1	76.9	63.8	61.5	.7	1.5	10.2	
1973.....	1,254.3	767.9	121.3	307.4	339.2	217.5	200.4	138.1	47.4	90.7	62.3	59.9	.6	1.7	17.2	
1974.....	1,246.3	762.8	112.3	302.5	348.0	195.5	183.9	135.7	43.6	92.1	48.2	45.3	1.1	1.7	11.6	
1975.....	1,231.6	779.4	112.7	307.5	359.3	154.8	161.5	119.3	38.3	81.1	42.2	39.8	.8	1.6	-6.7	
1976.....	1,298.2	823.1	126.6	321.9	374.7	184.5	176.7	125.6	39.5	86.1	51.2	48.7	.8	1.7	7.8	
1977.....	1,369.7	864.3	138.0	333.4	393.0	214.2	200.9	140.3	40.4	99.9	60.7	57.9	1.0	1.8	13.3	
1978.....	1,438.6	903.2	146.8	344.4	412.0	236.7	220.7	158.3	44.6	113.7	62.4	59.5	1.0	1.9	16.0	
1979.....	1,479.4	927.6	147.2	353.1	427.3	236.3	229.1	169.9	49.1	120.8	59.1	56.3	.8	2.0	7.3	
1980.....	1,475.0	931.8	137.5	355.6	438.8	208.5	212.9	165.8	48.8	117.0	47.1	44.2	.8	2.0	-4.4	
1981.....	1,513.8	956.8	141.2	362.5	453.1	227.6	219.1	174.4	52.5	121.9	44.7	42.1	.5	2.0	8.5	
1982.....	1,485.4	970.2	139.8	364.2	466.2	194.5	203.9	166.1	53.4	112.7	37.8	35.2	.6	1.9	-9.4	
1983 P.....	1,534.8	1,011.4	156.0	376.3	479.2	218.4	220.7	168.0	49.8	118.2	52.7	50.1	.6	2.1	-2.4	
1981:																
I.....	1,510.1	953.6	145.4	359.8	448.3	222.7	219.7	170.9	50.1	120.8	48.8	46.3	.4	2.1	3.0	
II.....	1,512.5	954.7	140.5	362.7	451.5	229.5	220.7	173.4	51.6	121.7	47.3	44.8	.5	2.0	8.9	
III.....	1,525.8	962.9	143.9	363.6	455.5	236.3	220.2	177.0	53.5	123.5	43.1	40.5	.6	2.0	16.1	
IV.....	1,506.9	955.7	134.8	363.8	457.1	221.7	215.7	176.3	54.6	121.8	39.4	36.8	.7	2.0	6.0	
1982:																
I.....	1,485.8	961.4	138.5	362.6	460.4	199.7	209.9	173.6	54.3	119.3	36.3	33.9	.4	1.9	-10.2	
II.....	1,489.3	968.8	139.5	363.5	465.7	201.4	204.9	167.1	50.0	113.1	37.8	35.2	.7	1.9	-3.4	
III.....	1,485.7	971.0	138.2	364.7	468.2	198.4	199.8	163.3	53.0	110.3	36.5	34.1	.5	1.9	-1.3	
IV.....	1,480.7	979.6	143.2	366.0	470.4	178.4	201.1	160.5	52.2	108.3	40.6	37.8	.9	1.9	-22.7	
1983:																
I.....	1,490.1	986.7	145.8	368.9	472.0	190.0	205.4	159.9	50.3	109.6	45.5	43.0	.5	2.0	-15.4	
II.....	1,525.1	1,010.6	156.5	374.7	479.3	210.2	215.6	163.0	48.3	114.7	52.6	50.0	.6	2.1	-5.4	
III.....	1,553.4	1,016.0	157.9	378.1	480.1	230.7	227.0	170.1	49.6	120.5	56.8	54.1	.6	2.1	3.8	
IV P.....	1,570.5	1,032.2	163.6	383.3	485.3	242.5	235.0	178.9	50.8	128.1	56.1	53.3	.6	2.1	7.5	

See next page for continuation of table.

TABLE B-2.—Gross national product in 1972 dollars, 1929-83—Continued

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government purchases of goods and services					Final sales	Percent change from preceding period ¹	
	Net exports	Exports	Imports	Total	Federal			State and local		Gross national product	Final sales
					Total	National defense	Non-defense				
1929	3.7	16.7	12.9	41.0	7.0			33.9	311.0	6.6	.....
1933	.4	9.1	8.6	42.9	10.9			32.0	227.0	-2.2	-3.1
1939	3.4	14.3	10.9	63.0	22.8			40.3	318.2	7.8	6.3
1940	4.4	15.5	11.1	65.3	26.7			38.6	337.9	7.6	6.2
1941	3.2	16.4	13.2	97.8	61.0			36.8	388.4	16.3	14.9
1942	-6	11.4	12.0	191.6	157.4			34.3	456.5	15.3	17.5
1943	-5.9	9.8	15.7	271.3	239.6			31.7	531.5	15.1	16.4
1944	-6.2	10.5	16.8	300.4	269.7			30.7	571.4	7.1	7.5
1945	-3.7	13.8	17.5	265.4	233.7			31.7	564.0	-1.5	-1.3
1946	13.2	27.3	14.0	93.1	58.2			34.9	466.1	-14.7	-17.4
1947	18.9	32.2	13.3	75.7	36.3			39.4	470.6	-1.7	1.0
1948	10.8	26.3	15.5	84.7	42.8			41.9	484.3	4.1	2.9
1949	10.7	25.8	15.2	96.8	49.2			47.5	496.6	.5	2.5
1950	5.9	23.6	17.7	98.1	47.3			50.8	524.2	8.7	5.6
1951	10.1	28.6	18.5	133.7	82.2			51.5	565.6	8.3	7.9
1952	7.9	27.9	20.0	159.8	107.2			52.7	596.5	3.7	5.5
1953	4.8	26.6	21.8	170.1	114.7			55.3	622.1	3.8	4.3
1954	6.9	27.8	20.9	156.0	96.1			59.9	618.2	-1.2	-6
1955	7.3	30.7	23.4	152.3	88.2			64.1	649.8	6.7	5.1
1956	10.1	35.3	25.2	153.5	86.8			66.7	665.8	2.1	2.5
1957	11.8	38.0	26.1	161.2	90.6			70.6	682.2	1.8	2.5
1958	5.6	33.2	27.6	169.8	93.4			76.4	682.7	-4	.1
1959	2.7	33.8	31.1	170.6	91.4			79.2	714.7	6.0	4.7
1960	7.7	38.4	30.7	172.8	90.4			82.4	733.7	2.2	2.7
1961	8.5	39.3	30.9	182.9	95.3			87.5	753.7	2.6	2.7
1962	7.5	41.8	34.3	193.2	102.8			90.4	792.4	5.8	5.1
1963	9.4	44.8	35.4	197.6	101.8			95.8	825.0	4.0	4.1
1964	12.8	50.3	37.5	202.6	100.2			102.4	869.3	5.3	5.4
1965	10.1	51.7	41.6	209.8	100.3			109.5	917.5	6.0	5.5
1966	6.5	54.4	47.9	229.7	112.6			117.1	968.0	6.0	5.5
1967	5.4	56.7	51.3	248.5	125.1			123.4	999.2	2.7	3.2
1968	1.9	61.2	59.3	260.2	128.1			132.1	1,049.1	4.6	5.0
1969	.9	65.0	64.1	257.4	121.8			135.6	1,076.6	2.8	2.6
1970	3.9	70.5	66.6	251.1	110.6			140.5	1,081.8	-2	.5
1971	1.6	71.0	69.3	250.1	103.7			146.4	1,114.3	3.4	3.0
1972	.7	77.5	76.7	253.1	101.7	73.1	28.5	151.4	1,175.7	5.7	5.5
1973	15.5	97.3	81.8	253.3	95.9	68.3	27.6	157.4	1,237.1	5.8	5.2
1974	27.8	108.5	80.7	260.3	96.6	66.9	29.7	163.6	1,234.7	-6	-2
1975	32.2	103.5	71.4	265.2	97.4	66.4	31.0	167.8	1,238.4	-1.2	-3
1976	25.4	110.1	84.7	265.2	96.8	64.9	31.8	168.4	1,290.4	5.4	4.2
1977	22.0	112.9	90.9	269.2	100.4	65.4	35.0	168.8	1,356.4	5.5	5.1
1978	24.0	126.7	102.7	274.6	100.3	65.7	34.7	174.3	1,422.6	5.0	4.9
1979	37.2	146.2	109.0	278.3	102.1	67.4	34.8	176.2	1,472.2	2.8	3.5
1980	50.3	159.1	108.8	284.3	106.4	70.0	36.4	177.9	1,479.4	-3	.5
1981	43.0	159.7	116.7	286.5	110.4	73.6	36.8	176.1	1,505.3	2.6	1.8
1982	28.9	147.3	118.4	291.8	116.6	78.8	37.8	175.2	1,494.8	-1.9	-7
1983 ^a	11.7	138.9	127.2	293.3	118.0	84.2	33.7	175.4	1,537.2	3.3	2.8
1981:											
I	48.3	160.6	112.4	285.6	107.3	71.0	36.3	178.3	1,507.0	9.0	6.8
II	44.1	160.7	116.6	284.1	107.9	73.3	34.6	176.2	1,503.6	.7	-.9
III	39.8	159.0	119.1	286.8	111.8	74.4	37.4	175.0	1,509.7	3.6	1.6
IV	39.9	158.7	118.8	289.6	114.5	75.7	38.7	175.1	1,500.9	-4.9	-2.3
1982:											
I	35.2	151.8	116.6	289.4	114.5	75.5	39.1	174.9	1,495.9	-5.5	-1.3
II	33.4	154.5	121.1	285.8	110.3	77.8	32.5	175.4	1,492.7	1.0	-.8
III	24.0	146.4	122.4	292.2	116.9	80.4	36.5	175.3	1,487.0	-1.0	-1.5
IV	23.0	136.5	113.5	299.7	124.4	81.4	43.0	175.2	1,503.4	-1.3	4.5
1983:											
I	20.5	137.3	116.8	292.9	118.4	82.7	35.7	174.5	1,505.5	2.6	.6
II	12.3	136.2	123.9	292.1	117.6	84.2	33.4	174.5	1,530.5	9.7	6.8
III	11.4	140.7	129.2	295.2	118.9	84.2	34.7	176.3	1,549.7	7.6	5.1
IV ^a	2.5	141.5	139.0	293.2	116.9	85.6	31.2	176.3	1,563.0	4.5	3.5

¹ 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, 1929-83

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product ¹	Personal consumption expenditures				Gross private domestic investment ¹							
		Total	Durable goods	Non-durable goods	Services	Fixed investment							
						Total	Nonresidential			Residential			
							Total	Structures	Producers' durable equipment	Total	Non-farm structures	Farm structures	Producers' durable equipment
1929.....	32.76	35.9	44.2	38.4	31.6	28.3	28.3	24.3	33.4	28.2	27.8	28.6	77.2
1933.....	25.13	26.9	32.5	26.8	26.1	22.4	22.9	19.2	26.2	20.7	19.8	19.5	58.8
1939.....	28.43	30.5	35.9	30.5	29.2	27.7	28.2	23.0	32.0	26.6	26.3	23.4	61.1
1940.....	29.06	30.9	36.7	30.9	29.5	28.5	29.1	23.4	32.8	27.4	27.2	23.6	59.6
1941.....	31.23	33.2	40.0	33.6	30.8	30.7	31.0	24.9	34.9	30.0	29.7	26.6	63.8
1942.....	34.32	36.7	43.7	39.1	32.4	33.5	33.9	28.4	37.3	32.4	31.8	30.7	71.3
1943.....	36.14	40.1	46.7	43.7	34.2	35.7	35.9	32.4	37.3	34.9	34.3	35.7	71.4
1944.....	37.01	42.4	51.3	46.2	36.1	37.0	36.8	33.8	38.0	38.1	37.3	40.8	75.0
1945.....	37.91	44.1	55.5	47.8	37.3	37.2	36.7	33.9	37.9	40.8	40.0	42.9	84.6
1946.....	43.88	47.8	62.1	52.1	38.8	41.3	40.0	36.6	42.8	44.6	43.9	46.6	95.2
1947.....	49.55	52.9	67.8	58.7	41.7	49.0	46.9	44.0	48.6	53.7	53.0	52.8	105.6
1948.....	52.98	56.0	70.3	62.3	44.4	53.7	51.5	48.8	53.0	58.1	57.5	57.3	111.5
1949.....	52.49	55.8	70.5	60.3	46.0	54.9	53.0	48.4	56.0	58.7	58.1	58.0	107.9
1950.....	53.56	56.9	72.2	60.7	47.4	56.7	54.5	49.3	57.8	60.0	59.5	59.4	107.4
1951.....	57.09	60.6	76.3	65.8	49.9	60.9	59.1	55.1	61.7	64.4	63.8	63.8	114.9
1952.....	57.92	62.0	76.7	66.5	52.6	62.3	60.1	56.3	62.6	66.4	65.8	65.7	114.6
1953.....	58.82	63.2	77.2	66.3	55.4	63.1	61.2	57.4	63.8	66.9	66.3	66.2	114.2
1954.....	59.55	63.7	75.0	66.6	57.2	63.6	61.7	56.5	65.5	67.1	66.6	66.5	112.4
1955.....	60.84	64.4	75.6	66.3	58.4	65.0	62.9	57.6	66.6	68.7	68.2	68.3	109.1
1956.....	62.79	65.6	77.7	67.3	60.1	68.5	67.3	62.4	71.1	71.0	70.5	70.6	104.3
1957.....	64.93	67.8	80.9	69.4	62.2	71.1	71.0	64.9	75.5	71.4	70.9	70.9	103.4
1958.....	66.04	69.2	81.3	71.0	64.1	71.0	70.9	63.9	76.6	71.2	70.7	70.8	101.9
1959.....	67.60	70.6	83.8	71.4	66.0	71.8	72.2	64.2	78.3	71.1	70.6	70.7	101.8
1960.....	68.70	71.9	83.8	72.6	67.9	72.1	72.5	63.7	79.4	71.4	70.9	71.1	100.8
1961.....	69.33	72.6	84.3	73.3	69.0	71.8	72.0	63.3	79.3	71.3	70.9	70.7	99.0
1962.....	70.61	73.7	85.4	73.9	70.4	72.2	72.5	63.6	79.4	71.5	71.1	71.2	96.8
1963.....	71.67	74.8	86.2	74.9	71.7	72.3	73.1	64.1	79.7	70.9	70.5	70.6	95.3
1964.....	72.77	75.9	87.1	75.8	72.7	72.9	73.8	64.9	80.1	71.2	70.8	70.9	94.3
1965.....	74.36	77.2	86.8	77.3	74.2	74.0	74.7	66.4	80.6	72.3	72.0	72.2	92.1
1966.....	76.76	79.4	86.7	80.1	76.4	76.3	76.9	69.2	82.1	74.6	74.3	74.2	90.8
1967.....	79.06	81.4	88.2	81.9	78.7	78.8	79.5	72.2	84.3	77.0	76.7	76.7	91.0
1968.....	82.54	84.6	91.1	85.3	81.9	82.2	82.8	75.8	87.2	80.7	80.5	80.6	93.5
1969.....	86.79	88.4	93.3	89.4	86.0	87.0	86.7	81.5	89.9	87.7	87.5	87.5	95.7
1970.....	91.45	92.5	95.7	93.6	90.5	91.1	91.3	88.2	93.2	90.5	90.3	90.6	97.8
1971.....	96.01	96.5	99.0	96.6	95.6	95.7	96.2	94.5	97.2	94.8	94.7	95.0	99.3
1972.....	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1973.....	105.75	105.7	101.7	108.5	104.7	105.5	103.8	107.7	101.8	109.1	109.4	109.2	100.6
1974.....	115.08	116.4	108.2	123.4	113.0	116.7	115.4	128.2	109.3	120.3	120.8	120.5	106.8
1975.....	125.79	125.3	117.3	132.5	121.6	131.9	132.2	144.8	126.2	131.0	131.6	131.9	116.9
1976.....	132.34	131.7	123.9	137.2	129.6	139.2	138.6	149.0	133.9	140.7	141.3	140.7	122.7
1977.....	140.05	139.3	129.2	143.6	139.3	149.8	146.3	159.4	141.0	158.0	159.0	157.0	126.7
1978.....	150.42	149.1	136.4	153.4	150.0	163.2	157.2	176.4	149.7	178.3	179.8	180.0	132.6
1979.....	163.42	162.5	145.0	169.9	162.3	178.5	170.8	200.2	158.8	200.5	202.7	202.7	140.3
1980.....	178.42	179.0	156.2	188.1	178.8	193.4	186.2	227.4	169.1	218.5	221.6	218.1	149.2
1981.....	195.14	194.1	167.3	202.5	195.8	208.4	201.9	254.2	179.5	233.5	237.1	234.0	159.3
1982.....	206.88	205.3	174.8	209.0	211.6	215.3	209.7	265.8	183.1	240.2	244.0	245.9	168.7
1983 P.....	215.63	213.4	178.6	213.8	224.5	216.6	206.9	264.0	182.9	247.4	250.5	251.4	172.5
1981:													
I.....	189.83	189.1	162.9	199.1	189.5	202.4	194.9	242.6	175.1	228.8	232.1	225.5	155.4
II.....	192.56	192.3	166.1	201.4	193.1	207.2	200.5	250.5	179.3	231.6	234.9	231.4	158.1
III.....	196.94	195.9	169.3	203.8	197.9	210.0	203.7	255.9	181.0	235.7	239.4	235.8	161.0
IV.....	201.22	199.2	171.2	205.5	202.5	214.1	208.5	266.6	182.4	239.2	243.3	239.2	162.9
1982:													
I.....	203.36	201.7	172.9	206.8	206.3	213.7	208.1	266.4	181.5	240.8	245.0	240.6	165.8
II.....	206.15	203.6	174.2	207.6	205.4	216.6	211.1	267.1	184.4	240.9	244.8	246.5	168.2
III.....	208.03	206.9	176.1	210.2	213.4	215.3	209.6	264.3	183.3	240.9	244.9	242.4	169.8
IV.....	210.00	209.0	176.1	211.2	217.2	215.7	209.9	265.4	183.2	238.4	241.5	249.9	171.1
1983:													
I.....	212.83	210.1	177.3	210.6	219.8	215.9	207.7	264.0	181.8	244.9	248.2	248.2	171.7
II.....	214.55	212.5	177.5	213.4	223.1	215.5	206.3	263.7	182.1	243.9	246.8	249.8	171.5
III.....	216.44	214.7	179.1	215.5	225.7	217.0	207.3	263.7	182.7	249.0	251.9	251.5	172.4
IV.....	218.53	216.3	180.4	215.5	229.1	217.9	207.5	264.5	184.9	251.2	254.2	254.9	174.4

See next page for continuation of table.

TABLE B-3.—Implicit price deflators for gross national product, 1929-83—Continued

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Exports and imports of goods and services ¹		Government purchases of goods and services					Final sales	Percent change from preceding period ²	
	Exports	Imports	Total	Federal			State and local		GNP implicit price deflator	Final sales implicit price deflator
				Total	National defense	Non-defense				
1929.....	42.2	45.5	21.5	20.5			21.8	32.7	0.0	-----
1933.....	26.5	23.6	19.2	19.4			19.1	25.3	-2.1	-2.6
1939.....	32.1	31.0	21.4	22.7			20.7	28.4	-8	-9
1940.....	34.9	32.8	21.7	22.7			20.9	29.0	2.2	1.8
1941.....	37.3	35.4	25.5	27.8			21.7	31.0	7.5	7.2
1942.....	43.6	40.0	31.2	33.0			22.8	34.3	9.9	10.6
1943.....	46.8	41.3	32.8	34.0			23.7	36.3	5.3	5.6
1944.....	51.9	42.7	32.3	33.1			24.8	37.0	2.4	2.1
1945.....	53.6	44.9	31.2	31.9			25.8	37.9	2.4	2.2
1946.....	55.4	51.8	29.6	30.2			28.5	43.7	15.7	15.3
1947.....	62.8	62.3	33.6	35.0			32.4	49.6	12.9	13.7
1948.....	66.5	67.8	37.7	39.0			36.4	52.6	6.9	6.0
1949.....	63.1	64.6	39.7	41.4			37.8	52.6	-9	.1
1950.....	61.0	68.8	39.2	39.6			38.9	53.3	2.1	1.3
1951.....	68.8	82.6	45.0	46.6			42.3	56.7	6.6	6.2
1952.....	68.6	79.9	47.3	48.9			44.1	57.8	1.4	2.0
1953.....	67.5	76.7	48.5	50.1			45.2	58.9	1.6	1.9
1954.....	67.2	77.2	48.6	49.9			46.5	59.6	1.2	1.2
1955.....	68.5	77.1	49.2	50.4			47.6	60.6	2.2	1.8
1956.....	71.0	78.4	51.7	52.9			50.2	62.6	3.2	3.3
1957.....	74.0	79.6	54.0	55.1			52.6	64.9	3.4	3.6
1958.....	73.1	76.1	56.0	57.7			53.8	66.1	1.7	1.9
1959.....	73.5	75.2	57.2	59.0			55.1	67.5	2.4	2.1
1960.....	75.2	76.1	58.0	59.4			56.5	68.6	1.6	1.7
1961.....	76.1	75.5	59.1	60.2			58.0	69.3	.9	1.0
1962.....	76.0	74.2	61.1	62.0			60.1	70.5	1.8	1.8
1963.....	76.3	75.2	62.6	63.5			61.6	71.6	1.5	1.5
1964.....	77.2	76.8	64.1	65.1			63.1	72.7	1.5	1.5
1965.....	79.4	77.7	66.0	67.1			64.9	74.2	2.2	2.1
1966.....	81.9	79.4	69.1	70.0			68.2	76.6	3.2	3.2
1967.....	83.5	79.9	72.5	72.7			72.4	79.0	3.0	3.1
1968.....	85.5	81.1	76.5	76.5			76.4	82.5	4.4	4.4
1969.....	88.5	83.2	81.1	80.1			82.0	86.8	5.1	5.2
1970.....	93.2	88.6	87.7	86.6			88.6	91.5	5.4	5.4
1971.....	97.0	93.3	93.9	92.7			94.7	96.0	5.0	5.0
1972.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4.2	4.1
1973.....	112.7	116.7	106.7	106.3	106.6	105.6	107.0	105.7	5.8	5.7
1974.....	134.8	164.6	116.8	114.9	115.1	114.2	118.0	115.0	8.8	8.8
1975.....	149.6	179.6	128.2	126.0	124.9	128.2	129.4	125.7	9.3	9.3
1976.....	155.3	185.6	136.6	133.5	132.4	135.7	138.3	132.2	5.2	5.2
1977.....	161.9	205.5	146.3	142.8	141.9	144.6	148.4	139.7	5.8	5.7
1978.....	172.6	214.1	157.3	153.1	152.7	153.8	159.7	150.3	7.4	7.5
1979.....	192.5	246.1	170.4	164.8	166.0	162.5	173.7	163.3	8.6	8.7
1980.....	212.9	289.4	189.2	185.2	187.5	180.8	191.5	178.6	9.2	9.4
1981.....	230.8	293.4	207.9	207.7	209.3	204.5	208.1	195.0	9.4	9.2
1982.....	236.0	278.9	222.5	222.0	227.7	210.0	222.9	207.2	6.0	6.3
1983 ^p	241.7	272.3	235.3	233.3	237.8	222.0	236.6	215.7	4.2	4.1
1981:										
I.....	228.7	298.5	201.8	201.0	201.9	199.3	202.2	189.5	10.6	8.7
II.....	229.7	298.5	205.4	204.2	206.4	199.7	206.1	192.7	5.9	6.9
III.....	231.2	289.4	209.3	207.9	208.3	207.0	210.2	196.8	9.4	8.8
IV.....	233.8	287.7	215.1	217.0	220.0	211.2	213.8	201.1	9.0	8.9
1982:										
I.....	236.1	281.8	217.6	218.0	222.7	209.1	217.3	203.7	4.3	5.3
II.....	236.0	273.6	221.0	221.3	225.1	212.3	220.9	206.4	5.6	5.5
III.....	236.3	281.8	224.4	223.8	228.3	213.9	224.7	208.2	3.7	3.4
IV.....	235.6	278.5	226.8	224.4	234.3	205.7	228.5	210.6	3.8	4.7
1983:										
I.....	238.0	265.4	231.3	230.9	234.9	221.7	231.6	213.3	5.5	5.2
II.....	240.2	270.7	234.0	232.7	236.7	222.6	234.8	214.7	3.3	2.8
III.....	242.5	278.1	236.5	233.8	238.8	221.7	238.3	216.4	3.6	3.2
IV ^p	246.0	274.0	239.3	235.8	240.7	222.2	241.6	218.4	3.9	3.8

¹ Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.² 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, 1959–83

(Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted)

Year or quarter	Gross national product	Personal consumption expenditures	Gross private domestic investment ¹			Exports and imports of goods and services ¹		Government purchases of goods and services					Percent change from preceding period, gross national product fixed-weighted price index ²
			Fixed investment			Exports	Imports	Total	Federal			State and local	
			Total	Nonresidential	Residential				Total	National defense	Non-defense		
1959.....	69.8	73.1	74.4	74.1	74.9	73.4	75.0	56.9	58.5			55.8	
1960.....	70.8	74.1	74.7	74.5	74.9	75.0	76.0	58.3	59.6			57.4	1.5
1961.....	71.6	74.8	74.4	74.3	74.7	76.0	75.2	59.5	60.5			58.9	1.1
1962.....	72.4	75.5	74.2	74.4	73.9	76.0	73.7	61.3	61.7			61.0	1.2
1963.....	73.2	76.3	74.0	74.7	72.6	76.3	74.7	62.8	63.3			62.5	1.1
1964.....	74.1	77.2	74.3	75.3	72.6	77.1	76.3	64.4	65.3			63.9	1.2
1965.....	75.3	78.2	75.2	76.1	73.5	79.4	77.1	66.2	67.1			65.6	1.7
1966.....	77.5	80.1	77.0	77.9	75.3	81.8	78.8	69.2	69.6			68.8	2.9
1967.....	79.8	82.0	79.3	80.3	77.5	83.3	79.3	72.4	71.5			73.1	3.0
1968.....	83.1	85.0	82.5	83.3	81.0	85.5	80.7	76.4	75.7			76.9	4.1
1969.....	87.3	88.7	87.3	87.0	87.8	88.5	83.0	81.3	79.8			82.3	5.0
1970.....	91.8	92.7	91.2	91.6	90.6	93.1	88.4	87.9	86.7			88.7	5.2
1971.....	96.2	96.6	95.8	96.3	94.9	97.0	93.3	94.0	92.9			94.8	4.8
1972.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4.0
1973.....	106.0	106.1	105.8	104.0	109.2	112.6	116.7	106.9	106.7	106.9	106.1	107.0	6.0
1974.....	115.9	117.1	117.9	116.5	120.5	137.4	161.5	117.9	117.0	117.5	115.6	118.4	9.4
1975.....	126.4	126.3	132.3	132.9	131.2	151.8	175.1	129.2	128.0	127.9	128.3	130.0	9.1
1976.....	133.7	133.0	140.2	139.9	140.8	156.9	178.7	137.3	135.4	135.6	135.0	138.5	5.8
1977.....	142.2	141.2	151.8	148.5	158.0	164.0	195.0	147.0	145.0	145.5	143.6	148.4	6.3
1978.....	153.3	151.6	167.0	160.9	178.4	174.9	210.1	158.4	155.4	156.5	152.6	160.4	7.8
1979.....	167.8	166.3	185.4	177.2	200.8	197.2	244.5	173.2	169.5	171.7	164.0	175.7	9.5
1980.....	184.2	184.8	204.1	195.9	219.5	218.4	304.4	193.8	192.7	196.7	182.6	194.5	9.8
1981.....	201.8	201.7	221.1	213.7	235.0	238.3	319.4	212.2	215.0	220.1	201.7	210.4	9.5
1982.....	214.7	213.2	231.5	225.7	242.4	244.1	309.4	226.4	230.6	236.7	215.0	223.6	6.4
1983 P.....	223.9	222.0	235.1	230.3	244.3	249.2	299.5	236.9	238.1	244.0	222.9	236.2	4.3
1981:													
I.....	195.8	196.4	215.1	207.2	230.0	235.2	321.9	206.1	208.0	212.3	196.9	204.9	10.2
II.....	199.5	199.9	219.1	211.9	232.9	237.6	324.3	210.1	212.4	217.5	199.4	208.5	7.9
III.....	203.8	203.6	223.3	215.7	237.5	239.5	316.2	213.4	215.0	220.0	202.2	212.4	8.9
IV.....	208.0	207.0	227.2	219.8	241.2	241.3	315.7	219.3	224.5	230.6	208.7	215.8	8.4
1982:													
I.....	210.7	209.4	229.7	222.4	243.4	243.7	315.6	222.2	227.1	233.2	211.6	218.9	5.3
II.....	213.1	211.3	231.5	225.2	243.4	244.8	309.1	224.6	228.8	234.9	213.0	221.9	4.7
III.....	216.2	214.7	232.8	227.2	243.3	244.2	306.7	227.5	230.8	236.6	215.8	225.3	5.9
IV.....	218.7	217.4	232.5	228.6	240.0	243.9	306.1	231.4	235.6	241.9	219.7	228.6	4.7
1983:													
I.....	220.6	218.3	235.6	229.9	246.5	245.8	303.2	233.7	237.0	242.9	221.7	231.5	3.4
II.....	222.9	220.9	235.2	230.1	244.9	247.4	298.2	235.2	236.2	241.8	221.9	234.5	4.3
III.....	225.5	223.3	237.4	230.9	249.7	249.8	299.4	238.3	238.7	244.7	223.3	238.0	4.7
IV P.....	228.0	225.8	238.6	231.6	252.0	253.6	299.0	240.6	240.3	246.4	224.6	240.9	4.5

¹ Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

² Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-5.—*Changes in gross national product, personal consumption expenditures, and related price measures, 1929-83*

(Percent change from preceding period; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product					Personal consumption expenditures				
	Current dollars	Constant (1972) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1972 weights)	Current dollars	Constant (1972) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1972 weights)
1929	6.6	6.6	0.0							
1933	-4.2	-2.2	-2.1			-5.7	-2.0	-3.8		
1939	7.0	7.8	-8			4.6	5.3	-7		
1940	10.0	7.6	2.2			6.0	4.6	1.3		
1941	25.0	16.3	7.5			13.8	5.9	7.4		
1942	26.7	15.3	9.9			9.7	-1.0	10.8		
1943	21.3	15.1	5.3			12.2	2.9	9.0		
1944	9.6	7.1	2.4			8.8	2.8	5.8		
1945	.9	-1.5	2.4			10.5	6.2	4.1		
1946	-1.2	-14.7	15.7			20.3	11.1	8.3		
1947	11.1	-1.7	12.9			12.5	1.6	10.7		
1948	11.3	4.1	6.9			8.0	2.1	5.8		
1949	-5	.5	-9			1.9	2.3	-3		
1950	10.9	8.7	2.1			7.8	5.6	2.0		
1951	15.5	8.3	6.6			7.9	1.3	6.5		
1952	5.2	3.7	1.4			4.8	2.5	2.3		
1953	5.4	3.8	1.6			5.8	3.8	1.9		
1954	.0	-1.2	1.2			2.7	1.8	.9		
1955	9.0	6.7	2.2			7.6	6.5	1.0		
1956	5.4	2.1	3.2			4.9	2.9	1.9		
1957	5.3	1.8	3.4			5.4	2.1	3.3		
1958	1.3	-4	1.7			3.2	1.0	2.2		
1959	8.5	6.0	2.4			7.4	5.4	1.9		
1960	3.8	2.2	1.6	1.6	1.5	4.5	2.6	1.9	1.7	1.5
1961	3.6	2.6	.9	1.2	1.1	3.1	2.1	1.0	1.1	.9
1962	7.7	5.8	1.8	1.4	1.2	6.0	4.5	1.5	1.1	.9
1963	5.6	4.0	1.5	1.3	1.1	5.5	3.8	1.6	1.4	1.2
1964	6.9	5.3	1.5	1.4	1.2	6.9	5.5	1.4	1.2	1.1
1965	8.4	6.0	2.2	1.9	1.7	7.5	5.6	1.8	1.5	1.3
1966	9.4	6.0	3.2	3.1	2.9	8.1	5.1	2.9	2.7	2.4
1967	5.8	2.7	3.0	3.0	3.0	5.4	2.9	2.4	2.5	2.4
1968	9.2	4.6	4.4	4.3	4.1	9.5	5.3	4.0	3.8	3.6
1969	8.1	2.8	5.1	5.0	5.0	8.4	3.7	4.5	4.5	4.4
1970	5.2	-2	5.4	5.3	5.2	6.9	2.2	4.6	4.6	4.5
1971	8.6	3.4	5.0	4.9	4.8	8.1	3.7	4.3	4.3	4.2
1972	10.1	5.7	4.2	4.1	4.0	9.6	5.8	3.7	3.6	3.5
1973	11.8	5.8	5.8	6.0	6.0	10.2	4.2	5.7	6.1	6.1
1974	8.1	-6	8.8	9.1	9.4	9.4	-7	10.1	10.4	10.4
1975	8.0	-1.2	9.3	9.2	9.1	9.9	2.2	7.6	7.7	7.8
1976	10.9	5.4	5.2	5.7	5.8	11.0	5.6	5.1	5.3	5.3
1977	11.7	5.5	5.8	6.1	6.3	11.1	5.0	5.8	6.0	6.2
1978	12.8	5.0	7.4	7.6	7.8	11.8	4.5	7.0	7.3	7.4
1979	11.7	2.8	8.6	8.9	9.5	11.9	2.7	9.0	9.3	9.7
1980	8.8	-3	9.2	8.9	9.8	10.7	.5	10.2	10.7	11.1
1981	12.2	2.6	9.4	9.4	9.5	11.3	2.7	8.4	9.0	9.2
1982	4.0	-1.9	6.0	6.5	6.4	7.3	1.4	5.8	5.9	5.7
1983 P.	7.7	3.3	4.2	4.4	4.3	8.4	4.2	4.0	4.2	4.1
1981:										
I	20.5	9.0	10.6	9.6	10.2	14.7	5.9	8.3	9.9	10.6
II	6.6	.7	5.9	7.6	7.9	7.5	.5	7.0	7.3	7.5
III	13.3	3.6	9.4	9.0	8.9	11.4	3.5	7.7	7.8	7.5
IV	3.7	-4.9	9.0	8.2	8.4	3.9	-3.0	7.0	7.0	6.8
1982:										
I	-1.4	-5.5	4.3	5.6	5.3	7.5	2.4	5.0	5.2	4.8
II	6.6	1.0	5.6	5.2	4.7	7.2	3.1	4.0	3.9	3.5
III	2.7	-1.0	3.7	5.9	5.9	7.5	.9	6.5	6.4	6.7
IV	2.5	-1.3	3.8	5.0	4.7	7.8	3.6	4.1	5.1	5.1
1983:										
I	8.2	2.6	5.5	3.6	3.4	5.2	2.9	2.2	2.3	1.6
II	13.3	9.7	3.3	4.3	4.3	15.1	10.0	4.6	4.7	4.9
III	11.5	7.6	3.6	4.5	4.7	6.5	2.2	4.2	4.2	4.4
IV P.	8.6	4.5	3.9	4.6	4.5	9.9	6.5	3.1	4.5	4.5

Note.—Changes are based on unrounded data and may differ slightly from changes computed from data shown elsewhere in these tables.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-6.—Gross national product by major type of product, 1929-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods								Services	Structures	Auto output
				Total			Durable goods		Nondurable goods					
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change				
1929	103.4	101.7	1.7	56.1	54.4	1.7	16.1	1.4	38.3	0.3	35.9	11.4		
1933	55.8	57.4	-1.6	27.0	28.6	-1.6	5.4	-5	23.2	-1.1	25.9	2.9		
1939	90.9	90.5	.4	49.0	48.6	.4	12.4	.3	36.2	.1	34.4	7.5		
1940	100.0	97.8	2.2	56.0	53.8	2.2	15.4	1.2	38.4	1.0	35.7	8.3		
1941	125.0	120.6	4.5	72.5	68.0	4.5	23.8	3.1	44.2	1.4	40.8	11.8		
1942	158.5	156.7	1.8	93.7	91.9	1.8	34.5	1.0	57.4	.7	50.8	14.0		
1943	192.1	192.8	-.6	120.4	121.0	-.6	54.2	.0	66.8	-.6	63.0	8.7		
1944	210.6	211.6	-1.0	132.3	133.3	-1.0	58.5	-.6	74.8	-.3	72.3	6.1		
1945	212.4	213.5	-1.0	128.9	129.9	-1.0	50.1	-1.3	79.8	.2	77.0	6.5		
1946	209.8	203.5	6.4	125.3	118.9	6.4	31.8	5.3	87.1	1.1	68.8	15.7		
1947	233.1	233.5	-.5	139.8	140.3	-.5	44.4	1.4	95.9	-1.9	71.6	21.7	7.2	
1948	259.5	254.8	4.7	154.4	149.7	4.7	48.0	1.0	101.7	3.7	77.2	28.0	8.8	
1949	258.3	261.4	-3.1	147.7	150.8	-3.1	50.0	-1.8	100.9	-1.3	82.2	28.4	11.9	
1950	286.5	279.7	6.8	162.4	155.6	6.8	56.2	3.6	99.4	3.2	88.5	35.6	15.4	
1951	330.8	320.5	10.3	189.5	179.2	10.3	66.4	6.1	112.8	4.2	103.5	37.8	13.3	
1952	348.0	344.8	3.1	194.6	191.5	3.1	72.5	1.2	119.0	2.0	113.9	39.4	12.0	
1953	366.8	366.3	.4	203.1	202.7	.4	77.8	1.5	124.9	-1.1	121.6	42.0	16.1	
1954	366.8	368.4	-1.5	196.1	197.6	-1.5	73.9	-2.5	123.7	1.0	126.2	44.5	14.7	
1955	400.0	394.1	6.0	214.5	208.5	6.0	81.4	3.4	127.1	2.6	136.1	49.5	21.2	
1956	421.7	417.0	4.7	223.3	218.6	4.7	85.9	2.1	132.7	2.6	146.2	52.2	16.9	
1957	444.0	442.6	1.3	232.3	231.0	1.3	91.3	.5	139.6	.8	158.7	53.0	19.4	
1958	449.7	451.2	-1.5	228.2	229.7	-1.5	84.4	-2.8	145.3	1.3	167.7	53.8	14.4	
1959	487.9	482.2	5.7	248.5	242.9	5.7	90.8	3.1	152.1	2.5	179.8	59.5	19.4	
1960	506.5	503.6	3.0	254.2	251.3	3.0	93.3	1.6	158.0	1.3	193.8	58.5	21.3	
1961	524.6	522.2	2.3	257.4	255.0	2.3	92.7	-.1	162.4	2.4	207.0	60.2	17.8	
1962	565.0	558.8	6.3	278.5	272.2	6.3	102.9	3.4	169.3	2.8	222.0	64.5	22.5	
1963	596.7	590.7	6.0	290.3	284.3	6.0	109.4	2.7	174.9	3.3	237.1	69.3	25.2	
1964	637.7	632.1	5.6	309.8	304.2	5.6	118.9	4.0	185.3	1.6	255.0	72.9	25.9	
1965	691.1	681.2	9.9	338.4	328.5	9.9	131.6	6.7	196.9	3.2	273.3	79.3	31.2	
1966	756.0	741.9	14.1	375.0	360.9	14.1	147.0	10.2	213.9	3.9	299.0	82.0	30.4	
1967	799.6	789.3	10.3	389.4	379.1	10.3	153.5	5.5	225.6	4.9	326.5	83.6	28.0	
1968	873.4	865.5	7.9	421.3	413.4	7.9	167.9	4.7	245.5	3.1	358.2	94.0	35.1	
1969	944.0	934.2	9.8	450.2	440.4	9.8	178.5	6.4	261.9	3.4	391.9	101.8	34.9	
1970	992.7	989.5	3.2	459.9	456.6	3.2	179.2	-.1	277.5	3.3	429.9	102.9	28.7	
1971	1,077.6	1,070.0	7.7	485.3	477.7	7.7	187.1	2.8	290.6	4.8	472.0	120.3	39.1	
1972	1,185.9	1,175.7	10.2	529.6	519.4	10.2	207.4	7.2	312.0	3.0	519.0	137.3	41.6	
1973	1,326.4	1,307.9	18.5	604.1	585.6	18.5	237.6	13.1	348.0	5.3	571.5	150.8	46.2	
1974	1,434.2	1,420.1	14.1	646.7	632.5	14.1	250.7	12.0	381.8	2.2	636.1	151.4	39.2	
1975	1,549.2	1,556.1	-6.9	694.0	700.9	-6.9	279.4	-8.4	421.5	1.5	705.2	150.0	40.7	
1976	1,718.0	1,706.2	11.8	771.1	759.3	11.8	312.5	7.7	446.7	4.2	779.3	167.6	55.9	
1977	1,918.3	1,895.3	23.0	855.0	832.0	23.0	354.9	10.4	477.2	12.6	867.2	196.1	65.1	
1978	2,163.9	2,137.4	26.5	958.6	932.1	26.5	402.1	19.1	530.1	7.3	972.2	233.1	69.5	
1979	2,417.8	2,403.5	14.3	1,065.6	1,051.3	14.3	454.3	10.5	597.0	3.8	1,089.7	262.5	68.0	
1980	2,631.7	2,641.5	-9.8	1,140.6	1,150.4	-9.8	482.0	-4.1	668.4	-5.7	1,225.2	265.9	60.8	
1981	2,954.1	2,935.6	18.5	1,291.8	1,273.4	18.5	524.3	3.6	749.1	14.8	1,374.2	288.0	70.4	
1982	3,073.0	3,097.5	-24.5	1,280.9	1,305.4	-24.5	516.3	-15.5	789.1	-9.1	1,511.1	281.0	66.6	
1983 P.	3,309.5	3,316.4	-6.9	1,362.0	1,368.9	-6.9	549.0	-4.2	819.9	-2.8	1,637.8	309.7	88.6	
1981:														
I	2,866.6	2,855.7	10.9	1,260.8	1,249.9	10.9	520.4	-1.4	729.6	12.3	1,319.2	286.5	69.9	
II	2,912.5	2,897.5	15.0	1,273.9	1,258.8	15.0	525.6	8.1	733.2	6.9	1,349.7	288.9	75.4	
III	3,004.9	2,971.4	33.6	1,325.2	1,291.6	33.6	535.7	14.0	755.9	19.6	1,392.5	287.3	73.1	
IV	3,032.2	3,017.9	14.3	1,307.5	1,293.2	14.3	515.6	-6.3	777.6	20.6	1,435.5	289.2	63.3	
1982:														
I	3,021.4	3,047.1	-25.7	1,281.1	1,306.8	-25.7	517.2	-20.8	789.6	-4.9	1,460.6	279.7	56.3	
II	3,070.2	3,081.4	-11.2	1,290.8	1,302.0	-11.2	516.8	-2.5	785.2	-8.7	1,496.4	283.0	70.5	
III	3,090.7	3,095.6	-4.9	1,286.6	1,291.5	-4.9	512.0	6.4	779.5	-11.3	1,527.2	276.9	73.7	
IV	3,109.6	3,165.9	-56.4	1,264.8	1,321.2	-56.4	519.0	-45.0	802.2	-11.4	1,560.5	284.3	66.0	
1983:														
I	3,171.5	3,210.9	-39.4	1,292.2	1,331.6	-39.4	520.9	-38.2	810.6	-1.2	1,588.4	290.9	78.5	
II	3,272.0	3,286.6	-14.5	1,346.8	1,361.3	-14.5	545.7	-8.9	815.7	-5.7	1,623.4	301.9	80.9	
III	3,362.2	3,353.7	8.5	1,388.9	1,380.4	8.5	555.9	13.1	824.5	-4.5	1,651.0	322.3	95.0	
IV	3,432.0	3,414.3	17.7	1,419.9	1,402.2	17.7	573.5	17.4	828.7	.3	1,688.5	323.6	100.0	

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-7.—Gross national product by major type of product in 1972 dollars, 1929-83

(Billions of 1972 dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product	Final sales	Inventory change	Goods						Services	Structures	Auto output
				Total			Durable goods		Nondurable goods			
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change		
1929	315.7	311.0	4.6	144.3	139.7	4.6	40.4	3.5	99.3	1.1	127.4	43.9
1933	222.1	227.0	-4.9	97.5	102.3	-4.9	17.5	-2.1	84.9	-2.8	110.7	14.0
1939	319.8	318.2	1.6	154.3	152.7	1.6	35.5	.7	117.2	.9	135.2	30.3
1940	344.1	337.9	6.2	171.7	165.5	6.2	43.1	3.4	122.4	2.8	139.9	32.5
1941	400.4	388.4	12.0	198.6	186.6	12.0	57.8	8.2	128.7	3.8	158.5	43.3
1942	461.7	456.5	5.2	221.4	216.2	5.2	75.7	3.5	140.5	1.7	193.9	46.3
1943	531.6	531.5	.1	263.3	263.3	.1	118.8	.7	144.4	-6	242.0	26.2
1944	569.1	571.4	-2.3	287.3	289.6	-2.3	135.9	-1.8	153.7	-5	263.7	18.1
1945	560.4	564.0	-3.6	278.5	282.2	-3.6	121.2	-3.7	161.0	-1	263.0	18.8
1946	478.3	466.1	12.2	238.3	226.2	12.2	60.3	10.8	165.8	1.3	200.8	39.1
1947	470.3	470.6	-.2	237.7	237.9	-.2	75.5	1.4	162.4	-1.6	188.1	44.6
1948	489.8	484.3	5.5	244.8	239.4	5.5	77.3	1.6	162.1	3.8	192.5	52.4
1949	492.2	496.6	-4.4	240.3	244.7	-4.4	78.3	-2.9	166.4	-1.5	198.3	53.6
1950	534.8	524.2	10.6	261.5	250.9	10.6	86.1	5.5	164.8	5.1	207.4	65.9
1951	579.4	565.6	13.7	283.7	270.0	13.7	98.2	9.0	171.8	4.7	231.3	64.3
1952	600.8	596.5	4.3	292.1	287.8	4.3	107.9	1.7	179.9	2.6	243.2	65.5
1953	623.6	622.1	1.5	306.8	305.3	1.5	116.2	2.3	189.1	-8	247.5	69.3
1954	616.1	618.2	-2.2	292.7	294.9	-2.2	109.0	-3.7	185.9	1.5	249.1	74.3
1955	657.5	649.8	7.7	316.7	309.0	7.7	117.2	4.5	191.9	3.2	260.1	80.7
1956	671.6	665.8	5.8	320.9	315.1	5.8	117.8	2.9	197.2	2.9	270.2	80.5
1957	683.8	682.2	1.5	321.7	320.2	1.5	119.4	.9	200.8	.6	282.4	79.7
1958	680.9	682.7	-1.8	311.6	313.4	-1.8	109.2	-3.4	204.3	1.6	287.6	81.7
1959	721.7	714.7	7.0	332.5	325.5	7.0	113.6	3.9	211.9	3.1	299.4	89.8
1960	737.2	733.7	3.5	335.8	332.3	3.5	115.6	2.0	216.6	1.6	312.5	89.0
1961	756.6	753.7	3.0	338.0	335.0	3.0	114.7	-1	220.3	3.0	326.9	91.7
1962	800.3	792.4	7.8	361.3	353.5	7.8	125.7	4.2	227.8	3.7	341.5	97.4
1963	832.5	825.0	7.5	372.2	364.7	7.5	132.5	3.4	232.2	4.2	356.2	104.1
1964	876.4	869.3	7.1	393.8	386.7	7.1	143.0	5.1	243.7	1.9	374.0	108.6
1965	929.3	917.5	11.8	422.6	410.8	11.8	157.2	8.2	253.6	3.6	390.7	116.0
1966	984.8	968.0	16.8	456.4	439.6	16.8	174.0	12.3	265.6	4.5	412.6	115.9
1967	1,011.4	999.2	12.2	463.4	451.2	12.2	178.3	6.6	272.9	5.6	434.1	113.9
1968	1,058.1	1,049.1	9.0	483.1	474.1	9.0	187.4	5.4	286.7	3.6	453.0	122.0
1969	1,087.6	1,076.6	11.1	496.0	484.9	11.1	193.0	7.2	291.9	3.9	469.2	122.5
1970	1,085.6	1,081.8	3.8	486.9	483.2	3.8	187.5	.0	295.7	3.7	482.4	116.3
1971	1,122.4	1,114.3	8.1	497.2	489.1	8.1	188.7	3.0	300.4	5.1	497.8	127.3
1972	1,185.9	1,175.7	10.2	529.6	519.4	10.2	207.4	7.2	312.0	3.0	519.0	137.3
1973	1,254.3	1,237.1	17.2	572.3	555.1	17.2	236.1	12.7	319.0	4.5	542.8	139.1
1974	1,246.3	1,234.7	11.6	562.5	550.9	11.6	234.1	9.4	316.8	2.2	562.8	121.0
1975	1,231.6	1,238.4	-6.7	547.4	554.2	-6.7	230.2	-6.4	324.0	-3	575.9	108.3
1976	1,298.2	1,290.4	7.8	587.2	579.4	7.8	242.7	5.4	336.7	2.4	595.0	116.0
1977	1,369.7	1,356.4	13.3	628.1	614.8	13.3	264.7	6.9	350.1	6.3	617.3	124.4
1978	1,438.6	1,422.6	16.0	662.0	645.9	16.0	285.4	11.8	360.5	4.3	644.7	131.9
1979	1,479.4	1,472.2	7.3	677.7	670.4	7.3	299.1	6.2	371.3	1.1	670.7	131.0
1980	1,475.0	1,479.4	-4.4	668.1	672.5	-4.4	290.4	-1.9	382.1	-2.5	687.7	119.1
1981	1,513.8	1,505.3	8.5	692.6	684.1	8.5	292.5	1.6	391.7	6.9	702.7	118.5
1982	1,485.4	1,494.8	-9.4	661.6	671.0	-9.4	276.1	-6.5	394.9	-2.9	712.2	111.6
1983 P.	1,534.8	1,537.2	-2.4	687.0	689.4	-2.4	291.2	-1.5	398.3	-9	725.2	122.6
1981:												
I	1,510.1	1,507.0	3.0	691.2	688.2	3.0	298.9	-1.5	389.4	4.5	696.9	121.9
II	1,512.5	1,503.6	8.9	692.3	683.4	8.9	294.8	4.4	388.7	4.5	700.0	120.3
III	1,525.8	1,509.7	16.1	703.2	687.1	16.1	295.1	5.8	392.0	10.3	705.4	117.2
IV	1,506.9	1,500.9	6.0	683.7	677.7	6.0	281.2	-2.4	396.5	8.4	708.5	114.7
1982:												
I	1,485.8	1,495.9	-10.2	668.1	678.3	-10.2	280.9	-9.1	397.4	-1.0	707.1	110.6
II	1,489.3	1,492.7	-3.4	664.6	668.1	-3.4	276.5	-1.1	391.6	-2.3	712.8	111.9
III	1,485.7	1,487.0	-1.3	661.6	663.0	-1.3	271.6	3.2	391.3	-4.6	713.9	110.2
IV	1,480.7	1,503.4	-22.7	652.1	674.8	-22.7	275.3	-18.9	399.4	-3.8	715.0	113.6
1983:												
I	1,490.1	1,505.5	-15.4	656.9	672.3	-15.4	277.0	-15.7	395.2	.3	717.8	115.4
II	1,525.1	1,530.5	-5.4	681.8	687.2	-5.4	291.1	-3.7	396.1	-1.7	723.0	120.3
III	1,553.4	1,549.7	3.8	699.0	695.3	3.8	294.1	5.8	401.2	-2.0	727.0	127.3
IV	1,570.5	1,563.0	7.5	710.4	702.9	7.5	302.4	7.7	400.5	-2	732.9	127.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-8.—*Gross national product by sector, 1929-83*
 [Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world
		Total	Business ¹				Households and institutions	Government ²			
			Total ¹	Nonfarm ¹	Farm	Statistical discrepancy		Total	Federal	State and local	
1929.....	103.4	102.6	95.4	84.7	9.7	1.1	2.9	4.3	0.9	3.5	0.8
1933.....	55.8	55.5	49.1	43.8	4.6	.7	1.7	4.7	1.2	3.5	.3
1939.....	90.9	90.5	80.6	72.9	6.3	1.4	2.3	7.6	3.4	4.2	.5
1940.....	100.0	99.6	89.4	81.8	6.4	1.1	2.4	7.8	3.5	4.3	.4
1941.....	125.0	124.5	112.6	103.1	8.9	.6	2.5	9.4	5.0	4.4	.5
1942.....	158.5	157.9	139.9	127.7	13.0	— .8	2.9	15.1	10.6	4.5	.5
1943.....	192.1	191.6	162.8	149.3	15.3	— 1.8	3.2	25.6	20.9	4.7	.5
1944.....	210.6	210.1	174.2	156.2	15.3	2.7	3.7	32.2	27.2	4.9	.5
1945.....	212.4	212.0	172.8	152.7	16.0	4.1	4.1	35.2	29.8	5.4	.4
1946.....	209.8	209.0	183.8	164.4	18.8	.5	4.5	20.8	14.6	6.2	.8
1947.....	233.1	231.8	210.0	188.2	20.2	1.5	5.1	16.7	9.4	7.3	1.2
1948.....	259.5	257.9	234.9	213.1	23.3	— 1.6	5.6	17.4	8.9	8.5	1.6
1949.....	258.3	256.9	231.5	212.2	18.8	.6	5.9	19.4	10.0	9.4	1.4
1950.....	286.5	284.8	257.5	236.3	20.0	1.3	6.4	20.9	10.7	10.1	1.6
1951.....	330.8	328.7	294.4	268.3	22.9	3.2	6.9	27.4	16.2	11.2	2.1
1952.....	348.0	345.7	307.3	283.4	22.2	1.7	7.2	31.2	18.9	12.3	2.3
1953.....	366.8	364.6	324.9	302.3	20.3	2.3	7.8	31.9	18.6	13.3	2.2
1954.....	366.8	364.5	323.9	302.3	19.7	2.0	8.1	32.5	17.8	14.7	2.3
1955.....	400.0	397.3	354.0	333.9	18.8	1.3	9.1	34.2	18.4	15.8	2.8
1956.....	421.7	418.5	372.1	355.7	18.6	— 2.1	9.8	36.6	19.0	17.6	3.2
1957.....	444.0	440.5	390.8	373.7	18.4	— 1.2	10.5	39.1	19.6	19.6	3.5
1958.....	449.7	446.6	393.1	372.2	20.7	.2	11.4	42.1	20.5	21.6	3.0
1959.....	487.9	484.6	428.3	410.6	19.0	— 1.3	12.3	44.0	20.9	23.1	3.3
1960.....	506.5	502.9	442.0	424.2	20.2	— 2.4	13.8	47.1	21.7	25.5	3.6
1961.....	524.6	520.7	455.7	435.7	20.2	— 1.1	14.4	50.5	22.6	27.9	3.9
1962.....	565.0	560.5	490.6	460.5	20.4	2.1	15.5	54.3	24.1	30.2	4.6
1963.....	596.7	591.8	517.2	495.0	20.5	1.7	16.6	58.0	25.2	32.9	4.9
1964.....	637.7	632.3	551.6	532.2	19.3	.1	17.8	62.9	27.0	35.9	5.5
1965.....	691.1	685.2	598.4	577.7	21.9	— 1.2	19.2	67.6	28.3	39.3	5.9
1966.....	756.0	750.3	652.6	628.4	22.8	1.4	21.1	76.5	32.4	44.1	5.6
1967.....	799.6	793.7	685.1	663.3	22.1	— .3	23.4	85.1	35.6	49.5	5.9
1968.....	873.4	866.7	745.4	725.0	22.6	— 2.1	26.1	95.2	39.3	55.9	6.7
1969.....	944.0	937.1	803.2	782.1	25.1	— 3.9	29.4	104.5	41.9	62.6	6.9
1970.....	992.7	985.4	837.3	813.1	25.8	— 1.5	32.3	115.8	44.8	71.1	7.3
1971.....	1,077.6	1,068.5	907.1	875.4	27.6	4.1	35.4	126.0	46.8	79.3	9.2
1972.....	1,185.9	1,175.0	998.6	963.4	31.9	3.3	38.6	137.8	50.1	87.7	10.9
1973.....	1,326.4	1,310.4	1,118.7	1,068.0	49.9	.8	42.1	149.6	51.9	97.7	16.0
1974.....	1,434.2	1,414.4	1,206.4	1,155.0	47.7	3.7	45.8	162.2	54.9	107.3	19.8
1975.....	1,549.2	1,531.9	1,301.7	1,247.3	48.9	5.5	50.6	179.6	59.0	120.6	17.3
1976.....	1,718.0	1,697.5	1,447.3	1,396.3	45.9	5.1	55.6	194.6	62.4	132.3	20.5
1977.....	1,918.3	1,894.9	1,624.0	1,574.2	48.4	1.4	60.5	210.3	66.3	144.0	23.5
1978.....	2,163.9	2,134.3	1,837.2	1,781.0	58.7	— 2.6	67.8	229.3	71.7	157.6	29.6
1979.....	2,417.8	2,375.2	2,052.1	1,982.1	71.6	— 1.5	75.6	247.4	75.7	171.8	42.6
1980.....	2,631.7	2,586.4	2,228.1	2,158.2	67.7	2.3	85.3	273.0	82.9	190.0	45.3
1981.....	2,954.1	2,904.5	2,509.0	2,432.8	81.1	— 4.9	96.2	299.3	92.8	206.5	49.6
1982.....	3,073.0	3,025.7	2,594.6	2,520.0	74.1	.5	107.0	324.1	101.1	223.0	47.3
1983 *.....	3,309.5	3,263.4	2,802.0	2,730.9	71.0	.1	114.9	346.5	106.1	240.4	46.1
1981:											
I.....	2,866.6	2,819.0	2,434.8	2,354.4	75.4	5.1	92.7	291.5	90.2	201.3	47.6
II.....	2,912.5	2,865.9	2,475.5	2,399.8	79.8	— 4.2	94.9	295.5	90.8	204.7	46.6
III.....	3,004.9	2,955.2	2,558.4	2,483.9	86.6	— 12.0	97.2	299.6	91.5	208.1	49.8
IV.....	3,032.2	2,977.9	2,567.2	2,493.1	82.5	— 8.5	100.2	310.5	98.5	212.0	54.3
1982:											
I.....	3,021.4	2,974.5	2,555.2	2,482.4	79.5	— 6.7	103.3	316.0	99.5	216.5	46.9
II.....	3,070.2	3,020.6	2,593.8	2,521.8	70.3	1.7	105.6	321.2	100.1	221.1	49.6
III.....	3,090.7	3,044.2	2,610.1	2,536.6	70.9	2.5	108.5	325.7	100.7	225.0	46.6
IV.....	3,109.6	3,063.5	2,619.1	2,539.1	75.8	4.2	110.8	333.7	104.2	229.5	46.0
1983:											
I.....	3,171.5	3,127.2	2,675.5	2,601.8	74.9	— 1.2	112.2	339.5	105.6	233.8	44.3
II.....	3,272.0	3,227.9	2,769.8	2,700.5	72.7	— 3.5	114.1	344.1	106.0	238.1	44.1
III.....	3,362.2	3,314.1	2,849.8	2,779.0	68.3	2.5	115.6	348.8	106.2	242.6	48.1
IV *.....	3,432.0	3,384.0	2,912.7	2,842.4	67.9	2.5	117.7	353.6	106.6	246.9	47.9

¹ Includes compensation of employees in government enterprises.

² Compensation of government employees.

³ 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-9.—Gross national product by sector in 1972 dollars, 1929-83

(Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product	Gross domestic product									Rest of the world
		Total	Business ¹				Households and institutions	Government ²			
			Total ¹	Nonfarm ¹	Farm	Statistical discrepancy		Total	Federal	State and local	
1929.....	315.7	313.2	271.5	244.7	23.6	3.1	15.6	26.2	5.2	21.0	2.4
1933.....	222.1	220.9	180.0	152.5	24.9	2.6	12.2	28.8	6.6	22.1	1.3
1939.....	319.8	318.2	261.0	231.3	25.2	4.6	15.1	42.1	16.9	25.2	1.6
1940.....	344.1	342.8	282.7	254.6	24.5	3.6	16.1	44.0	18.6	25.4	1.4
1941.....	400.4	398.7	327.6	299.8	26.2	1.6	15.9	55.2	29.6	25.6	1.7
1942.....	461.7	460.1	361.8	335.3	28.6	-2.1	16.4	81.9	56.7	25.2	1.5
1943.....	531.6	530.3	385.6	362.1	27.7	-4.2	15.2	129.4	105.0	24.5	1.3
1944.....	569.1	567.7	403.6	370.1	27.1	6.4	15.1	149.1	125.2	23.9	1.4
1945.....	560.4	559.3	397.9	362.8	25.6	9.4	15.0	146.4	121.8	24.6	1.1
1946.....	478.3	476.4	385.5	358.6	25.8	1.1	15.1	75.9	49.7	26.2	1.8
1947.....	470.3	467.8	393.8	367.0	24.0	2.9	16.0	58.0	29.8	28.2	2.5
1948.....	489.8	486.8	412.0	389.0	25.8	-2.8	16.7	58.1	29.2	29.0	3.0
1949.....	492.2	489.4	409.8	383.4	25.6	.8	17.3	62.3	31.3	31.0	2.7
1950.....	534.8	531.8	448.7	419.4	27.0	2.4	18.3	64.7	32.7	32.0	3.0
1951.....	579.4	575.6	478.0	447.2	25.8	5.0	18.7	79.0	46.2	32.8	3.7
1952.....	600.8	596.9	492.8	463.7	26.4	2.6	18.6	85.5	51.6	33.9	3.9
1953.....	623.6	619.8	515.6	484.3	27.7	3.6	19.3	85.0	49.6	35.4	3.7
1954.....	616.1	612.1	508.5	477.0	28.4	3.1	19.4	84.1	47.2	36.9	4.0
1955.....	657.5	653.0	547.0	516.0	29.3	1.8	21.4	84.6	45.9	38.6	4.5
1956.....	671.6	666.5	557.4	531.5	28.9	-3.0	22.5	86.7	45.6	41.0	5.1
1957.....	683.8	678.3	566.1	539.5	28.2	-1.7	23.1	89.1	45.8	43.3	5.5
1958.....	680.9	676.2	561.7	532.0	29.3	.3	24.2	90.3	44.5	45.8	4.6
1959.....	721.7	716.8	600.0	574.0	27.8	-1.9	24.7	92.2	44.5	47.7	4.9
1960.....	737.2	732.0	610.1	584.2	29.2	-3.3	26.6	95.3	45.2	50.1	5.2
1961.....	756.6	751.0	625.1	596.3	28.9	-2	27.0	98.9	46.2	52.7	5.7
1962.....	800.3	793.8	663.2	631.5	28.8	2.9	28.1	102.5	48.3	54.3	6.5
1963.....	832.5	825.6	691.6	659.7	29.6	2.3	28.9	105.2	48.2	57.0	6.9
1964.....	876.4	868.9	730.3	701.3	28.8	-2	29.8	108.8	48.5	60.4	7.5
1965.....	929.3	921.4	777.7	749.6	29.8	-1.6	30.9	112.7	48.7	64.0	7.9
1966.....	984.8	977.5	824.0	794.1	28.2	1.7	32.6	120.8	53.0	67.9	7.4
1967.....	1,011.4	1,003.9	842.0	812.8	29.5	-3	34.3	127.7	57.2	70.5	7.5
1968.....	1,058.1	1,050.0	882.1	855.6	29.0	-2.5	35.4	132.4	58.0	74.4	8.2
1969.....	1,087.6	1,079.7	907.1	881.9	29.5	-4.4	37.0	135.7	58.2	77.4	7.9
1970.....	1,085.6	1,077.6	904.8	875.4	31.1	-1.7	36.7	136.1	55.2	80.9	8.0
1971.....	1,122.4	1,112.8	938.6	901.7	32.6	4.2	37.6	136.7	52.5	84.2	9.5
1972.....	1,185.9	1,175.0	998.6	963.4	31.9	3.3	38.6	137.8	50.1	87.7	10.9
1973.....	1,254.3	1,239.2	1,060.7	1,028.4	31.6	7	39.4	139.1	48.2	90.8	15.1
1974.....	1,246.3	1,229.0	1,047.4	1,012.4	31.8	3.2	39.3	142.3	48.5	93.8	17.3
1975.....	1,231.6	1,217.8	1,032.4	994.5	33.6	4.4	40.5	144.9	48.4	96.5	13.8
1976.....	1,298.2	1,282.6	1,095.4	1,059.5	32.1	3.8	40.9	146.3	48.5	97.8	15.6
1977.....	1,369.7	1,352.8	1,163.7	1,129.5	33.1	1.0	41.5	147.7	48.6	99.1	16.9
1978.....	1,438.6	1,418.7	1,224.3	1,193.5	32.6	-1.8	43.3	151.2	49.3	101.9	19.9
1979.....	1,479.4	1,453.2	1,255.6	1,222.4	34.2	-1.0	44.6	153.0	49.0	104.1	26.3
1980.....	1,475.0	1,449.3	1,248.2	1,211.9	35.0	1.3	45.5	155.6	49.6	106.0	25.7
1981.....	1,513.8	1,488.2	1,285.8	1,247.7	40.6	-2.5	46.4	156.0	50.0	106.0	25.6
1982.....	1,485.4	1,462.3	1,259.6	1,220.4	39.0	2	46.7	156.1	50.5	105.6	23.1
1983 ^p	1,534.8	1,513.3	1,309.8	1,273.2	36.6	.0	47.5	156.0	50.8	105.2	21.5
1981:											
I.....	1,510.1	1,484.8	1,282.3	1,243.9	35.8	2.7	46.4	156.1	49.8	106.3	25.3
II.....	1,512.5	1,488.0	1,285.7	1,247.7	40.1	-2.2	46.4	156.0	49.9	106.1	24.5
III.....	1,525.8	1,500.3	1,298.1	1,261.2	43.1	-6.1	46.3	155.9	50.1	105.7	25.5
IV.....	1,506.9	1,479.6	1,277.2	1,237.9	43.5	-4.2	46.6	155.9	50.1	105.8	27.3
1982:											
I.....	1,485.8	1,462.5	1,259.9	1,220.8	42.4	-3.3	46.6	156.1	50.2	105.9	23.3
II.....	1,489.3	1,465.0	1,262.1	1,224.0	37.3	.8	46.6	156.3	50.3	106.0	24.3
III.....	1,485.7	1,463.1	1,260.4	1,223.4	35.7	1.2	46.8	156.0	50.5	105.4	22.6
IV.....	1,480.7	1,458.6	1,255.9	1,213.2	40.6	2.0	46.9	155.8	50.7	105.1	22.1
1983:											
I.....	1,490.1	1,469.2	1,266.1	1,227.5	39.2	-6	47.1	155.9	50.8	105.1	21.0
II.....	1,525.1	1,504.4	1,301.2	1,265.1	37.7	-1.6	47.3	156.0	50.8	105.1	20.7
III.....	1,553.4	1,531.1	1,327.5	1,290.9	35.5	1.1	47.6	156.0	50.8	105.2	22.3
IV ^p	1,570.5	1,548.5	1,344.4	1,309.3	33.9	1.1	48.0	156.1	50.8	105.2	22.0

¹ Includes compensation of employees in government enterprises.² Compensation of government employees.³ 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-10.—Gross national product by industry, 1947-82

(Billions of dollars)

Year	Gross national product	Gross domestic product											Rest of the world	
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises		Statistical discrepancy
					Total	Durable goods	Non-durable goods							
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.....	691.1	23.8	13.5	32.8	197.7	118.0	79.7	60.5	112.6	98.0	70.8	76.7	-1.2	5.9
1966.....	756.0	24.8	14.2	35.9	216.6	130.4	86.3	65.3	121.5	105.9	78.4	86.4	1.4	5.6
1967.....	799.6	24.2	14.6	37.5	222.3	133.6	88.7	68.6	130.1	114.2	86.1	96.3	-3	5.9
1968.....	873.4	25.0	15.3	41.3	242.8	146.0	96.8	74.0	144.4	123.8	94.2	108.1	-2.1	6.7
1969.....	944.0	27.8	16.1	46.3	256.7	154.5	102.2	80.0	157.0	133.6	105.3	118.2	-3.9	6.9
1970.....	992.7	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.....	1,077.6	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.....	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	10.9
1973.....	1,326.4	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.....	1,434.2	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.....	1,549.2	53.3	38.8	69.9	358.2	207.6	150.6	135.7	266.2	216.2	186.2	202.0	5.5	17.3
1976.....	1,718.0	51.2	43.0	76.6	410.4	240.0	170.4	152.6	291.4	238.6	208.2	220.4	5.1	20.5
1977.....	1,918.3	54.6	47.4	86.6	464.8	277.7	187.1	170.9	322.3	275.5	234.3	237.2	1.4	23.5
1978.....	2,163.9	66.0	52.0	102.1	518.7	316.7	202.0	193.3	362.3	317.4	265.9	259.1	-2.6	29.6
1979.....	2,417.8	79.6	66.8	115.7	563.2	344.3	218.9	209.6	401.4	358.3	302.4	279.6	-1.5	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.....	2,954.1	90.6	126.5	124.6	644.4	389.8	254.6	262.4	474.2	461.6	387.6	337.5	-4.9	49.6
1982.....	3,073.0	84.3	116.1	122.4	630.9	367.8	263.1	279.7	490.2	507.1	431.1	363.4	.5	47.3

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, 1947-82

[Billions of 1972 dollars]

Year	Gross national product	Gross domestic product													Rest of the world
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	Residual	
					Total	Durable goods	Non-durable goods								
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	929.3	32.8	15.7	54.4	236.7	144.6	92.0	73.4	148.2	128.5	103.1	127.8	-1.6	2.3	7.9
1966	984.8	31.3	16.5	54.6	254.9	157.3	97.6	79.4	156.3	133.9	109.0	136.9	1.7	3.0	7.4
1967	1,011.4	32.6	17.0	53.4	254.3	157.4	96.9	81.6	160.1	139.4	115.0	144.1	-.3	6.7	7.5
1968	1,058.1	32.1	17.6	56.9	268.2	165.5	102.7	88.2	169.9	145.7	118.8	148.9	-2.5	6.2	8.2
1969	1,087.6	32.7	18.2	55.8	277.2	170.3	106.8	92.6	173.6	152.9	124.0	152.5	-4.4	4.6	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	194.2	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	1,231.6	37.1	18.9	48.3	289.6	168.8	120.8	113.5	209.7	187.9	148.5	164.3	4.4	-4.2	13.8
1976	1,298.2	35.8	19.1	52.8	317.4	187.2	130.1	118.6	220.2	194.8	154.7	165.7	3.8	-.2	15.6
1977	1,369.7	36.9	19.5	55.0	339.2	202.9	136.3	125.1	231.0	207.2	164.3	167.5	1.0	6.0	16.9
1978	1,438.6	37.0	20.1	58.8	357.2	217.4	139.8	134.2	244.6	217.8	174.2	171.7	-1.8	4.9	19.9
1979	1,479.4	38.9	20.8	58.2	367.0	223.4	143.6	140.0	250.7	229.4	183.0	174.3	-1.0	-8.1	26.3
1980	1,475.0	39.9	21.6	52.2	351.0	210.2	140.8	139.6	246.0	235.6	189.1	177.5	1.3	-4.6	25.7
1981	1,513.8	45.6	22.5	50.5	361.1	217.2	144.0	142.9	251.8	245.4	198.7	177.9	-2.5	-5.8	25.6
1982	1,485.4	44.2	21.6	47.7	336.1	197.4	138.7	138.9	248.0	251.0	203.5	177.6	.2	-6.5	23.1

¹ 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, 1929-83

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross domestic product of non-financial corporate business	Capital consumption allowances with capital consumption adjustment	Net domestic product													
			Total	Indirect business tax, etc. ¹	Domestic income										Net interest	
					Total	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments							Inventory valuation adjustment		Capital consumption adjustment
							Total	Profits before tax	Profits tax liability	Profits after tax						
										Total	Dividends	Undistributed profits				
1929.....	50.1	5.5	44.5	3.4	41.2	32.3	7.5	8.4	1.2	7.3	5.1	2.2	0.5	-1.4	1.4	
1933.....	24.4	4.3	20.2	3.8	16.3	16.7	-2.1	6.1	5.5	1.2	2.0	-1.9	-2.1	-6	1.7	
1939.....	43.7	4.8	39.0	5.1	33.9	28.2	4.2	6.1	1.4	4.7	3.3	1.4	-7	-1.1	1.5	
1940.....	50.4	4.9	45.4	5.5	40.0	31.2	7.4	8.8	2.7	6.1	3.5	2.6	-2	-1.2	1.4	
1941.....	65.6	5.4	60.2	6.4	53.8	39.8	12.7	16.4	7.5	9.0	3.9	5.0	-2.5	-1.3	1.3	
1942.....	82.9	6.1	76.8	6.8	70.0	51.0	17.7	20.1	11.2	8.9	3.7	5.2	-1.2	-1.2	1.3	
1943.....	98.7	6.2	92.4	7.3	85.2	62.2	21.8	23.6	13.8	9.8	3.9	5.8	-8	-3	1.1	
1944.....	102.1	6.3	95.8	8.1	87.7	65.1	21.6	22.2	12.6	9.6	4.1	5.6	-3	-3	1.0	
1945.....	95.3	6.5	88.8	8.9	79.9	61.9	17.1	17.8	10.2	7.6	4.1	3.5	-6	-2	1.0	
1946.....	99.3	7.6	91.8	10.1	81.6	67.2	13.8	22.0	8.6	13.4	4.8	8.6	-5.3	-3.0	.7	
1947.....	120.0	9.3	110.7	11.2	99.6	79.1	19.7	29.1	10.8	18.3	5.5	12.8	-5.9	-3.5	.8	
1948.....	137.3	10.9	126.4	12.1	114.3	87.8	25.6	31.8	11.8	20.0	6.0	14.0	-2.2	-4.0	.9	
1949.....	133.5	11.7	121.8	12.6	109.2	85.3	22.9	24.9	9.3	15.6	6.0	9.6	-1.9	-3.9	1.0	
1950.....	151.9	12.6	139.3	14.1	125.2	94.7	29.6	38.5	16.9	21.6	7.5	14.1	-5.0	-3.9	.9	
1951.....	174.5	14.6	159.9	15.2	144.7	110.2	33.4	39.1	21.2	17.9	7.1	10.8	-1.2	-4.6	1.1	
1952.....	182.3	15.8	166.6	16.8	149.7	118.3	30.2	33.8	17.8	16.0	7.1	8.8	1.0	-4.5	1.2	
1953.....	195.0	16.8	178.2	18.2	160.0	128.7	30.0	34.9	18.5	16.4	7.3	9.1	-1.0	-3.9	1.3	
1954.....	191.9	17.9	174.0	17.4	156.6	126.5	28.6	32.1	15.6	16.4	7.4	9.0	-3	-3.2	1.5	
1955.....	216.7	19.1	197.6	19.2	178.4	138.5	38.3	42.0	20.2	21.8	8.5	13.4	-1.7	-2.0	1.6	
1956.....	231.6	21.8	209.8	20.8	189.0	151.4	35.9	41.8	20.1	21.8	9.0	12.7	-2.7	-3.2	1.7	
1957.....	242.3	23.8	218.5	22.4	196.1	159.1	34.9	39.8	19.1	20.7	9.3	11.4	-1.5	-3.4	2.2	
1958.....	236.3	24.8	211.6	22.8	188.8	155.9	30.2	33.7	16.2	17.5	9.3	8.2	-3	-3.2	2.7	
1959.....	266.0	25.8	240.2	25.4	214.8	171.6	40.1	43.1	20.7	22.4	10.0	12.4	-3	-2.7	3.1	
1960.....	277.0	26.8	250.2	28.3	221.9	181.1	37.4	39.7	19.2	20.5	10.6	9.9	-2	-2.1	3.5	
1961.....	285.0	27.5	257.5	30.1	227.3	185.1	38.3	39.5	19.5	20.1	10.6	9.5	.3	-1.5	3.9	
1962.....	311.3	28.4	283.0	33.0	249.9	199.8	45.6	44.2	20.6	23.5	11.4	12.2	.0	1.4	4.5	
1963.....	331.8	29.4	302.3	35.6	266.8	210.7	51.2	48.9	22.8	26.2	12.6	13.5	.1	2.3	4.8	
1964.....	358.4	30.8	327.6	38.4	289.3	226.3	57.7	55.4	24.0	31.4	13.7	17.7	-.5	2.9	5.3	
1965.....	393.6	32.7	360.9	41.1	319.8	246.1	67.7	65.2	27.2	38.0	15.6	22.4	-1.2	3.7	6.1	
1966.....	431.5	35.6	395.9	42.9	353.0	273.5	72.2	70.3	29.5	40.8	16.8	24.0	-2.1	3.9	7.4	
1967.....	454.1	38.9	415.2	45.8	369.5	291.9	68.6	66.3	27.7	38.6	17.5	21.2	-1.6	4.0	8.7	
1968.....	500.2	42.6	457.6	51.5	406.1	322.8	73.3	72.9	33.4	39.5	19.1	20.4	-3.7	4.0	10.1	
1969.....	544.1	47.1	497.0	58.0	439.1	358.5	67.5	69.4	33.1	36.2	19.1	17.1	-5.9	4.0	13.1	
1970.....	563.7	52.2	511.4	63.4	448.1	378.4	52.7	56.8	27.0	29.8	18.5	11.3	-6.6	2.4	17.0	
1971.....	609.9	57.3	552.6	70.5	482.1	402.0	62.1	65.4	29.8	35.6	18.5	17.1	-4.6	1.3	18.0	
1972.....	678.0	62.6	615.5	76.7	538.7	447.0	72.7	76.6	33.6	43.0	20.1	22.9	-6.6	2.7	19.1	
1973.....	759.4	67.9	691.6	83.7	607.9	506.2	78.6	96.0	40.0	56.0	21.1	35.0	-20.0	2.6	23.0	
1974.....	818.9	79.5	739.4	89.7	649.7	556.5	63.6	105.3	42.0	63.3	21.4	41.9	-40.0	-1.8	29.6	
1975.....	890.0	94.9	795.1	97.1	697.9	581.1	86.1	107.3	41.2	66.1	25.7	40.4	-11.6	-9.7	30.8	
1976.....	1,001.3	104.8	896.5	105.3	791.2	654.4	107.3	135.0	52.6	82.3	30.1	52.2	-14.7	-13.0	29.5	
1977.....	1,128.4	115.7	1,012.7	112.6	900.1	738.5	129.5	156.5	59.6	96.8	31.9	64.9	-16.2	-10.8	32.1	
1978.....	1,276.2	130.9	1,145.3	122.0	1,023.3	844.3	142.1	178.4	66.9	111.5	37.7	73.8	-24.0	-12.3	36.9	
1979.....	1,416.8	149.6	1,267.3	130.5	1,136.7	958.1	134.7	191.8	69.2	122.5	39.8	82.8	-43.1	-13.9	43.9	
1980.....	1,540.7	170.0	1,370.7	147.6	1,223.0	1,046.5	120.3	177.8	67.0	110.8	43.7	67.1	-42.9	-14.7	56.3	
1981.....	1,739.9	192.2	1,547.7	176.5	1,371.2	1,155.8	150.2	183.0	65.5	117.5	53.5	64.0	-23.6	-9.1	65.2	
1982.....	1,776.7	210.0	1,566.8	179.0	1,387.8	1,198.6	124.0	131.5	41.2	90.3	57.2	33.1	-8.4	.8	65.2	
1983 P.....	1,918.4	218.2	1,700.2	196.9	1,503.2	1,269.3	174.5	151.9	55.1	96.7	64.9	31.8	-9.8	32.5	59.3	
1981:																
I.....	1,683.3	183.0	1,500.2	172.1	1,328.1	1,123.7	148.1	195.3	71.7	123.6	50.2	73.4	-36.7	-10.5	56.3	
II.....	1,718.8	189.1	1,529.7	176.2	1,353.5	1,146.4	145.1	177.2	63.0	114.2	52.2	62.0	-22.6	-9.6	62.1	
III.....	1,778.6	195.3	1,583.3	178.6	1,404.6	1,173.2	158.8	187.1	67.5	119.6	55.2	64.5	-19.4	-8.8	72.6	
IV.....	1,778.9	201.3	1,577.7	179.0	1,398.7	1,179.7	149.0	172.2	59.9	112.4	56.3	56.1	-15.7	-7.6	70.0	
1982:																
I.....	1,764.9	204.0	1,560.8	176.2	1,384.6	1,187.7	127.7	137.0	45.7	91.4	55.2	36.2	-5.5	-3.8	69.2	
II.....	1,780.2	208.4	1,571.8	177.7	1,394.1	1,199.7	126.5	136.6	43.6	93.0	55.7	37.3	-8.5	-1.6	67.9	
III.....	1,786.8	212.3	1,574.5	179.6	1,394.9	1,205.6	127.5	134.4	42.0	92.4	58.5	33.9	-9.0	2.1	61.8	
IV.....	1,775.0	215.1	1,559.8	182.4	1,377.4	1,201.2	114.3	117.9	33.6	84.4	59.2	25.1	-10.3	6.7	61.9	
1983:																
I.....	1,817.6	215.3	1,602.3	186.4	1,415.9	1,222.4	133.9	119.7	41.8	77.9	63.3	14.5	-1.7	15.9	59.7	
II.....	1,892.4	216.7	1,675.7	197.6	1,478.1	1,253.9	165.7	149.0	55.0	94.0	65.6	28.4	-10.6	27.3	58.6	
III.....	1,957.8	219.6	1,738.2	201.1	1,537.1	1,283.7	194.5	173.8	63.9	109.8	65.1	44.8	-18.3	39.0	58.9	
IV P.....		221.2		202.7		1,317.4					65.7		-8.5	47.7	60.2	

¹ 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, 1948-83

[Quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business (billions of dollars)		Current-dollar cost and profit per unit of output (dollars) ¹							Output per hour of all employees (1972 dollars)	Compensation per hour of all employees (dollars)	
			Total cost and profit ²	Capital consumption allowances with capital consumption adjustment	Indirect business tax, etc. ³	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments					Net interest
	Current dollars	1972 dollars					Total	Profits tax liability	Profits after tax ⁴			
1948.....	137.3	229.7	0.598	0.047	0.053	0.382	0.112	0.051	0.060	0.004		
1949.....	133.5	219.9	.607	.053	.057	.388	.104	.042	.062	.004		
1950.....	151.9	247.5	.614	.051	.057	.383	.120	.068	.051	.004		
1951.....	174.5	270.2	.646	.054	.056	.408	.124	.079	.045	.004		
1952.....	182.3	275.2	.663	.057	.061	.430	.110	.065	.045	.004		
1953.....	195.0	292.0	.668	.058	.062	.441	.103	.063	.040	.004		
1954.....	191.9	283.4	.677	.063	.061	.446	.101	.055	.046	.005		
1955.....	216.7	315.1	.688	.061	.061	.439	.122	.064	.057	.005		
1956.....	231.6	324.1	.715	.067	.064	.467	.111	.062	.049	.005		
1957.....	242.3	328.3	.738	.073	.068	.484	.106	.058	.048	.007		
1958.....	236.3	313.4	.754	.079	.073	.497	.097	.052	.045	.009	5.206	2.589
1959.....	266.0	347.4	.766	.074	.073	.494	.116	.060	.056	.009	5.433	2.684
1960.....	277.0	358.4	.773	.075	.079	.505	.104	.054	.051	.010	5.536	2.797
1961.....	285.0	367.2	.776	.075	.082	.504	.104	.053	.051	.011	5.727	2.887
1962.....	311.3	399.7	.779	.071	.083	.500	.114	.052	.062	.011	5.997	2.998
1963.....	331.8	426.3	.778	.069	.083	.494	.120	.053	.067	.011	6.248	3.089
1964.....	358.4	455.6	.787	.068	.084	.497	.127	.053	.074	.012	6.469	3.213
1965.....	393.6	495.2	.795	.066	.083	.497	.137	.055	.082	.012	6.673	3.316
1966.....	431.5	530.7	.813	.067	.081	.515	.136	.056	.080	.014	6.776	3.492
1967.....	454.1	543.0	.836	.072	.084	.538	.127	.051	.076	.016	6.847	3.680
1968.....	500.2	578.9	.864	.074	.089	.558	.127	.058	.069	.017	7.074	3.945
1969.....	544.1	604.0	.901	.078	.096	.594	.112	.055	.057	.022	7.092	4.209
1970.....	563.7	599.6	.940	.087	.106	.631	.088	.045	.043	.028	7.115	4.491
1971.....	609.9	626.8	.973	.091	.113	.641	.099	.047	.052	.029	7.450	4.778
1972.....	678.0	678.0	1.000	.092	.113	.659	.107	.049	.058	.028	7.664	5.052
1973.....	759.4	731.9	1.038	.093	.114	.692	.107	.055	.053	.031	7.849	5.429
1974.....	818.9	708.2	1.156	.112	.127	.786	.090	.059	.030	.042	7.555	5.937
1975.....	890.0	694.2	1.282	.137	.140	.837	.124	.059	.065	.044	7.774	6.507
1976.....	1,001.3	745.5	1.343	.141	.141	.878	.144	.071	.073	.040	8.002	7.024
1977.....	1,128.4	795.8	1.418	.145	.141	.928	.163	.075	.088	.040	8.144	7.558
1978.....	1,276.2	846.3	1.508	.155	.144	.998	.168	.079	.089	.044	8.216	8.168
1979.....	1,416.8	876.1	1.617	.171	.149	1.094	.154	.079	.075	.050	8.201	8.999
1980.....	1,540.7	859.5	1.793	.198	.172	1.218	.140	.078	.062	.065	8.126	9.894
1981.....	1,739.9	887.5	1.960	.217	.199	1.302	.169	.074	.095	.074	8.332	10.850
1982.....	1,776.7	857.7	2.072	.245	.209	1.397	.145	.048	.097	.076	8.373	11.700
1983.....	1,918.4	893.9	2.146	.244	.220	1.420	.195	.062	.134	.066		
1981:												
I.....	1,683.3	883.7	1.905	.207	.195	1.272	.168	.081	.086	.064	8.290	10.541
II.....	1,718.8	888.7	1.934	.213	.198	1.290	.163	.071	.092	.070	8.319	10.730
III.....	1,778.6	898.6	1.979	.217	.199	1.306	.177	.075	.102	.081	8.392	10.957
IV.....	1,778.9	878.9	2.024	.229	.204	1.342	.169	.068	.101	.080	8.323	11.171
1982:												
I.....	1,764.9	864.3	2.042	.236	.204	1.374	.148	.053	.095	.080	8.342	11.463
II.....	1,780.2	860.5	2.069	.242	.207	1.394	.147	.051	.096	.079	8.330	11.614
III.....	1,786.8	859.5	2.079	.247	.209	1.403	.148	.049	.099	.072	8.409	11.952
IV.....	1,775.0	846.4	2.097	.254	.215	1.419	.135	.040	.095	.073	8.421	
1983:												
I.....	1,817.6	856.0	2.123	.252	.218	1.428	.156	.049	.108	.070	8.492	12.126
II.....	1,892.4	885.8	2.136	.245	.223	1.416	.187	.062	.125	.066	8.627	12.213
III.....	1,957.8	909.4	2.153	.241	.221	1.412	.214	.070	.144	.065	8.716	12.304

¹ Output is measured by gross domestic product of nonfinancial corporate business in 1972 dollars.² This is equal to the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.³ Indirect business tax and nontax liability plus business transfer payments less subsidies.⁴ With inventory valuation and capital consumption adjustments.

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

TABLE B-14.—*Personal consumption expenditures, 1929-83*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods	Nondurable goods	Services	Durable goods			Nondurable goods	
					Motor vehicles and parts	Furniture and household equipment	Other	Food	Clothing and shoes
1929.....	77.3	9.2	37.7	30.3	3.3	4.7	1.2	19.5	9.4
1933.....	45.8	3.5	22.3	20.1	1.1	1.9	.5	11.5	4.6
1939.....	67.0	6.7	35.1	25.2	2.3	3.4	1.0	19.1	7.1
1940.....	71.0	7.8	37.0	26.2	2.8	3.8	1.1	20.2	7.5
1941.....	80.8	9.7	42.9	28.2	3.5	4.8	1.3	23.4	8.8
1942.....	88.6	6.9	50.8	31.0	.7	4.6	1.6	28.4	11.0
1943.....	99.4	6.5	58.6	34.3	.8	3.9	1.9	33.2	13.4
1944.....	108.2	6.7	64.3	37.1	.8	3.8	2.1	36.7	14.6
1945.....	119.5	8.0	71.9	39.6	1.0	4.5	2.5	40.6	16.5
1946.....	143.8	15.8	82.7	45.3	4.1	8.4	3.2	47.4	18.2
1947.....	161.7	20.4	90.9	50.4	6.6	10.6	3.3	52.3	18.8
1948.....	174.7	22.9	96.6	55.3	8.0	11.5	3.4	54.2	20.1
1949.....	178.1	25.0	94.9	58.2	10.6	11.3	3.2	52.5	19.3
1950.....	192.0	30.8	98.2	63.0	13.7	13.7	3.3	53.9	19.6
1951.....	207.1	29.8	108.8	68.5	12.2	14.0	3.6	60.4	21.2
1952.....	217.1	29.1	113.9	74.0	11.3	14.0	3.9	63.4	21.9
1953.....	229.7	32.5	116.5	80.6	13.9	14.6	4.1	64.4	22.1
1954.....	235.8	31.8	118.0	86.1	13.0	14.6	4.2	65.4	22.1
1955.....	253.7	38.6	122.9	92.1	17.8	16.2	4.6	67.2	23.1
1956.....	266.0	37.9	128.9	99.2	15.8	17.1	5.0	69.9	24.1
1957.....	280.4	39.3	135.2	105.9	17.2	16.9	5.2	73.6	24.3
1958.....	289.5	36.8	139.8	112.8	14.8	16.6	5.4	76.4	24.7
1959.....	310.8	42.4	146.4	121.9	18.9	17.8	5.8	79.1	26.1
1960.....	324.9	43.1	151.1	130.7	19.7	17.7	5.8	81.1	26.7
1961.....	335.0	41.6	155.3	138.1	17.8	17.9	5.8	83.2	27.4
1962.....	355.2	46.7	161.6	147.0	21.5	18.9	6.3	85.5	28.7
1963.....	374.6	51.4	167.1	156.1	24.4	20.3	6.7	87.8	29.5
1964.....	400.5	56.4	176.9	167.1	26.1	22.8	7.6	92.7	31.9
1965.....	430.4	63.0	188.6	178.7	30.0	24.7	8.3	98.9	33.5
1966.....	465.1	68.0	204.7	192.4	30.4	27.7	9.9	106.6	36.6
1967.....	490.3	70.1	212.6	207.6	30.1	29.5	10.5	109.6	38.2
1968.....	536.9	80.5	230.6	225.8	36.3	32.3	11.8	118.7	42.1
1969.....	581.8	85.7	247.8	248.2	38.7	34.1	13.0	127.5	45.5
1970.....	621.7	85.2	265.7	270.8	36.2	35.2	13.9	138.9	46.8
1971.....	672.2	97.2	278.8	296.2	45.4	37.2	14.6	144.2	50.6
1972.....	737.1	111.1	300.6	325.3	52.4	41.7	16.9	154.9	55.4
1973.....	812.0	123.3	333.4	355.2	57.1	47.1	19.2	172.1	61.4
1974.....	888.1	121.5	373.4	393.2	50.4	50.6	20.5	193.7	64.8
1975.....	976.4	132.2	407.3	437.0	55.8	53.5	22.9	213.6	69.6
1976.....	1,084.3	156.8	441.7	485.7	72.6	59.1	25.2	230.6	75.3
1977.....	1,204.4	178.2	478.8	547.4	84.8	65.7	27.7	249.8	82.6
1978.....	1,346.5	200.2	528.2	618.0	95.7	72.8	31.7	275.9	92.4
1979.....	1,507.2	213.4	600.0	693.7	96.6	81.8	35.1	311.6	99.1
1980.....	1,668.1	214.7	668.8	784.5	90.7	86.3	37.7	345.1	104.6
1981.....	1,857.2	236.1	733.9	887.1	101.6	93.3	41.2	375.9	115.3
1982.....	1,991.9	244.5	761.0	986.4	109.9	93.5	41.1	396.9	119.0
1983 ^a	2,158.6	278.6	804.3	1,075.7	132.8	101.8	44.0	422.5	125.6
1981:									
I.....	1,802.8	236.9	716.3	849.6	103.9	92.7	40.3	367.7	112.1
II.....	1,835.8	233.4	730.6	871.8	98.5	93.3	41.5	373.7	115.0
III.....	1,886.1	243.5	741.1	901.5	107.7	93.8	42.0	378.9	116.8
IV.....	1,904.1	230.8	747.7	925.6	96.5	93.4	40.9	383.2	117.2
1982:									
I.....	1,938.9	239.4	749.7	949.7	106.4	91.7	41.3	388.1	118.4
II.....	1,972.8	242.9	754.7	975.2	107.6	93.9	41.4	394.7	119.0
III.....	2,008.8	243.4	766.6	998.9	109.4	93.5	40.5	400.4	119.2
IV.....	2,046.9	252.1	773.0	1,021.8	116.1	94.9	41.0	404.5	119.6
1983:									
I.....	2,073.0	258.5	777.1	1,037.4	118.4	97.3	42.9	411.7	120.0
II.....	2,147.0	277.7	799.6	1,069.7	133.9	100.8	43.1	419.6	126.4
III.....	2,181.1	282.8	814.8	1,083.5	135.6	102.9	44.3	426.4	125.1
IV ^a	2,233.1	295.2	825.9	1,112.0	143.2	106.4	45.7	432.4	130.9

See next page for continuation of table.

TABLE B-14.—Personal consumption expenditures, 1929-83—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Nondurable goods—cont'd			Services						
	Gasoline and oil	Fuel oil and coal	Other	Housing ¹	Household operation			Transportation	Other	
					Total	Electricity and gas	Other		Total	Medical care
1929.....	1.8	1.6	5.4	11.7	4.0	1.2	2.9	2.6	12.0	2.2
1933.....	1.5	1.2	3.5	8.1	2.8	1.1	1.7	1.5	7.7	1.5
1939.....	2.2	1.4	5.3	9.4	3.8	1.4	2.4	2.0	10.0	2.1
1940.....	2.3	1.5	5.6	9.7	4.0	1.5	2.6	2.1	10.3	2.2
1941.....	2.6	1.7	6.4	10.4	4.3	1.5	2.7	2.4	11.2	2.4
1942.....	2.1	1.9	7.5	11.2	4.8	1.6	3.2	2.7	12.2	2.6
1943.....	1.3	2.0	8.7	11.8	5.2	1.7	3.5	3.4	13.9	2.9
1944.....	1.4	2.0	9.6	12.3	5.9	1.8	4.1	3.7	15.2	3.3
1945.....	1.8	2.2	10.8	12.8	6.4	1.9	4.5	4.0	16.4	3.6
1946.....	3.4	2.5	11.3	14.2	6.8	2.1	4.7	5.0	19.4	4.5
1947.....	4.0	3.0	12.8	16.0	7.5	2.3	5.1	5.3	21.7	5.5
1948.....	4.8	3.4	14.1	17.9	8.1	2.6	5.4	5.8	23.6	6.3
1949.....	5.3	3.1	14.7	19.6	8.5	2.9	5.6	5.9	24.1	6.4
1950.....	5.5	3.4	15.8	21.7	9.5	3.3	6.2	6.2	25.6	6.9
1951.....	6.1	3.5	17.6	24.3	10.4	3.7	6.7	6.7	27.0	7.3
1952.....	6.8	3.4	18.3	27.0	11.1	4.1	7.0	7.1	28.8	8.0
1953.....	7.4	3.4	19.3	29.8	12.0	4.5	7.5	7.8	31.0	8.9
1954.....	7.8	3.5	19.2	32.2	12.6	5.0	7.6	7.9	33.3	9.7
1955.....	8.6	3.8	20.3	34.3	14.0	5.5	8.5	8.2	35.6	10.3
1956.....	9.4	4.1	21.6	36.7	15.2	6.1	9.2	8.6	38.7	11.0
1957.....	10.2	4.1	23.0	39.3	16.2	6.5	9.7	9.0	41.4	12.0
1958.....	10.6	4.2	24.0	42.0	17.3	7.1	10.2	9.3	44.3	13.1
1959.....	11.3	4.0	25.9	45.0	18.5	7.6	10.9	10.1	48.3	14.3
1960.....	12.0	3.8	27.5	48.1	20.1	8.3	11.8	10.7	51.7	15.4
1961.....	12.0	3.7	29.0	51.2	21.0	8.8	12.2	11.2	54.8	16.4
1962.....	12.6	3.7	31.1	54.7	22.2	9.4	12.8	11.7	58.3	18.0
1963.....	12.9	4.0	32.8	58.0	23.4	9.9	13.6	12.2	62.5	19.5
1964.....	13.5	4.1	34.6	61.4	24.8	10.4	14.4	12.8	66.1	22.3
1965.....	14.7	4.4	37.2	65.5	26.3	10.9	15.4	13.7	73.3	23.9
1966.....	16.0	4.7	40.9	69.5	28.0	11.5	16.5	15.0	79.9	26.0
1967.....	17.0	4.8	43.0	74.1	30.0	12.2	17.8	16.2	87.2	28.4
1968.....	18.6	4.7	46.5	79.8	32.2	13.1	19.2	17.6	96.2	31.4
1969.....	20.7	4.5	49.6	87.0	35.0	14.2	20.8	19.5	106.8	36.5
1970.....	22.4	4.4	53.2	93.9	37.7	15.4	22.2	22.0	117.2	41.0
1971.....	23.9	4.5	55.5	102.7	41.0	17.0	24.0	25.1	127.4	45.9
1972.....	25.4	5.0	59.8	112.5	45.2	18.8	26.4	27.5	140.1	51.4
1973.....	28.6	6.2	65.0	123.8	49.6	20.5	29.1	28.8	153.0	57.4
1974.....	36.6	7.7	70.5	137.4	55.2	24.0	31.2	30.9	169.8	64.5
1975.....	40.4	8.2	75.5	149.8	63.3	29.2	34.1	33.2	190.7	73.7
1976.....	44.0	9.8	82.1	166.5	71.6	32.9	38.7	38.6	209.0	83.3
1977.....	48.1	10.7	87.6	185.9	81.1	38.5	42.6	46.4	234.1	96.5
1978.....	51.2	11.9	96.9	209.6	90.1	42.9	47.2	51.2	267.1	108.4
1979.....	66.6	16.1	106.6	236.0	99.3	47.8	51.5	56.3	302.0	124.1
1980.....	84.8	18.6	115.7	266.2	113.0	57.6	55.4	61.1	344.3	145.1
1981.....	94.6	20.7	127.4	302.0	128.4	66.8	61.6	65.5	391.3	173.6
1982.....	91.5	20.0	133.5	334.1	144.3	76.3	68.0	68.4	439.6	196.6
1983 P.....	90.6	20.9	144.8	363.6	154.8	82.0	72.9	72.9	484.3	213.4
1981:										
I.....	93.1	20.3	123.1	288.0	121.7	62.9	58.8	65.4	374.5	162.8
II.....	94.8	20.7	126.4	297.0	125.8	65.1	60.7	64.5	384.5	169.9
III.....	95.1	21.1	129.2	306.6	130.5	68.2	62.3	66.0	398.4	177.9
IV.....	95.6	20.9	130.8	316.5	135.5	71.0	64.5	65.9	407.7	183.9
1982:										
I.....	94.0	19.4	129.8	323.8	140.2	74.9	65.3	66.5	419.2	188.7
II.....	89.6	19.6	131.9	329.7	144.6	77.2	67.4	68.0	432.9	194.4
III.....	91.3	20.9	134.8	337.8	145.2	76.2	69.0	69.8	446.1	199.9
IV.....	91.1	20.2	137.7	345.2	147.1	76.8	70.3	69.2	460.3	203.5
1983:										
I.....	87.3	17.7	140.4	352.6	145.9	74.1	71.8	70.1	468.8	207.0
II.....	90.3	21.2	142.1	359.5	155.4	82.8	72.6	70.9	483.9	211.7
III.....	93.1	23.0	147.2	367.2	155.8	83.3	72.5	74.0	486.6	215.1
IV P.....	91.6	21.6	149.5	375.2	162.2	87.6	74.6	76.6	498.0	219.7

¹ 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, 1929-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment									Change in business inventories
			Total	Net fixed investment								
				Total	Nonresidential			Residential				
					Total	Structures	Producers' durable equipment	Total	Non-farm structures	Farm structures	Producers' durable equipment	
1929.....	16.2	9.7	6.5	4.8	3.1	1.7	1.4	1.7	1.7	-0.1	0.0	1.7
1933.....	1.4	7.4	-6.0	-4.5	-3.5	-1.6	-1.8	-1.0	-9	-1	-0	-1.6
1939.....	9.3	8.7	.6	.1	-6	-1.0	.3	.8	.8	-0	.0	.4
1940.....	13.1	9.1	4.1	1.9	.7	-.7	1.4	1.2	1.1	.0	.0	2.2
1941.....	17.9	10.0	7.9	3.4	2.0	-.3	2.2	1.5	1.4	.0	.0	4.5
1942.....	9.9	11.2	-1.3	-3.0	-2.5	-1.7	-.7	-.6	-.5	-1	-0	1.8
1943.....	5.8	11.5	-5.7	-5.0	-3.5	-2.6	-.9	-1.6	-1.4	-1	-1	-.6
1944.....	7.2	11.7	-4.6	-3.6	-1.7	-2.0	.3	-1.9	-1.7	-1	-1	-1.0
1945.....	10.6	12.2	-1.6	-.6	1.3	-1.2	2.4	-1.8	-1.6	-2	-1	1.0
1946.....	30.7	14.0	16.6	10.3	6.6	2.4	4.2	3.7	3.4	.2	.1	6.4
1947.....	34.0	17.3	16.6	17.1	10.2	2.1	8.2	6.8	6.4	.3	.2	-.5
1948.....	45.9	20.2	25.6	20.9	11.3	2.7	8.6	9.7	9.1	.4	.2	4.7
1949.....	35.3	21.8	13.5	16.6	8.1	2.3	5.8	8.5	7.9	.4	.1	-3.1
1950.....	53.8	23.5	30.3	23.5	9.6	2.9	6.7	13.9	13.4	.3	.2	6.8
1951.....	59.2	27.2	32.0	21.7	10.7	3.9	6.7	11.0	10.6	.3	.1	10.3
1952.....	52.1	29.3	22.8	19.7	9.1	3.8	5.3	10.6	10.3	.3	.1	3.1
1953.....	53.3	31.0	22.4	21.9	10.8	4.8	6.0	11.1	10.8	.3	.1	.4
1954.....	52.7	32.7	20.0	21.6	9.1	5.1	4.0	12.5	12.2	.2	.1	-1.5
1955.....	68.4	34.8	33.6	27.6	11.9	5.9	6.0	15.7	15.6	.0	.1	6.0
1956.....	71.0	38.7	32.3	27.6	13.9	7.9	6.0	13.7	13.4	.1	.1	4.7
1957.....	69.2	41.7	27.5	26.1	14.3	7.9	6.4	11.8	11.7	.1	.1	1.3
1958.....	61.9	43.5	18.4	19.9	8.1	6.4	1.8	11.8	11.6	.1	.1	-1.5
1959.....	78.1	44.9	33.2	27.5	10.6	6.4	4.2	16.9	16.7	.1	.2	5.7
1960.....	75.9	46.3	29.6	26.7	12.3	7.3	5.0	14.4	14.3	-.0	.1	3.0
1961.....	74.8	47.5	27.3	24.9	10.9	7.3	3.6	14.0	13.9	.1	.1	2.3
1962.....	85.4	49.0	36.5	30.2	14.0	7.9	6.1	16.2	16.1	.0	.1	6.3
1963.....	90.9	50.6	40.3	34.4	15.3	7.8	7.5	19.0	18.8	.0	.1	6.0
1964.....	97.4	52.9	44.5	38.9	19.7	9.1	10.6	19.1	18.9	.0	.2	5.6
1965.....	113.5	56.0	57.5	47.6	28.9	12.9	16.0	18.7	18.6	-.0	.2	9.9
1966.....	125.7	60.7	65.0	50.9	35.4	14.8	20.6	15.5	15.3	.0	.2	14.1
1967.....	122.8	65.9	57.0	46.6	31.9	13.8	18.2	14.7	14.5	.0	.2	10.3
1968.....	133.3	72.1	61.2	53.3	33.6	14.5	19.1	19.8	19.6	-.1	.3	7.9
1969.....	149.3	80.0	69.3	59.5	38.1	16.6	21.5	21.3	21.0	-.0	.4	9.8
1970.....	144.2	88.1	56.2	52.9	33.9	16.3	17.6	19.0	18.9	-.2	.4	3.2
1971.....	166.4	96.5	69.9	62.3	31.1	15.6	15.5	31.2	30.9	-.2	.5	7.7
1972.....	195.0	106.4	88.6	78.4	37.0	16.6	20.4	41.3	40.9	-.2	.6	10.2
1973.....	229.8	116.5	113.3	94.8	51.9	20.7	31.2	42.9	42.5	-.4	.7	18.5
1974.....	228.7	136.0	92.7	78.5	49.2	18.9	30.3	29.3	28.4	-.2	.7	14.1
1975.....	206.1	159.3	46.8	53.7	30.3	13.1	17.3	23.4	23.1	-.2	.5	-6.9
1976.....	257.9	175.0	82.8	71.0	34.3	14.1	20.2	36.8	36.5	-.2	.5	11.8
1977.....	324.1	195.2	128.9	105.9	50.7	16.0	34.7	55.2	54.5	.1	.6	23.0
1978.....	386.6	222.5	164.1	137.7	73.6	23.3	50.4	64.0	63.3	.1	.6	26.5
1979.....	423.0	256.0	167.0	152.7	89.0	33.7	55.3	63.7	63.2	-.2	.7	14.3
1980.....	401.9	293.2	108.7	118.5	77.0	36.2	40.9	41.5	41.2	-.3	.6	-9.8
1981.....	474.9	329.5	145.4	127.0	89.7	49.1	40.6	37.3	37.7	-.9	.5	18.5
1982.....	414.5	359.2	55.3	79.9	59.0	48.8	10.2	20.8	21.3	-.7	.3	-24.5
1983 P.....	471.3	377.4	93.9	100.8	44.6	36.8	7.8	56.2	56.6	-.8	.4	-6.9
1981:												
I.....	455.5	314.8	140.7	129.8								10.9
II.....	472.1	324.2	147.9	132.9								15.0
III.....	495.8	334.4	161.4	127.8								33.6
IV.....	476.2	344.6	131.6	117.3								14.3
1982:												
I.....	422.9	349.3	73.6	99.3								-25.7
II.....	432.5	356.1	76.4	87.6								-11.2
III.....	425.3	363.0	62.3	67.2								-4.9
IV.....	377.4	368.3	9.1	65.5								-56.4
1983:												
I.....	404.1	370.8	33.3	72.7								-39.4
II.....	450.1	373.3	76.8	91.3								-14.5
III.....	501.1	381.7	119.4	110.9								8.5
IV P.....	529.8	383.6	146.2	128.5								17.7

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-16.—Gross and net private domestic investment in 1972 dollars, 1929-83

(Billions of 1972 dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment									Change in business inventories
			Total	Net fixed investment								
				Total	Nonresidential			Residential				
					Total	Structures	Producers' durable equipment	Total	Non-farm structures	Farm structures	Producers' durable equipment	
1929.....	55.8	33.6	22.3	17.7	11.7	7.8	3.8	6.0	6.2	-0.2	0.0	4.6
1933.....	8.4	33.0	-24.6	-19.8	-14.7	-8.5	-6.2	-5.1	-4.6	-5	.0	-4.9
1939.....	33.6	32.1	1.5	-.1	-3.1	-4.0	.9	3.0	3.0	.0	.0	1.6
1940.....	44.5	32.4	12.2	6.0	1.6	-2.6	4.2	4.3	4.1	.2	.1	6.2
1941.....	55.8	33.1	22.7	10.6	5.7	-.7	6.3	5.0	4.7	.2	.1	12.0
1942.....	29.5	33.3	-3.8	-9.0	-7.3	-5.8	-1.5	-1.8	-1.6	-.1	.0	5.2
1943.....	18.1	32.6	-14.6	-14.7	-10.2	-8.2	-2.0	-4.5	-4.1	-.3	-.1	.1
1944.....	19.7	32.1	-12.4	-10.1	-5.1	-6.6	1.5	-5.0	-4.6	-.4	-.1	-2.3
1945.....	27.7	32.3	-4.6	-1.0	3.6	-3.6	7.2	-4.6	-4.1	-.4	.0	-3.6
1946.....	70.9	34.0	36.9	24.8	16.6	6.8	9.8	8.2	7.7	.4	.1	12.2
1947.....	70.0	36.1	33.9	34.1	21.5	5.0	16.5	12.6	11.9	.6	.2	-.2
1948.....	82.1	38.5	43.6	38.1	21.6	5.8	15.8	16.5	15.6	.8	.2	5.5
1949.....	65.4	40.7	24.7	29.1	14.8	5.0	9.7	14.4	13.5	.7	.1	-4.4
1950.....	93.5	42.8	50.7	40.1	17.0	6.1	10.9	23.2	22.4	.6	.2	10.6
1951.....	93.9	45.3	48.7	35.0	17.8	7.2	10.6	17.1	16.5	.5	.1	13.7
1952.....	83.0	47.5	35.4	31.1	15.1	6.9	8.2	16.0	15.5	.4	.1	4.3
1953.....	85.3	49.8	35.6	34.1	17.5	8.5	9.0	16.6	16.1	.4	.1	1.5
1954.....	83.1	52.1	31.1	33.3	14.7	9.1	5.6	18.6	18.2	.3	.1	-2.2
1955.....	103.8	54.2	49.5	41.8	19.0	10.4	8.6	22.8	22.7	.0	.1	7.7
1956.....	102.6	56.5	46.1	40.3	21.1	12.8	8.3	19.2	18.8	.2	.1	5.8
1957.....	97.0	58.6	38.4	36.9	20.4	12.3	8.1	16.5	16.3	.1	.1	1.5
1958.....	87.5	60.3	27.2	29.0	12.2	10.2	2.0	16.9	16.6	.1	.1	-1.8
1959.....	108.0	61.6	46.4	39.3	15.4	10.2	5.2	23.9	23.6	.1	.2	7.0
1960.....	104.7	63.3	41.4	37.9	17.6	11.8	5.8	20.3	20.2	-.1	.1	3.5
1961.....	103.9	65.0	38.9	35.9	16.1	11.9	4.2	19.8	19.6	.1	.1	3.0
1962.....	117.6	66.9	50.7	42.9	20.1	12.8	7.3	22.8	22.6	.0	.1	7.8
1963.....	125.1	69.0	56.0	48.5	21.6	12.4	9.1	26.9	26.7	.0	.2	7.5
1964.....	133.0	71.6	61.4	54.3	27.3	14.3	13.0	27.0	26.8	.1	.2	7.1
1965.....	151.9	74.8	77.2	65.4	39.4	19.8	19.7	26.0	25.8	-.1	.2	11.8
1966.....	163.0	78.7	84.3	67.5	46.7	21.7	25.0	20.8	20.6	.0	.2	16.8
1967.....	154.9	82.8	72.1	59.9	40.8	19.3	21.5	19.1	18.9	.0	.2	12.2
1968.....	161.6	87.1	74.5	65.5	41.0	19.2	21.8	24.5	24.3	-.1	.3	9.0
1969.....	171.4	91.6	79.8	68.8	44.4	20.5	23.9	24.3	24.0	-.1	.4	11.1
1970.....	158.5	96.1	62.4	58.7	37.7	18.6	19.1	21.0	20.9	-.3	.4	3.8
1971.....	173.9	100.2	73.6	65.6	32.7	16.6	16.1	32.9	32.6	-.2	.5	8.1
1972.....	195.0	106.4	88.6	78.4	37.0	16.6	20.4	41.3	40.9	-.2	.6	10.2
1973.....	217.5	110.8	106.8	89.6	50.3	19.4	30.9	39.3	38.9	-.3	.7	17.2
1974.....	195.5	116.1	79.3	67.7	43.4	14.9	28.5	24.3	23.5	.2	.6	11.6
1975.....	154.8	120.8	34.0	40.8	23.0	8.8	14.2	17.8	17.5	-.2	.4	-6.7
1976.....	184.5	125.1	59.4	51.6	25.6	9.3	16.3	26.0	25.8	-.1	.4	7.8
1977.....	214.2	129.9	84.3	71.1	36.3	9.5	26.8	34.7	34.2	.1	.5	13.3
1978.....	236.7	135.8	100.9	84.9	49.2	13.0	36.2	35.6	35.1	.0	.5	16.0
1979.....	236.3	143.0	93.3	86.0	54.6	16.5	38.1	31.4	31.0	-.1	.5	7.3
1980.....	208.5	149.8	58.7	63.1	44.3	15.3	29.1	18.7	18.4	-.1	.4	-4.4
1981.....	227.6	155.9	71.6	63.1	47.5	17.9	29.6	15.6	15.7	-.4	.3	8.5
1982.....	194.5	162.5	32.0	41.4	33.3	17.5	15.7	8.2	8.3	-.3	.2	-9.4
1983 P.....	218.4	169.1	49.3	51.7	29.5	13.3	16.2	22.2	22.2	-.3	.3	-2.4
1981:												
I.....	222.7	153.7	69.0	66.0								3.0
II.....	229.5	155.1	74.4	65.5								8.9
III.....	236.3	156.6	79.7	63.6								16.1
IV.....	221.7	158.2	63.5	57.5								6.0
1982:												
I.....	199.7	159.7	40.0	50.2								-10.2
II.....	201.4	161.6	39.8	43.2								-3.4
III.....	198.4	163.1	35.3	36.6								-1.3
IV.....	178.4	165.5	12.9	35.6								-22.7
1983:												
I.....	190.0	166.3	23.7	39.1								-15.4
II.....	210.2	167.8	42.4	47.8								-5.4
III.....	230.7	170.7	60.0	56.2								3.8
IV P.....	242.5	171.5	71.0	63.5								7.5

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-17.—*Inventories and final sales of business, 1946-83*

[Billions of dollars, except as noted; seasonally adjusted]

Quarter	Inventories ¹							Final sales ²	Inventory—final sales ratio	
	Total	Farm	Nonfarm				Total		Non-farm ³	
			Total	Manu- facturing	Whole- sale trade	Retail trade				Other
Fourth quarter:										
1946.....	72.0	22.7	49.3	26.7	10.1	11.4	3.5	16.0	4.50	3.08
1947.....	82.6	25.1	57.5	29.3	10.5	13.1	4.6	18.3	4.51	3.14
1948.....	87.2	22.9	64.3	32.5	11.7	15.1	5.0	19.6	4.44	3.27
1949.....	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
1951.....	110.5	28.3	82.2	43.4	14.6	18.0	6.1	24.6	4.49	3.34
1952.....	109.2	26.0	83.1	44.4	14.8	17.7	6.2	26.1	4.18	3.18
1953.....	110.1	24.6	85.5	46.4	15.0	18.3	5.8	27.2	4.05	3.15
1954.....	107.6	23.8	83.9	44.3	15.3	18.5	5.9	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
1956.....	124.0	22.9	101.0	54.5	17.9	21.7	6.9	31.4	3.95	3.22
1957.....	127.6	24.3	103.3	54.8	18.2	22.9	7.3	32.7	3.90	3.16
1958.....	127.3	25.6	101.7	53.2	18.3	22.9	7.3	33.7	3.77	3.01
1959.....	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
1961.....	137.9	25.9	112.1	57.7	20.9	24.9	8.7	38.8	3.55	2.89
1962.....	144.6	27.3	117.3	60.9	21.5	26.3	8.6	41.1	3.52	2.85
1963.....	150.4	27.6	122.7	62.9	23.1	27.6	9.2	43.7	3.44	2.81
1964.....	156.2	26.5	129.7	66.4	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
1966.....	187.4	29.6	157.8	81.7	29.9	34.6	11.6	54.1	3.46	2.92
1967.....	199.4	29.5	169.9	88.7	32.4	35.3	13.5	57.6	3.46	2.95
1968.....	213.5	30.6	182.9	95.2	34.3	39.0	14.4	63.3	3.37	2.89
1969.....	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
1976.....	473.6	60.6	413.0	207.5	86.9	82.9	35.7	124.1	3.82	3.33
1977.....	519.5	59.9	459.6	224.7	98.7	93.7	42.5	138.9	3.74	3.31
1978.....	602.3	73.9	528.3	254.2	114.6	109.0	50.6	159.5	3.78	3.31
1979.....	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
1981.....	819.3	83.7	735.6	363.2	164.6	139.4	68.4	212.7	3.85	3.46
1982.....	798.4	80.7	717.7	341.5	163.5	141.3	71.3	223.0	3.58	3.22
1983 ^p	816.9	82.4	734.6	343.1	167.3	153.0	71.1	241.3	3.39	3.04
1981:										
I.....	791.2	85.6	705.6	350.7	159.6	129.8	65.4	202.0	3.92	3.49
II.....	802.2	87.5	714.7	355.4	160.6	133.4	65.4	205.0	3.91	3.49
III.....	811.9	83.1	728.8	362.9	162.5	137.3	66.1	210.4	3.86	3.46
IV.....	819.3	83.7	735.6	363.2	164.6	139.4	68.4	212.7	3.85	3.46
1982:										
I.....	810.4	86.8	723.6	355.7	160.6	137.3	69.9	215.1	3.77	3.36
II.....	814.6	88.5	726.1	351.4	164.4	139.0	71.3	217.1	3.75	3.34
III.....	814.9	84.6	730.3	349.4	165.0	143.2	72.7	217.9	3.74	3.35
IV.....	798.4	80.7	717.7	341.5	163.5	141.3	71.3	223.0	3.58	3.22
1983:										
I.....	791.5	84.3	707.1	332.7	159.1	143.3	72.1	226.2	3.50	3.13
II.....	793.9	82.6	711.3	334.9	159.2	145.6	71.6	232.0	3.42	3.07
III.....	807.5	81.9	725.5	341.1	164.1	149.3	71.1	236.8	3.41	3.06
IV ^p	816.9	82.4	734.6	343.1	167.3	153.0	71.1	241.3	3.39	3.04

¹ End of quarter.² 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.³ 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, 1947-83

(Billions of 1972 dollars, except as noted; seasonally adjusted)

Quarter	Inventories ¹							Final sales ²	Inventory—final sales ratio	
	Total	Farm	Nonfarm				Total		Non-farm ³	
			Total	Manu- facturing	Whole- sale trade	Retail trade				Other
Fourth quarter:										
1947.....	116.1	25.7	90.5	47.4	16.0	18.3	8.7	33.2	3.50	2.73
1948.....	121.6	26.7	94.8	48.8	17.2	20.3	8.6	34.4	3.53	2.76
1949.....	117.2	26.2	91.0	46.2	17.2	19.8	7.8	34.6	3.38	2.63
1950.....	127.7	27.5	100.2	49.3	19.2	23.0	8.7	36.9	3.46	2.72
1951.....	141.4	29.1	112.3	60.0	19.7	23.0	9.5	39.8	3.55	2.82
1952.....	145.7	30.4	115.4	62.7	20.1	23.0	9.6	41.6	3.51	2.78
1953.....	147.2	30.2	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	64.3	22.1	26.5	8.4	45.6	3.35	2.66
1956.....	158.6	30.7	127.8	69.1	22.8	26.8	9.2	46.5	3.41	2.75
1957.....	160.1	31.4	128.7	68.7	22.5	27.8	9.8	47.1	3.40	2.73
1958.....	158.3	32.4	125.9	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	30.3	10.7	50.7	3.33	2.68
1961.....	171.8	33.2	138.6	71.7	25.7	29.8	11.4	53.1	3.24	2.61
1962.....	179.7	34.5	145.2	75.6	26.6	31.6	11.4	55.3	3.25	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.....	206.1	36.2	169.9	87.0	31.6	37.4	13.8	66.1	3.12	2.57
1966.....	222.9	36.0	186.8	97.2	35.3	40.0	14.3	67.5	3.30	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	2.81
1969.....	255.1	37.3	217.8	112.8	41.2	45.9	17.9	74.7	3.41	2.92
1970.....	258.9	37.7	221.2	112.9	44.0	46.1	18.2	75.2	3.44	2.94
1971.....	267.0	39.2	227.8	111.8	45.9	51.2	19.0	78.9	3.38	2.89
1972.....	277.2	39.8	237.4	114.4	47.9	54.6	20.5	84.7	3.27	2.80
1973.....	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.....	299.2	43.0	256.3	127.1	52.2	55.8	21.1	88.1	3.40	2.91
1976.....	307.0	41.1	265.9	130.9	55.5	58.8	20.8	92.2	3.33	2.88
1977.....	320.3	40.8	279.5	134.1	59.7	63.1	22.6	97.6	3.28	2.86
1978.....	336.3	40.8	295.5	139.8	63.5	67.3	24.9	103.0	3.27	2.87
1979.....	343.6	43.2	300.4	145.0	64.7	66.1	24.6	105.4	3.26	2.85
1980.....	339.2	40.9	298.4	145.9	66.2	63.2	23.0	104.9	3.23	2.84
1981.....	347.7	44.2	303.5	147.9	67.2	65.6	22.8	105.9	3.28	2.86
1982.....	338.3	43.4	294.9	139.6	67.1	65.1	23.2	106.6	3.18	2.77
1983 ^P	335.9	40.5	295.5	136.9	66.8	68.8	23.0	111.4	3.02	2.65
1981:										
I.....	340.0	41.1	298.9	146.8	66.1	63.1	23.0	106.6	3.19	2.80
II.....	342.2	42.2	300.0	147.2	66.2	64.2	22.5	106.4	3.22	2.82
III.....	346.2	43.3	303.0	149.0	66.5	65.2	22.2	106.8	3.24	2.84
IV.....	347.7	44.2	303.5	147.9	67.2	65.6	22.8	105.9	3.28	2.86
1982:										
I.....	345.2	44.5	300.7	146.0	66.5	64.9	23.4	105.8	3.26	2.84
II.....	344.3	44.2	300.2	144.3	67.6	64.8	23.4	105.5	3.27	2.85
III.....	344.0	43.8	300.2	143.0	67.7	66.1	23.4	105.1	3.27	2.86
IV.....	338.3	43.4	294.9	139.6	67.1	65.1	23.2	106.6	3.18	2.77
1983:										
I.....	334.5	43.3	291.2	136.5	65.4	65.9	23.4	106.8	3.13	2.73
II.....	333.1	42.8	290.3	136.3	64.7	66.3	23.0	108.9	3.06	2.67
III.....	334.1	41.5	292.5	136.6	65.7	67.3	22.9	110.3	3.03	2.65
IV ^P	335.9	40.5	295.5	136.9	66.8	68.8	23.0	111.4	3.02	2.65

¹ End of quarter.² 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.³ 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-19.—*Relation of gross national product, net national product, and national income, 1929-83*

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross national product	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net national product	Less:			Plus: Subsidies less current surplus of government enterprises	Equals: National income
				Indirect business tax and nontax liability	Business transfer payments	Statistical discrepancy		
1929.....	103.4	9.7	93.7	7.1	0.6	1.1	-0.2	84.8
1933.....	55.8	7.4	48.4	7.1	.7	.7	-0	39.9
1939.....	90.9	8.7	82.2	9.4	.5	1.4	.4	71.4
1940.....	100.0	9.1	91.0	10.1	.4	1.1	.4	79.7
1941.....	125.0	10.0	115.0	11.3	.5	.6	.1	102.7
1942.....	158.5	11.2	147.3	11.8	.5	-.8	.1	135.9
1943.....	192.1	11.5	180.7	12.8	.5	-1.8	.1	169.3
1944.....	210.6	11.7	198.9	14.2	.5	2.7	.6	182.1
1945.....	212.4	12.2	200.2	15.5	.5	4.1	.7	180.7
1946.....	209.8	14.0	195.8	17.1	.5	.5	.9	178.6
1947.....	233.1	17.3	215.7	18.4	.6	1.5	-2	194.9
1948.....	259.5	20.2	239.3	20.1	.7	-1.6	-1	219.9
1949.....	258.3	21.8	236.5	21.3	.8	.6	-3	213.6
1950.....	286.5	23.5	263.0	23.4	.8	1.3	.1	237.6
1951.....	330.8	27.2	303.6	25.3	.9	3.2	-1	274.1
1952.....	348.0	29.3	318.7	27.7	1.0	1.7	-3	287.9
1953.....	366.8	31.0	335.8	29.7	1.2	2.3	-5	302.1
1954.....	366.8	32.7	334.1	29.6	1.1	2.0	-3	301.1
1955.....	400.0	34.8	365.3	32.2	1.2	1.3	-0	330.5
1956.....	421.7	38.7	383.0	35.1	1.4	-2.1	.7	349.4
1957.....	444.0	41.7	402.3	37.5	1.5	-1.2	.7	365.2
1958.....	449.7	43.5	406.2	38.7	1.6	.2	1.1	366.9
1959.....	487.9	44.9	443.0	41.8	1.8	-1.3	.1	400.8
1960.....	506.5	46.3	460.2	45.4	2.0	-2.4	.4	415.7
1961.....	524.6	47.5	477.0	48.0	2.0	-1	1.7	428.8
1962.....	565.0	49.0	516.1	51.6	2.1	2.1	1.8	462.0
1963.....	596.7	50.6	546.1	54.6	2.4	1.7	1.1	488.5
1964.....	637.7	52.9	584.8	58.8	2.7	.1	1.7	524.9
1965.....	691.1	56.0	635.0	62.6	2.8	-1.2	1.6	572.4
1966.....	756.0	60.7	695.3	65.3	3.0	1.4	2.5	628.1
1967.....	799.6	65.9	733.7	70.2	3.1	-3	1.6	662.2
1968.....	873.4	72.1	801.3	78.9	3.4	-2.1	1.4	722.5
1969.....	944.0	80.0	864.0	86.6	3.9	-3.9	1.9	779.3
1970.....	992.7	88.1	904.7	94.3	4.1	-1.5	2.9	810.7
1971.....	1,077.6	96.5	981.1	103.7	4.4	4.1	2.6	871.5
1972.....	1,185.9	106.4	1,079.5	111.5	4.9	3.3	3.8	963.6
1973.....	1,326.4	116.5	1,209.9	120.9	5.5	.8	3.4	1,086.2
1974.....	1,434.2	136.0	1,298.2	129.1	5.8	3.7	1.1	1,160.7
1975.....	1,549.2	159.3	1,389.9	140.1	7.4	5.5	2.4	1,239.4
1976.....	1,718.0	175.0	1,543.0	151.7	7.9	5.1	1.0	1,379.2
1977.....	1,918.3	195.2	1,723.2	165.7	8.6	1.4	3.1	1,550.5
1978.....	2,163.9	222.5	1,941.4	178.2	9.3	-2.6	3.7	1,760.3
1979.....	2,417.8	256.0	2,161.7	189.6	10.3	-1.5	3.4	1,966.7
1980.....	2,631.7	293.2	2,338.5	213.4	11.7	2.3	5.5	2,116.6
1981.....	2,954.1	329.5	2,624.6	250.0	12.9	-4.9	6.4	2,373.0
1982.....	3,073.0	359.2	2,713.8	258.3	14.1	.5	9.5	2,450.4
1983 P.....	3,309.5	377.4	2,932.1	285.8	15.5	.1	16.3	2,646.9
1981:								
I.....	2,866.6	314.8	2,551.7	244.0	12.5	5.1	5.6	2,295.8
II.....	2,912.5	324.2	2,588.4	249.1	12.8	-4.2	6.5	2,337.2
III.....	3,004.9	334.4	2,670.5	252.4	13.1	-12.0	6.4	2,423.4
IV.....	3,032.2	344.6	2,687.6	254.3	13.4	-8.5	7.2	2,435.6
1982:								
I.....	3,021.4	349.3	2,672.1	252.6	13.7	-6.7	7.2	2,419.7
II.....	3,070.2	356.1	2,714.1	256.0	14.0	1.7	6.4	2,448.9
III.....	3,090.7	363.0	2,727.7	259.9	14.3	2.5	8.0	2,458.9
IV.....	3,109.6	368.3	2,741.3	264.8	14.7	4.2	16.6	2,474.0
1983:								
I.....	3,171.5	370.8	2,800.7	270.6	15.0	-1.2	12.3	2,528.5
II.....	3,272.0	373.3	2,898.7	285.8	15.3	-3.5	11.8	2,612.8
III.....	3,362.2	381.7	2,980.5	291.1	15.7	2.5	15.8	2,686.9
IV P.....	3,432.0	383.6	3,048.4	295.7	16.1		25.2	

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-20.—*Relation of national income and personal income, 1929-83*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income	Less:					Plus:				Equals:
		Corporate profits with inventory valuation and capital consumption adjustments	Net interest	Contributions for social insurance	Wage accruals less disbursements	Government transfer payments to persons	Personal interest income	Personal dividend income	Business transfer payments	Personal income	
1929	84.8	9.0	4.7	0.2	0.0	0.9	6.9	5.8	0.6	85.0	
1933	39.9	-1.7	4.1	.3	.0	1.5	5.5	2.0	.7	47.0	
1939	71.4	5.3	3.6	2.1	.0	2.5	5.4	3.8	.5	72.4	
1940	79.7	8.6	3.3	2.3	.0	2.7	5.3	4.0	.4	77.9	
1941	102.7	14.1	3.3	2.8	.0	2.6	5.3	4.4	.5	95.4	
1942	135.9	19.3	3.1	3.5	.0	2.7	5.2	4.3	.5	122.6	
1943	169.3	23.5	2.7	4.5	.2	2.5	5.1	4.4	.5	150.8	
1944	182.1	23.6	2.4	5.2	-.2	3.1	5.2	4.6	.5	164.5	
1945	180.7	19.0	2.2	6.1	.0	5.6	5.9	4.6	.5	170.0	
1946	178.6	16.6	1.8	6.1	-.0	10.8	6.6	5.6	.5	177.6	
1947	194.9	22.3	2.3	5.8	.0	11.2	7.6	6.3	.6	190.1	
1948	219.9	29.4	2.4	5.4	.0	10.6	8.1	7.0	.7	209.0	
1949	213.6	27.1	2.7	5.9	-.0	11.7	8.7	7.2	.8	206.4	
1950	237.6	33.9	3.0	7.1	.0	14.4	9.7	8.8	.8	227.2	
1951	274.1	38.7	3.5	8.5	.1	11.6	10.5	8.5	.9	254.9	
1952	287.9	36.1	4.0	9.0	-.0	12.1	11.2	8.5	1.0	271.8	
1953	302.1	36.3	4.4	9.1	-.1	12.9	12.5	8.8	1.2	287.7	
1954	301.1	35.2	5.3	10.1	.0	15.1	13.7	9.1	1.1	289.6	
1955	330.5	45.5	5.9	11.5	.0	16.2	14.9	10.3	1.2	310.3	
1956	349.4	43.7	6.6	12.9	.0	17.3	16.7	11.1	1.4	332.6	
1957	365.2	43.3	7.9	14.9	.0	20.1	18.8	11.5	1.5	351.0	
1958	366.9	38.5	9.6	15.2	.0	24.3	20.3	11.3	1.6	361.1	
1959	400.8	49.6	10.3	18.0	.0	25.2	22.5	12.2	1.8	384.4	
1960	415.7	47.6	11.4	21.1	.0	27.0	25.0	12.9	2.0	402.3	
1961	428.8	48.6	13.0	21.9	.0	30.8	26.4	13.3	2.0	417.8	
1962	462.0	56.6	14.7	24.3	.0	31.6	29.0	14.4	2.1	443.6	
1963	488.5	62.1	16.4	27.3	.0	33.4	32.2	15.5	2.4	466.2	
1964	524.9	69.2	18.3	28.7	.0	34.8	35.6	17.3	2.7	499.2	
1965	572.4	80.0	21.0	30.0	.0	37.6	39.7	19.1	2.8	540.7	
1966	628.1	85.1	24.4	38.8	.0	41.6	44.4	19.4	3.0	588.2	
1967	662.2	82.4	27.6	43.4	.0	49.5	48.3	20.2	3.1	630.0	
1968	722.5	89.1	30.0	47.9	.0	56.4	53.4	21.9	3.4	690.6	
1969	779.3	85.1	34.8	55.0	.0	62.8	61.1	22.4	3.9	754.7	
1970	810.7	71.4	41.4	58.6	.0	76.1	69.4	22.2	4.1	811.1	
1971	871.5	83.2	46.5	64.6	.6	90.0	74.8	22.6	4.4	868.4	
1972	963.6	96.6	51.2	74.2	.0	99.8	80.9	24.1	4.9	951.4	
1973	1,086.2	108.3	60.2	92.4	-.1	114.0	93.9	26.5	5.5	1,065.2	
1974	1,160.7	94.9	76.1	104.3	-.5	135.4	112.4	28.1	5.8	1,168.6	
1975	1,239.4	110.5	84.5	110.9	.0	170.9	123.2	29.9	7.4	1,265.0	
1976	1,379.2	138.1	87.2	126.0	.0	186.4	132.5	36.5	7.9	1,391.2	
1977	1,550.5	167.3	102.5	140.6	.0	199.3	152.8	39.6	8.6	1,540.4	
1978	1,760.3	192.4	121.7	161.8	.2	214.6	179.4	45.3	9.3	1,732.7	
1979	1,966.7	194.8	153.8	186.9	-.2	240.0	218.7	50.8	10.3	1,951.2	
1980	2,116.6	175.4	192.6	203.7	-.0	285.9	266.0	56.8	11.7	2,165.3	
1981	2,373.0	192.3	249.9	237.0	.1	324.3	341.3	62.8	12.9	2,435.0	
1982	2,450.4	164.8	261.1	253.0	-.0	360.4	366.2	66.4	14.1	2,578.6	
1983 P	2,646.9	226.3	247.2	272.3	-.4	387.9	366.3	70.5	15.5	2,741.9	
1981:											
I	2,295.8	194.7	223.7	231.7	.0	311.9	308.7	59.6	12.5	2,338.3	
II	2,337.2	185.0	242.6	234.8	.0	314.9	329.8	61.9	12.8	2,394.2	
III	2,423.4	197.6	268.0	239.0	.3	332.8	361.9	64.5	13.1	2,490.9	
IV	2,435.6	192.0	265.3	242.5	.0	337.4	364.7	65.3	13.4	2,516.6	
1982:											
I	2,419.7	162.0	265.0	249.9	-.1	340.9	364.9	65.6	13.7	2,528.1	
II	2,448.9	166.8	268.3	252.4	.0	350.3	371.9	65.6	14.0	2,563.2	
III	2,458.9	168.5	256.4	254.3	.0	366.1	364.8	66.4	14.3	2,591.3	
IV	2,474.0	161.9	254.7	255.4	.0	384.3	363.1	67.9	14.7	2,632.0	
1983:											
I	2,528.5	181.8	248.3	265.4	.0	383.6	357.2	68.8	15.0	2,657.7	
II	2,612.8	218.2	243.8	270.1	-1.3	390.0	357.1	69.3	15.3	2,713.6	
III	2,686.9	248.4	246.1	274.4	-.4	386.8	369.9	70.9	15.7	2,761.9	
IV P			250.4	279.1	.0	391.4	381.0	72.9	16.1	2,834.2	

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-21.—National income by type of income, 1929-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income ¹	Compensation of employees			Proprietors' income with inventory valuation and capital consumption adjustments							
		Total	Wages and salaries	Supplements to wages and salaries ²	Total	Farm			Nonfarm			
						Total	Proprietors' income ³	Capital consumption adjustment	Total	Proprietors' income ⁴	Inventory valuation adjustment	Capital consumption adjustment
1929.....	84.8	51.1	50.5	0.6	15.0	6.1	6.3	-0.2	8.9	8.8	0.1	-0.1
1933.....	39.9	29.5	29.0	.5	5.9	2.5	2.6	-0.1	3.3	3.9	-0.5	.0
1939.....	71.4	48.1	46.0	2.1	11.8	4.4	4.5	-0.1	7.4	7.6	-0.2	-0.0
1940.....	79.7	52.1	49.9	2.3	13.0	4.4	4.5	-0.1	8.6	8.6	-0.0	.0
1941.....	102.7	64.8	62.1	2.7	17.5	6.4	6.5	-0.2	11.1	11.7	-0.6	.0
1942.....	135.9	85.3	82.1	3.2	24.2	10.1	10.3	-0.2	14.1	14.4	-0.4	.1
1943.....	169.3	109.5	105.8	3.8	29.1	12.0	12.2	-0.2	17.1	17.1	-0.2	.2
1944.....	182.1	121.2	116.7	4.5	30.4	12.0	12.2	-0.2	18.4	18.3	-0.1	.2
1945.....	180.7	123.1	117.5	5.6	31.8	12.4	12.7	-0.3	19.4	19.3	-0.1	.2
1946.....	178.6	118.1	112.0	6.0	36.7	14.9	15.2	-0.3	21.8	23.3	-1.7	.2
1947.....	194.9	129.2	123.1	6.1	35.9	15.1	15.7	-0.5	20.8	21.8	-1.5	.5
1948.....	219.9	141.4	135.5	5.9	40.9	17.6	18.2	-0.6	23.3	23.1	-0.4	.6
1949.....	213.6	141.3	134.7	6.6	36.4	12.8	13.5	-0.7	23.6	22.2	.5	.9
1950.....	237.6	154.8	147.0	7.8	38.7	13.7	14.4	-0.7	25.0	25.1	-1.1	1.0
1951.....	274.1	181.0	171.3	9.7	43.2	16.1	16.9	-0.8	27.2	26.4	-0.3	1.0
1952.....	287.9	195.7	185.3	10.4	43.4	15.1	16.0	-0.8	28.2	26.9	-0.2	1.1
1953.....	302.1	209.6	198.5	11.0	41.8	13.1	13.9	-0.8	28.6	27.6	-0.2	1.2
1954.....	301.1	208.4	196.8	11.6	41.2	12.5	13.3	-0.8	28.7	27.6	-0.0	1.2
1955.....	330.5	224.9	211.7	13.2	42.9	11.5	12.2	-0.8	31.4	30.5	-0.2	1.2
1956.....	349.4	243.5	228.3	15.2	43.9	11.2	12.1	-0.9	32.7	31.8	-0.5	1.4
1957.....	365.2	256.5	239.3	17.2	45.3	11.1	12.1	-0.9	34.2	33.1	-0.3	1.4
1958.....	366.9	258.2	240.5	17.7	47.7	13.2	14.1	-0.9	34.5	33.2	-0.1	1.4
1959.....	400.8	279.6	258.9	20.6	47.6	10.9	11.9	-1.0	36.7	35.3	-0.0	1.4
1960.....	415.7	294.9	271.9	23.0	47.2	11.7	12.6	-0.9	35.5	34.2	-0.0	1.3
1961.....	428.8	303.6	279.5	24.1	48.6	12.1	12.9	-0.8	36.5	35.3	-0.0	1.2
1962.....	462.0	325.1	298.0	27.1	49.9	12.3	13.0	-0.8	37.6	36.4	-0.0	1.2
1963.....	488.5	342.9	313.4	29.5	50.5	12.0	12.8	-0.7	38.5	37.2	-0.0	1.4
1964.....	524.9	368.0	336.1	31.8	52.5	10.8	11.5	-0.7	41.7	40.2	-0.1	1.5
1965.....	572.4	396.5	362.0	34.5	56.9	13.1	13.8	-0.7	43.8	42.7	-0.2	1.3
1966.....	628.1	439.3	398.4	40.9	60.5	14.1	14.9	-0.8	46.4	45.3	-0.2	1.3
1967.....	662.2	471.4	427.0	44.4	61.2	12.6	13.5	-0.9	48.6	47.5	-0.2	1.3
1968.....	722.5	519.9	469.6	50.3	64.0	12.7	13.7	-1.0	51.3	50.6	-0.4	1.1
1969.....	779.3	572.9	515.7	57.2	67.0	14.6	15.7	-1.2	52.5	51.9	-0.5	1.1
1970.....	810.7	612.0	548.7	63.3	66.2	14.3	15.6	-1.3	51.9	51.7	-0.5	.8
1971.....	871.5	652.2	581.5	70.7	69.4	15.0	16.4	-1.4	54.4	54.5	-0.6	.4
1972.....	963.6	718.0	635.2	82.8	76.9	18.7	20.4	-1.6	58.1	58.1	-0.7	.8
1973.....	1,086.2	801.3	702.6	98.7	93.8	32.8	34.6	-1.8	61.0	62.3	-2.0	.6
1974.....	1,160.7	877.5	765.2	112.3	88.7	26.5	29.0	-2.5	62.2	65.8	-3.7	.1
1975.....	1,239.4	931.4	806.4	125.0	90.0	24.6	28.0	-3.4	65.4	67.4	-1.2	-0.8
1976.....	1,379.2	1,036.3	889.9	146.4	94.1	19.1	22.8	-3.7	75.0	77.1	-1.2	-0.9
1977.....	1,550.5	1,152.1	983.2	168.9	103.9	19.1	23.3	-4.3	84.8	86.8	-1.2	-0.8
1978.....	1,760.3	1,301.1	1,106.5	194.6	118.5	26.3	31.3	-5.0	92.2	94.9	-2.0	-0.7
1979.....	1,966.7	1,458.1	1,237.4	220.7	132.1	31.9	37.8	-5.9	100.2	103.2	-2.9	-1.1
1980.....	2,116.6	1,599.6	1,356.6	243.0	117.4	21.8	28.9	-7.1	95.6	100.3	-3.1	-1.5
1981.....	2,373.0	1,769.2	1,493.2	276.0	120.2	30.5	38.4	-8.0	89.7	90.1	-1.5	1.1
1982.....	2,450.4	1,865.7	1,568.1	297.6	109.0	21.5	29.9	-8.4	87.4	84.2	-0.6	3.9
1983 ⁵	2,646.9	1,990.1	1,664.0	326.1	128.6	21.0	29.4	-8.4	107.6	97.3	-0.9	11.1
1981:												
I.....	2,295.8	1,718.8	1,451.7	267.1	121.1	26.5	34.1	-7.7	94.7	97.4	-2.6	-1.1
II.....	2,337.2	1,750.9	1,478.1	272.8	118.9	29.1	37.0	-7.9	89.8	90.3	-1.4	.9
III.....	2,423.4	1,791.7	1,512.6	279.2	123.5	35.0	43.1	-8.1	88.5	88.0	-1.2	1.6
IV.....	2,435.6	1,815.6	1,530.6	285.0	117.1	31.3	39.6	-8.2	85.8	84.7	-1.0	2.1
1982:												
I.....	2,419.7	1,834.2	1,542.7	291.6	111.2	27.4	35.7	-8.2	83.7	80.8	-1.1	3.0
II.....	2,448.9	1,859.9	1,563.9	296.0	104.9	16.8	25.1	-8.3	88.1	85.3	-0.8	3.6
III.....	2,458.9	1,879.5	1,579.8	299.7	103.6	15.8	24.2	-8.4	87.8	84.5	-0.7	4.1
IV.....	2,474.0	1,889.0	1,586.0	302.9	116.2	26.0	34.6	-8.6	90.2	86.0	-0.8	4.9
1983:												
I.....	2,528.5	1,923.7	1,610.6	313.1	120.6	22.2	30.6	-8.4	98.4	91.0	-2.2	7.6
II.....	2,612.8	1,968.7	1,647.1	321.6	127.2	21.0	29.4	-8.4	106.2	96.8	-1.1	10.5
III.....	2,686.9	2,011.8	1,681.5	330.3	126.7	15.5	23.9	-8.4	111.2	100.6	-1.5	12.2
IV.....		2,056.0	1,716.6	339.3	139.7	25.3	33.6	-8.3	114.4	100.9	-0.6	14.1

¹ National income is the total net income earned in production. It differs from gross national product mainly in that it excludes depreciation charges and other allowances for business and institutional consumption of durable capital goods and indirect business taxes. See Table B-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, 1929-83—Continued

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Rental income of persons with capital consumption adjustment			Corporate profits with inventory valuation and capital consumption adjustments											Net interest
	Total	Rental income of persons	Capital consumption adjustment	Total	Profits with inventory valuation adjustment and without capital consumption adjustment							Capital consumption adjustment			
					Total	Profits before taxes	Profits tax liability	Profits after tax			Inventory valuation adjustment				
								Total	Dividends	Undistributed profits					
1929	4.9	5.7	-0.8	9.0	10.5	10.0	1.4	8.6	5.8	2.8	0.5	-1.4	4.1		
1933	2.2	2.3	-1	-1.7	-1.2	1.0	5	4	2.0	-1.6	-2.1	-6	4.1		
1939	2.6	3.1	-6	5.3	6.5	7.2	1.4	5.7	3.8	2.0	-7	-1.1	3.6		
1940	2.7	3.3	-6	8.6	9.8	10.0	2.8	7.2	4.0	3.2	-2	-1.2	3.3		
1941	3.1	3.9	-8	14.1	15.4	17.9	7.6	10.3	4.4	5.8	-2.5	-1.3	3.3		
1942	4.0	5.0	-1.0	19.3	20.5	21.7	11.4	10.3	4.3	6.0	-1.2	-1.2	3.1		
1943	4.4	5.6	-1.2	23.5	24.5	25.3	14.1	11.2	4.4	6.7	-8	-1.0	2.7		
1944	4.5	5.9	-1.4	23.6	24.0	24.2	12.9	11.3	4.6	6.7	-3	-3	2.4		
1945	4.6	6.2	-1.6	19.0	19.3	19.8	10.7	9.1	4.6	4.5	-6	-2	2.2		
1946	5.5	7.3	-1.8	16.6	19.6	24.8	9.1	15.7	5.6	10.2	-5.3	-3.0	1.8		
1947	5.3	7.7	-2.5	22.3	25.9	31.8	11.3	20.5	6.3	14.2	-5.9	-3.6	2.3		
1948	5.7	8.5	-2.8	29.4	33.4	35.6	12.4	23.2	7.0	16.2	-2.2	-4.0	2.4		
1949	6.1	8.9	-2.8	27.1	31.1	29.2	10.2	19.0	7.2	11.8	1.9	-3.9	2.7		
1950	7.1	10.0	-2.9	33.9	37.9	42.9	17.9	25.0	8.8	16.2	-5.0	-4.0	3.0		
1951	7.7	11.0	-3.3	38.7	43.3	44.5	22.6	21.9	8.5	13.4	-1.2	-4.6	3.5		
1952	8.8	12.2	-3.4	36.1	40.6	39.6	19.4	20.2	8.5	11.8	1.0	-4.5	4.0		
1953	10.0	13.4	-3.4	36.3	40.2	41.2	20.3	20.9	8.8	12.1	-1.0	-3.9	4.4		
1954	11.0	14.4	-3.3	35.2	38.4	38.7	17.6	21.1	9.1	11.9	-3	-3.2	5.3		
1955	11.3	14.8	-3.5	45.5	47.5	49.2	22.0	27.2	10.3	16.9	-1.7	-2.0	5.9		
1956	11.6	15.2	-3.6	43.7	46.9	49.6	22.0	27.6	11.1	16.6	-2.7	-3.2	6.6		
1957	12.2	15.9	-3.6	43.3	46.6	48.1	21.4	26.7	11.5	15.2	-1.5	-3.4	7.9		
1958	12.9	16.7	-3.8	38.5	41.6	41.9	19.0	22.9	11.3	11.6	-3	-3.2	9.6		
1959	13.6	17.4	-3.8	49.6	52.3	52.6	23.6	28.9	12.2	16.7	-3	-2.7	10.3		
1960	14.5	18.0	-3.5	47.6	49.7	49.8	22.7	27.1	12.9	14.3	-2	-2.0	11.4		
1961	15.0	18.4	-3.4	48.6	50.0	49.7	22.8	26.9	13.3	13.6	3	-1.4	13.0		
1962	15.8	19.1	-3.4	56.6	55.1	55.0	24.0	31.1	14.4	16.6	0	1.5	14.7		
1963	16.5	19.7	-3.2	62.1	59.7	59.6	26.2	33.4	15.5	17.9	1	2.5	16.4		
1964	17.1	20.2	-3.2	69.2	66.0	66.5	28.0	38.5	17.3	21.2	-5	3.1	18.3		
1965	18.0	21.2	-3.3	80.0	76.0	77.2	30.9	46.3	19.1	27.2	-1.2	4.0	21.0		
1966	18.7	22.3	-3.6	85.1	80.9	83.0	33.7	49.4	19.4	29.9	-2.1	4.2	24.4		
1967	19.7	23.6	-3.9	82.4	78.1	79.7	32.5	47.2	20.2	27.0	-1.6	4.3	27.6		
1968	19.5	24.0	-4.5	89.1	84.9	88.5	39.2	49.4	22.0	27.3	-3.7	4.3	30.0		
1969	19.6	25.2	-5.6	85.1	80.8	86.7	39.5	47.2	22.5	24.7	-5.9	4.3	34.8		
1970	19.7	25.8	-6.1	71.4	68.9	75.4	34.2	41.3	22.5	18.8	-6.6	2.5	41.4		
1971	20.2	27.1	-6.9	83.2	82.0	86.6	37.5	49.0	22.9	26.1	-4.6	1.3	46.5		
1972	21.0	29.0	-8.0	96.6	94.0	100.6	41.6	58.9	24.4	34.5	-6.6	2.7	51.2		
1973	22.6	32.1	-9.5	108.3	105.6	125.6	49.0	76.6	27.0	49.6	-20.0	2.7	60.2		
1974	23.5	35.3	-11.8	94.9	96.7	136.7	51.6	85.1	29.9	55.2	-40.0	-1.8	76.1		
1975	23.0	36.8	-13.8	110.5	120.6	132.1	50.6	81.5	30.8	50.7	-11.6	-10.1	84.5		
1976	23.5	39.2	-15.6	138.1	151.6	166.3	63.8	102.5	37.4	65.1	-14.7	-13.5	87.2		
1977	24.8	44.0	-19.1	167.3	178.5	194.7	72.7	122.0	40.8	81.2	-16.2	-11.3	102.5		
1978	26.6	50.0	-23.4	192.4	205.1	229.1	83.2	145.9	47.0	98.9	-24.0	-12.7	121.7		
1979	27.9	56.2	-28.3	194.8	209.6	252.7	87.6	165.1	52.7	112.4	-43.1	-14.8	153.8		
1980	31.5	63.9	-32.4	175.4	191.7	234.6	84.8	149.8	58.6	91.2	-42.9	-16.3	192.6		
1981	41.4	77.0	-35.6	192.3	203.3	227.0	82.8	144.1	64.7	79.5	-23.6	-11.0	249.9		
1982	49.9	86.3	-36.5	164.8	165.9	174.2	59.2	115.1	68.7	46.4	-8.4	-1.1	261.1		
1983 ^a	54.8	93.4	-38.6	226.3	195.5	205.3	75.7	129.6	73.3	56.3	-9.8	30.8	247.2		
1981:															
I	37.4	71.7	-34.3	194.7	207.1	243.9	91.7	152.2	61.3	90.9	-36.7	-12.4	223.7		
II	39.9	74.8	-34.9	185.0	196.4	219.0	80.4	138.6	63.7	74.9	-22.6	-11.4	242.6		
III	42.7	78.7	-36.0	197.6	208.3	227.7	83.7	144.0	66.4	77.6	-19.4	-10.7	268.0		
IV	45.6	82.6	-37.1	192.0	201.5	217.2	75.6	141.7	67.3	74.4	-15.7	-9.5	265.0		
1982:															
I	47.4	84.7	-37.3	162.0	167.7	173.2	60.3	112.9	67.7	45.2	-5.5	-5.6	265.0		
II	49.0	85.7	-36.7	166.8	170.3	178.8	61.4	117.4	67.8	49.5	-8.5	-3.5	268.3		
III	50.9	87.6	-36.7	168.5	168.3	177.3	60.8	116.5	68.8	47.7	-9.0	-1	256.4		
IV	52.3	87.4	-35.2	161.9	157.2	167.5	54.0	113.5	70.4	43.1	-10.3	4.7	254.7		
1983:															
I	54.1	91.6	-37.5	181.8	168.0	169.7	61.5	108.2	71.4	36.7	-1.7	13.9	248.3		
II	54.8	92.2	-37.4	218.2	192.7	203.3	76.0	127.2	72.0	55.2	-10.6	25.6	243.8		
III	53.9	94.0	-40.0	248.4	210.8	229.1	84.9	144.1	73.7	70.4	-18.3	37.6	246.1		
IV ^a	56.2	95.7	-39.4						75.9		-8.5	46.3	250.4		

^a With inventory valuation adjustment and without capital consumption adjustment.^b Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-22.—Sources of personal income, 1929-83
(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Personal income	Wage and salary disbursements ¹						Other labor income ¹	Proprietors' income with inventory valuation and capital consumption adjustments	
		Total	Commodity-producing industries		Distributive industries	Service industries	Government and government enterprises		Farm	Nonfarm
			Total	Manufacturing						
1929	85.0	50.5	21.5	16.1	15.6	8.4	5.0	0.5	6.1	8.9
1933	47.0	29.0	9.8	7.8	8.8	5.2	5.2	.4	2.5	3.3
1939	72.4	46.0	17.4	13.6	13.3	7.1	8.2	.6	4.4	7.4
1940	77.9	49.9	19.7	15.6	14.2	7.5	8.5	.6	4.4	8.6
1941	95.4	62.1	27.5	21.7	16.3	8.1	10.2	.7	6.4	11.1
1942	122.6	82.1	39.1	30.9	18.0	9.0	16.0	.9	10.1	14.1
1943	150.8	105.6	49.0	40.9	20.1	9.9	26.6	1.1	12.0	17.1
1944	164.5	116.9	50.4	42.9	22.7	10.9	33.0	1.5	12.0	18.4
1945	170.0	117.5	45.9	38.2	24.8	11.9	34.9	1.8	12.4	19.4
1946	177.6	112.0	46.0	36.5	31.0	14.3	20.7	2.0	14.9	21.8
1947	190.1	123.1	54.2	42.5	35.2	16.1	17.5	2.4	15.1	20.8
1948	209.0	135.5	61.1	47.1	37.5	17.9	19.0	2.7	17.6	23.3
1949	206.4	134.8	57.8	44.6	37.7	18.5	20.8	2.9	12.8	23.6
1950	227.2	147.0	64.8	50.3	39.8	19.8	22.6	3.7	13.7	25.0
1951	254.9	171.3	76.3	59.3	44.3	21.5	29.2	4.6	16.1	27.2
1952	271.8	185.4	82.0	64.1	46.9	23.1	33.3	5.2	15.1	28.2
1953	287.7	198.6	89.6	71.2	49.7	24.9	34.4	5.9	13.1	28.6
1954	289.6	196.8	85.7	67.5	50.1	26.1	34.9	6.1	12.5	28.7
1955	310.3	211.7	93.1	73.8	53.4	28.6	36.6	7.0	11.5	31.4
1956	332.6	228.3	100.6	79.4	57.7	31.3	38.8	8.0	11.2	32.7
1957	351.0	239.3	104.2	82.4	60.5	33.6	41.0	9.0	11.1	34.2
1958	361.1	240.5	100.0	78.6	60.8	35.6	44.1	9.4	13.2	34.5
1959	384.4	258.9	109.6	86.8	64.8	38.5	46.0	10.6	10.9	36.7
1960	402.3	271.9	113.1	89.7	68.2	41.4	49.2	11.2	11.7	35.5
1961	417.8	279.5	113.7	89.8	69.3	44.1	52.4	11.8	12.1	36.5
1962	443.6	298.0	121.8	96.7	72.8	47.2	56.3	13.0	12.3	37.6
1963	466.2	313.4	126.9	100.6	76.3	50.2	60.0	14.0	12.0	38.5
1964	499.2	336.1	135.4	107.1	81.4	54.4	64.9	15.7	10.8	41.7
1965	540.7	362.0	146.0	115.5	87.2	58.9	69.9	17.8	13.1	43.8
1966	588.2	398.4	161.0	128.0	94.4	64.7	78.3	19.9	14.1	46.4
1967	630.0	427.0	168.3	134.1	100.9	71.3	86.4	21.7	12.6	48.6
1968	690.6	469.6	183.4	145.8	110.0	79.6	96.6	25.2	12.7	51.3
1969	754.7	515.7	199.6	157.5	120.8	89.7	105.5	28.5	14.6	52.5
1970	811.1	548.7	203.0	158.2	130.3	98.3	117.1	32.5	14.3	51.9
1971	868.4	580.9	208.3	160.3	139.4	106.7	126.5	36.7	15.0	54.4
1972	951.4	635.2	227.3	175.4	152.1	118.2	137.5	43.0	18.7	58.1
1973	1,065.2	702.7	254.3	196.2	168.3	131.3	148.7	48.8	32.8	61.0
1974	1,168.6	765.7	274.7	211.4	184.6	145.6	160.9	55.8	26.5	62.2
1975	1,265.0	806.4	275.0	211.0	195.6	159.7	176.1	64.5	24.6	65.4
1976	1,391.2	889.9	307.3	237.4	216.6	177.4	188.7	75.9	19.1	75.0
1977	1,540.4	983.2	343.6	266.0	239.5	197.7	202.4	89.4	19.1	84.8
1978	1,732.7	1,106.3	389.4	299.2	270.7	226.6	219.5	102.5	26.3	92.2
1979	1,951.2	1,237.6	438.4	333.9	303.4	259.7	236.2	114.9	31.9	100.2
1980	2,165.3	1,356.7	468.1	354.6	330.7	297.6	260.3	128.0	21.8	95.6
1981	2,435.0	1,493.2	509.5	385.3	361.6	337.7	284.4	143.5	30.5	89.7
1982	2,578.6	1,568.1	509.2	383.8	378.8	374.1	306.0	156.6	21.5	87.4
1983 p	2,741.9	1,664.4	529.6	402.7	397.2	411.5	326.1	173.4	21.0	107.6
1981:										
I	2,338.3	1,451.7	497.5	375.9	351.5	325.3	277.4	137.6	26.5	94.7
II	2,394.2	1,478.1	506.9	386.1	359.4	331.1	280.8	141.5	29.1	89.8
III	2,490.9	1,512.3	518.2	391.6	366.9	342.1	285.1	145.7	35.0	88.5
IV	2,516.6	1,530.6	515.5	387.5	368.4	352.4	294.2	149.4	31.3	85.8
1982:										
I	2,528.1	1,542.8	514.8	386.2	371.6	357.6	298.7	152.4	27.4	83.7
II	2,563.2	1,563.8	513.7	386.8	378.1	369.1	303.0	155.4	16.8	88.1
III	2,591.3	1,579.8	508.9	384.8	381.9	381.2	307.7	158.2	15.8	87.8
IV	2,632.0	1,586.0	499.5	377.4	383.5	388.5	314.5	160.4	26.0	90.2
1983:										
I	2,657.7	1,610.7	508.6	385.4	386.4	396.4	319.2	164.3	22.2	98.4
II	2,713.6	1,648.4	522.2	397.4	394.3	407.3	324.6	170.1	21.0	106.2
III	2,761.9	1,681.9	537.8	409.2	398.9	416.4	328.8	176.4	15.5	111.2
IV p	2,834.2	1,716.7	549.8	418.6	409.2	425.9	331.8	182.7	25.3	114.4

¹ 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, 1929-83—Continued

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Rental income of persons with capital consumption adjustment	Personal dividend income	Personal interest income	Transfer payments							Less: Personal contributions for social insurance	Nonfarm personal income ²
				Total	Old-age, survivors, disability, and health insurance benefits	Government unemployment insurance benefits	Veterans benefits	Government employees retirement benefits	Aid to families with dependent children (AFDC)	Other		
1929	4.9	5.8	6.9	1.5	.....	.....	0.6	0.1	0.8	.....	0.1	.....
1933	2.2	2.0	5.5	2.1	.....	.....	.6	.2	1.4	.....	.2	.....
1939	2.6	3.8	5.4	3.0	0.0	0.4	.5	.3	1.7	.....	.6	.....
1940	2.7	4.0	5.3	3.1	.0	.5	.5	.3	1.7	.....	.7	.....
1941	3.1	4.4	5.3	3.1	.1	.4	.5	.3	1.8	.....	.8	.....
1942	4.0	4.3	5.2	3.1	.1	.4	.5	.3	1.8	.....	1.2	.....
1943	4.4	4.4	5.1	3.0	.2	.1	.5	.4	1.8	.....	1.8	.....
1944	4.5	4.6	5.2	3.6	.2	.1	1.0	.4	2.0	.....	2.2	.....
1945	4.6	4.6	5.9	6.2	.3	.4	3.0	.5	2.0	.....	2.3	.....
1946	5.5	5.6	6.6	11.3	.4	1.1	7.0	.7	2.1	.....	2.0	159.9
1947	5.3	6.3	7.6	11.7	.5	.8	7.0	.7	.3	2.5	2.1	171.9
1948	5.7	7.0	8.1	11.3	.6	.9	5.9	.7	.4	2.9	2.2	188.2
1949	6.1	7.2	8.7	12.5	.7	1.9	5.3	.9	.5	3.3	2.2	190.4
1950	7.1	8.8	9.7	15.2	1.0	1.5	7.7	1.0	.6	3.5	2.9	210.2
1951	7.7	8.5	10.5	12.6	1.9	.9	4.6	1.1	.6	3.6	3.4	235.4
1952	8.8	8.5	11.2	13.1	2.2	1.1	4.3	1.2	.5	3.8	3.8	253.1
1953	10.0	8.8	12.5	14.1	3.0	1.0	4.1	1.4	.5	4.1	4.0	271.3
1954	11.0	9.1	13.7	16.2	3.6	2.2	4.2	1.5	.6	4.1	4.6	273.9
1955	11.3	10.3	14.9	17.5	4.9	1.5	4.4	1.7	.6	4.3	5.2	295.5
1956	11.6	11.1	16.7	18.7	5.7	1.5	4.4	1.9	.6	4.5	5.8	318.0
1957	12.2	11.5	18.8	21.6	7.3	1.9	4.5	2.2	.7	4.9	6.7	336.6
1958	12.9	11.3	20.3	25.9	8.5	4.1	4.7	2.5	.8	5.3	6.9	344.4
1959	13.6	12.2	22.5	27.0	10.2	2.8	4.6	2.8	.9	5.8	7.9	369.8
1960	14.5	12.9	25.0	28.9	11.1	3.0	4.6	3.1	1.0	6.2	9.3	386.7
1961	15.0	13.3	26.4	32.8	12.6	4.3	5.0	3.4	1.1	6.4	9.7	401.6
1962	15.8	14.4	29.0	33.8	14.3	3.1	4.7	3.7	1.3	6.7	10.3	427.1
1963	16.5	15.5	32.2	35.8	15.2	3.0	4.8	4.2	1.4	7.3	11.8	449.7
1964	17.1	17.3	35.6	37.4	16.0	2.7	4.7	4.7	1.5	7.8	12.6	483.7
1965	18.0	19.1	39.7	40.4	18.1	2.3	4.9	5.2	1.7	8.3	13.3	522.6
1966	18.7	19.4	44.4	44.7	20.8	1.9	4.9	6.1	1.9	9.2	17.8	568.9
1967	19.7	20.2	48.3	52.6	25.5	2.2	5.6	6.9	2.3	10.2	20.6	611.9
1968	19.5	21.9	53.4	59.8	30.2	2.1	5.9	7.6	2.8	11.1	22.9	672.1
1969	19.6	22.4	61.1	66.7	32.9	2.2	6.7	8.7	3.5	12.5	26.2	733.9
1970	19.7	22.2	69.4	80.1	38.5	4.0	7.7	10.2	4.8	15.0	27.9	790.0
1971	20.2	22.6	74.8	94.4	44.5	5.8	8.8	11.8	6.2	17.4	30.7	846.5
1972	21.0	24.1	80.9	104.7	49.6	5.7	9.7	13.8	6.9	19.0	34.5	925.3
1973	22.6	26.5	93.9	119.5	60.4	4.4	10.4	16.0	7.2	21.1	42.6	1,023.7
1974	23.5	29.1	112.4	141.2	70.1	6.8	11.8	19.0	7.9	25.6	47.9	1,131.8
1975	23.0	29.9	123.2	178.3	81.4	17.6	14.5	22.7	9.2	32.8	50.4	1,229.1
1976	23.5	36.5	132.5	194.3	92.9	15.8	14.4	26.1	10.1	35.1	55.5	1,359.3
1977	24.8	39.6	152.8	207.9	104.9	12.7	13.8	29.0	10.6	36.9	61.1	1,506.5
1978	26.6	45.3	179.4	223.8	116.2	9.7	13.9	32.7	10.7	40.7	69.8	1,689.7
1979	27.9	50.8	218.7	250.3	131.8	9.8	14.4	36.9	11.0	46.3	81.1	1,899.3
1980	31.5	56.8	266.0	297.6	154.2	16.1	15.0	43.0	12.4	56.9	88.7	2,119.5
1981	41.4	62.8	341.3	337.2	182.0	15.6	16.1	49.3	13.5	60.8	104.6	2,377.0
1982	49.9	66.4	366.2	374.5	204.5	24.8	16.4	54.2	13.4	61.2	112.0	2,527.6
1983 ^a	54.8	70.5	366.3	403.5	222.8	25.5	16.7	58.5	14.3	65.6	119.5	2,691.2
1981:												
I.....	37.4	59.6	308.7	324.4	171.0	16.1	16.0	47.4	13.3	60.6	102.2	2,285.8
II.....	39.9	61.9	329.8	327.7	173.4	15.0	15.9	49.2	13.5	60.6	103.6	2,337.9
III.....	42.7	64.5	361.9	345.9	190.5	14.4	16.0	49.8	13.6	61.6	105.6	2,427.9
IV.....	45.6	65.3	364.7	350.7	192.8	16.8	16.4	50.9	13.5	60.3	106.8	2,456.6
1982:												
I.....	47.4	65.6	364.9	354.6	195.0	19.0	16.4	51.5	13.3	59.4	110.7	2,471.3
II.....	49.0	65.6	371.9	364.2	197.3	23.2	16.2	54.5	13.4	59.7	111.7	2,516.8
III.....	50.9	66.4	364.8	380.4	209.3	24.9	16.3	55.1	13.3	61.6	112.7	2,546.0
IV.....	52.3	67.9	363.1	399.0	216.5	32.2	16.6	55.8	13.5	64.3	112.9	2,576.5
1983:												
I.....	54.1	68.8	357.2	398.5	217.4	29.0	16.9	56.6	14.1	64.5	116.5	2,606.1
II.....	54.8	69.3	357.1	405.3	221.1	30.0	16.6	58.3	14.4	64.9	118.6	2,663.3
III.....	53.9	70.9	369.9	402.6	223.8	22.6	16.6	59.3	14.3	66.0	120.5	2,716.6
IV ^a	56.2	72.9	381.0	407.5	229.0	20.6	16.5	59.7	14.5	67.1	122.5	2,779.0

^a 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.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-23.—Disposition of personal income, 1929-83

(Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates)

Year or quarter	Personal income	Less: Personal tax and nontax payments	Equals: Disposable personal income	Less: Personal outlays				Equals: Personal saving	Percent of disposable personal income		
				Total	Personal consumption expenditures	Interest paid by consumers to business	Personal transfer payments to foreigners (net)		Personal outlays		Personal saving
									Total	Personal consumption expenditures	
1929.....	85.0	2.6	82.4	79.1	77.3	1.5	0.3	3.3	96.0	93.8	4.0
1933.....	47.0	1.4	45.6	46.5	45.8	.5	.2	-0.9	102.0	100.5	-2.0
1939.....	72.4	2.4	70.0	67.8	67.0	.7	.2	2.2	96.9	95.6	3.1
1940.....	77.9	2.6	75.3	72.0	71.0	.8	.2	3.4	95.5	94.2	4.5
1941.....	95.4	3.3	92.2	81.8	80.8	.9	.2	10.3	88.8	87.6	11.2
1942.....	122.6	5.9	116.6	89.4	88.6	.7	.1	27.2	76.7	76.0	23.3
1943.....	150.8	17.8	133.0	100.1	99.4	.5	.2	32.9	75.3	74.7	24.7
1944.....	164.5	18.9	145.6	109.0	108.2	.5	.4	36.6	74.8	74.3	25.2
1945.....	170.0	20.8	149.1	120.4	119.5	.5	.5	28.7	80.8	80.1	19.2
1946.....	177.6	18.7	158.9	145.2	143.8	.7	.7	13.7	91.4	90.5	8.6
1947.....	190.1	21.4	168.7	163.5	161.7	1.0	.7	5.2	96.9	95.9	3.1
1948.....	209.0	21.0	188.0	176.9	174.7	1.4	.7	11.1	94.1	93.0	5.9
1949.....	206.4	18.5	187.9	180.4	178.1	1.7	.5	7.5	96.0	94.8	4.0
1950.....	227.2	20.6	206.6	194.7	192.0	2.3	.4	11.9	94.2	92.9	5.8
1951.....	254.9	28.9	226.0	210.0	207.1	2.5	.4	16.1	92.9	91.6	7.1
1952.....	271.8	34.0	237.7	220.4	217.1	2.9	.4	17.4	92.7	91.3	7.3
1953.....	287.7	35.5	252.2	233.7	229.7	3.6	.5	18.5	92.7	91.1	7.3
1954.....	289.6	32.5	257.1	240.1	235.8	3.8	.5	17.0	93.4	91.7	6.6
1955.....	310.3	35.4	275.0	258.5	253.7	4.4	.4	16.4	94.0	92.3	6.0
1956.....	332.6	39.7	292.9	271.6	266.0	5.1	.5	21.3	92.7	90.8	7.3
1957.....	351.0	42.4	308.6	286.4	280.4	5.5	.5	22.3	92.8	90.9	7.2
1958.....	361.1	42.1	319.0	295.4	289.5	5.6	.4	23.6	92.6	90.7	7.4
1959.....	384.4	46.0	338.4	317.3	310.8	6.1	.4	21.1	93.8	91.8	6.2
1960.....	402.3	50.4	352.0	332.3	324.9	7.0	.4	19.7	94.4	92.3	5.6
1961.....	417.8	52.1	365.8	342.7	335.0	7.3	.4	23.0	93.7	91.6	6.3
1962.....	443.6	56.8	386.8	363.5	355.2	7.8	.5	23.3	94.0	91.8	6.0
1963.....	466.2	60.3	405.9	384.0	374.6	8.8	.6	21.9	94.6	92.3	5.4
1964.....	499.2	58.6	440.6	411.0	400.5	9.9	.6	29.6	93.3	90.9	6.7
1965.....	540.7	64.9	475.8	442.1	430.4	11.1	.7	33.7	92.9	90.5	7.1
1966.....	588.2	74.5	513.7	477.7	465.1	12.0	.7	36.0	93.0	90.5	7.0
1967.....	630.0	82.1	547.9	503.6	490.3	12.5	.9	44.3	91.9	89.5	8.1
1968.....	690.6	97.2	593.4	551.5	536.9	13.8	.8	41.9	92.9	90.5	7.1
1969.....	754.7	115.7	638.9	598.3	581.8	15.6	.9	40.6	93.6	91.1	6.4
1970.....	811.1	115.8	695.3	639.5	621.7	16.7	1.1	55.8	92.0	89.4	8.0
1971.....	868.4	116.7	751.8	691.1	672.2	17.7	1.1	60.7	91.9	89.4	8.1
1972.....	951.4	141.0	810.3	757.7	737.1	19.5	1.1	52.6	93.5	91.0	6.5
1973.....	1,065.2	150.7	914.5	835.5	812.0	22.3	1.3	79.0	91.4	88.8	8.6
1974.....	1,168.6	170.2	998.3	913.2	888.1	24.1	1.0	85.1	91.5	89.0	8.5
1975.....	1,265.0	168.9	1,096.1	1,001.8	976.4	24.4	.9	94.3	91.4	89.1	8.6
1976.....	1,391.2	196.8	1,194.4	1,111.9	1,084.3	26.7	.9	82.5	93.1	90.8	6.9
1977.....	1,540.4	226.4	1,314.0	1,236.0	1,204.4	30.7	.9	78.0	94.1	91.7	5.9
1978.....	1,732.7	258.7	1,474.0	1,384.6	1,346.5	37.4	.8	89.4	93.9	91.3	6.1
1979.....	1,951.2	301.0	1,650.2	1,553.5	1,507.2	45.5	.8	96.7	94.1	91.3	5.9
1980.....	2,165.3	336.5	1,828.9	1,718.7	1,668.1	49.6	1.0	110.2	94.0	91.2	6.0
1981.....	2,435.0	387.4	2,047.6	1,912.4	1,857.2	54.3	.9	135.3	93.4	90.7	6.6
1982.....	2,578.6	402.1	2,176.5	2,051.1	1,991.9	58.1	1.1	125.4	94.2	91.5	5.8
1983 ^a	2,741.9	406.3	2,335.6	2,222.5	2,158.6	62.7	1.1	113.1	95.2	92.4	4.8
1981:											
I.....	2,338.3	370.7	1,967.6	1,855.3	1,802.8	51.7	.8	112.2	94.3	91.6	5.7
II.....	2,394.2	383.8	2,010.4	1,890.2	1,835.8	53.5	1.0	120.2	94.0	91.3	6.0
III.....	2,490.9	398.9	2,092.0	1,942.3	1,886.1	55.3	.9	149.7	92.8	90.2	7.2
IV.....	2,516.6	396.1	2,120.5	1,961.5	1,904.1	56.5	1.0	159.0	92.5	89.8	7.5
1982:											
I.....	2,528.1	400.2	2,127.9	1,997.0	1,938.9	57.0	1.1	130.8	93.9	91.1	6.1
II.....	2,563.2	404.2	2,159.0	2,031.9	1,972.8	57.8	1.3	127.1	94.1	91.4	5.9
III.....	2,591.3	399.8	2,191.5	2,068.4	2,008.8	58.5	1.1	123.0	94.4	91.7	5.6
IV.....	2,632.0	404.1	2,227.8	2,107.0	2,046.9	59.1	1.0	120.8	94.6	91.9	5.4
1983:											
I.....	2,657.7	401.8	2,255.9	2,134.2	2,073.0	60.2	1.0	121.7	94.6	91.9	5.4
II.....	2,713.6	412.6	2,301.0	2,209.5	2,147.0	61.4	1.1	91.5	96.0	93.3	4.0
III.....	2,761.9	400.1	2,361.7	2,245.9	2,181.1	63.6	1.2	115.8	95.1	92.4	4.9
IV ^a	2,834.2	410.6	2,423.6	2,300.1	2,233.1	65.8	1.2	123.5	94.9	92.1	5.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-24.—Total and per capita disposable personal income and personal consumption expenditures in current and 1972 dollars, 1929–83

[Quarterly data at seasonally adjusted annual rates, except as noted]

Year or quarter	Disposable personal income				Personal consumption expenditures				Population (thousands) ¹
	Total (billions of dollars)		Per capita (dollars)		Total (billions of dollars)		Per capita (dollars)		
	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	
1929.....	82.4	229.5	676	1,883	77.3	215.1	634	1,765	121,878
1933.....	45.6	169.6	363	1,349	45.8	170.5	364	1,356	125,690
1939.....	70.0	229.8	534	1,754	67.0	219.8	511	1,678	131,028
1940.....	75.3	244.0	570	1,847	71.0	229.9	537	1,740	132,122
1941.....	92.2	277.9	691	2,083	80.8	243.6	605	1,826	133,402
1942.....	116.6	317.5	865	2,354	88.6	241.1	657	1,788	134,860
1943.....	133.0	332.1	973	2,429	99.4	248.2	727	1,815	136,739
1944.....	145.6	343.6	1,052	2,483	108.2	255.2	781	1,844	138,397
1945.....	149.1	338.1	1,066	2,416	119.5	270.9	854	1,936	139,928
1946.....	158.9	332.7	1,124	2,353	143.8	301.0	1,017	2,129	141,389
1947.....	168.7	318.8	1,170	2,212	161.7	305.8	1,122	2,122	144,126
1948.....	188.0	335.8	1,282	2,290	174.7	312.2	1,192	2,129	146,631
1949.....	187.9	336.8	1,259	2,257	178.1	319.3	1,194	2,140	149,188
1950.....	206.6	362.8	1,362	2,392	192.0	337.3	1,266	2,224	151,684
1951.....	226.0	372.6	1,465	2,415	207.1	341.6	1,342	2,214	154,287
1952.....	237.7	383.2	1,515	2,441	217.1	350.1	1,383	2,230	156,954
1953.....	252.2	399.1	1,581	2,501	229.7	363.4	1,439	2,277	159,565
1954.....	257.1	403.2	1,583	2,483	235.8	370.0	1,452	2,278	162,391
1955.....	275.0	426.8	1,664	2,582	253.7	394.1	1,535	2,384	165,275
1956.....	292.9	446.2	1,741	2,653	266.0	405.4	1,581	2,410	168,221
1957.....	308.6	455.5	1,802	2,660	280.4	413.8	1,637	2,416	171,274
1958.....	319.0	460.7	1,832	2,645	289.5	418.0	1,662	2,400	174,141
1959.....	338.4	479.7	1,911	2,709	310.8	440.4	1,755	2,487	177,073
1960.....	352.0	489.7	1,947	2,709	324.9	452.0	1,797	2,501	180,760
1961.....	365.8	503.8	1,991	2,742	335.0	461.4	1,823	2,511	183,742
1962.....	386.8	524.9	2,073	2,813	355.2	482.0	1,904	2,583	186,590
1963.....	405.9	542.3	2,144	2,865	374.6	500.5	1,979	2,644	189,300
1964.....	440.6	580.8	2,296	3,026	400.5	528.0	2,087	2,751	191,927
1965.....	475.8	616.3	2,448	3,171	430.4	557.5	2,214	2,868	194,347
1966.....	513.7	646.8	2,613	3,290	465.1	585.7	2,366	2,979	196,599
1967.....	547.9	673.5	2,757	3,389	490.3	602.7	2,467	3,032	198,752
1968.....	593.4	701.3	2,956	3,493	536.9	634.4	2,674	3,160	200,745
1969.....	638.9	722.5	3,152	3,564	581.8	657.9	2,870	3,245	202,736
1970.....	695.3	751.6	3,390	3,665	621.7	672.1	3,031	3,277	205,089
1971.....	751.8	779.2	3,620	3,752	672.2	696.8	3,237	3,355	207,692
1972.....	810.3	810.3	3,860	3,860	737.1	737.1	3,511	3,511	209,924
1973.....	914.5	864.7	4,315	4,080	812.0	767.9	3,831	3,623	211,939
1974.....	998.3	857.5	4,667	4,009	888.1	762.8	4,152	3,566	213,898
1975.....	1,096.1	874.9	5,075	4,051	976.4	779.4	4,521	3,609	215,981
1976.....	1,194.4	906.8	5,477	4,158	1,084.3	823.1	4,972	3,774	218,086
1977.....	1,314.0	942.9	5,965	4,280	1,204.4	864.3	5,468	3,924	220,289
1978.....	1,474.0	988.8	6,621	4,441	1,346.5	903.2	6,048	4,057	222,629
1979.....	1,650.2	1,015.7	7,331	4,512	1,507.2	927.6	6,695	4,121	225,106
1980.....	1,828.9	1,021.6	8,032	4,487	1,668.1	931.8	7,326	4,093	227,694
1981.....	2,047.6	1,054.7	8,906	4,587	1,857.2	956.8	8,078	4,161	229,916
1982.....	2,176.5	1,060.2	9,377	4,567	1,991.9	970.2	8,581	4,180	232,118
1983 ^a	2,335.6	1,094.3	9,968	4,671	2,158.6	1,011.4	9,213	4,317	234,297
1981:.....									
I.....	1,967.6	1,040.7	8,588	4,543	1,802.8	953.6	7,869	4,162	229,097
II.....	2,010.4	1,045.6	8,757	4,554	1,835.8	954.7	7,996	4,159	229,580
III.....	2,092.0	1,068.1	9,088	4,640	1,886.1	962.9	8,194	4,183	230,187
IV.....	2,120.5	1,064.3	9,188	4,612	1,904.1	955.7	8,250	4,141	230,797
1982:.....									
I.....	2,127.9	1,055.1	9,199	4,562	1,938.9	961.4	8,382	4,156	231,304
II.....	2,159.0	1,060.2	9,315	4,574	1,972.8	968.8	8,511	4,179	231,790
III.....	2,191.5	1,059.3	9,430	4,558	2,008.8	971.0	8,644	4,179	232,387
IV.....	2,227.8	1,066.1	9,562	4,576	2,046.9	979.6	8,785	4,204	232,990
1983:.....									
I.....	2,255.9	1,073.8	9,661	4,599	2,073.0	986.7	8,878	4,226	233,501
II.....	2,301.0	1,083.0	9,834	4,629	2,147.0	1,010.6	9,176	4,319	233,984
III.....	2,361.7	1,100.1	10,069	4,690	2,181.1	1,016.0	9,299	4,332	234,564
IV ^a	2,423.6	1,120.3	10,307	4,764	2,233.1	1,032.2	9,497	4,390	235,138

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, 1929–83

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Gross saving							Gross investment			Statistical discrepancy	
	Total	Gross private saving			Government surplus or deficit (—), national income and product accounts			Capital grants received by the United States (net) ²	Total	Gross private domestic investment		Net foreign investment ³
		Total	Personal saving	Gross business saving ¹	Total	Federal	State and local					
1929	15.9	14.9	3.3	11.6	1.0	1.2	—0.2	17.0	16.2	0.8	1.1	
1930	9	2.2	—9	3.1	—1.4	—1.3	—1	1.6	1.4	2	7	
1931	8.8	11.0	2.2	8.8	—2.2	—2.2	0	10.3	9.3	1.0	1.4	
1940	13.5	14.2	3.4	10.8	—7	—1.3	6	14.7	13.1	1.5	1.1	
1941	18.6	22.4	10.3	12.1	—3.8	—5.1	1.3	19.2	17.9	1.3	6	
1942	10.7	42.0	27.2	14.8	—31.4	—33.1	1.8	9.8	9.9	—1	—8	
1943	5.4	49.6	32.9	16.7	—44.1	—46.6	2.5	3.7	5.8	—2.1	—1.8	
1944	2.4	54.3	36.6	17.6	—51.8	—54.5	2.7	5.2	7.2	—2.0	2.7	
1945	5.2	44.7	28.7	16.0	—39.5	—42.1	2.6	9.3	10.6	—1.3	4.1	
1946	35.1	29.6	13.7	15.9	5.4	3.5	1.9	35.6	30.7	4.9	5	
1947	41.7	27.3	5.2	22.1	14.4	13.4	1.0	43.2	34.0	9.3	1.5	
1948	49.8	41.4	11.1	30.2	8.4	8.3	1	48.3	45.9	2.4	—1.6	
1949	35.6	39.0	7.5	31.5	—3.4	—2.6	—7	36.2	35.3	9	6	
1950	50.7	42.7	11.9	30.7	8.0	9.2	—1.2	52.0	53.8	—1.8	1.3	
1951	56.9	50.8	16.1	34.8	6.1	6.5	—4	60.1	59.2	9	3.2	
1952	51.0	54.8	17.4	37.4	—3.8	—3.7	—0	52.7	52.1	6	1.7	
1953	49.8	56.7	18.5	38.2	—6.9	—7.1	—1	52.1	53.3	—1.3	2.3	
1954	50.9	58.1	17.0	41.1	—7.1	—6.0	—1.1	52.9	52.7	2	2.0	
1955	67.5	64.4	16.4	47.9	3.1	4.4	—1.3	68.8	68.4	4	1.3	
1956	75.9	70.7	21.3	49.4	5.2	6.1	9	73.8	71.0	2.8	—2.1	
1957	75.2	74.3	22.3	52.0	9	2.3	—1.4	74.0	69.2	4.8	—1.2	
1958	62.6	75.3	23.6	51.7	—12.6	—10.3	—2.4	62.8	61.9	9	2	
1959	78.3	79.9	21.1	58.7	—1.6	—1.1	—4	77.0	78.1	—1.2	—1.3	
1960	81.1	78.0	19.7	58.3	3.1	3.0	1	78.7	75.9	2.8	—2.4	
1961	78.7	83.0	23.0	60.0	—4.3	—3.9	—4	78.6	74.8	3.8	—1	
1962	86.7	90.5	23.3	67.2	—3.8	—4.2	5	88.8	85.4	3.4	2.1	
1963	93.6	92.9	21.9	71.0	7	3	5	95.3	90.9	4.4	1.7	
1964	104.0	106.3	29.6	76.7	—2.3	—3.3	1.0	104.2	97.4	6.8	1	
1965	120.2	119.7	33.7	86.0	5	5	—0	119.0	113.5	5.4	—1.2	
1966	127.3	128.6	36.0	92.7	—1.3	—1.8	5	128.7	125.7	3.0	1.4	
1967	125.7	139.9	44.3	95.6	—14.2	—13.2	—1.1	125.4	122.8	2.6	—3	
1968	136.0	142.0	41.9	100.0	—6.0	—6.0	1	133.9	133.3	6	—2.1	
1969	153.6	143.6	40.6	103.0	9.9	8.4	1.5	149.7	149.3	4	—3.9	
1970	148.9	158.6	55.8	102.8	—10.6	—12.4	1.9	147.4	144.2	3.2	—1.5	
1971	161.6	180.3	60.7	119.7	—19.4	—22.0	2.6	165.7	166.4	—7	4.1	
1972	186.6	189.2	52.6	136.6	—3.3	—16.8	13.5	189.9	195.0	—5.1	3.3	
1973	235.5	227.7	79.0	148.7	7.8	—5.6	13.4	236.3	229.8	6.5	8	
1974	227.8	234.5	85.1	149.4	—4.7	—11.5	6.8	231.5	228.7	2.9	3.7	
1975	218.9	282.7	94.3	188.4	—63.8	—69.3	5.5	224.4	206.1	18.3	5.5	
1976	257.9	294.4	82.5	211.9	—36.5	—53.1	16.6	263.0	257.9	5.1	5.1	
1977	309.1	326.9	78.0	248.9	—17.8	—45.9	28.0	310.4	324.1	—13.6	1.4	
1978	374.8	374.0	89.4	284.6	8	—29.5	30.3	372.3	386.6	—14.3	—2.6	
1979	422.7	407.3	96.7	310.6	14.3	—16.1	30.4	421.2	423.0	—1.8	—1.5	
1980	405.9	435.4	110.2	325.2	—30.7	—61.2	30.6	408.2	401.9	6.3	2.3	
1981	483.8	509.6	135.3	374.3	—26.9	—62.2	35.3	478.9	474.9	4.0	—4.9	
1982	405.8	521.6	125.4	396.1	—115.8	—147.1	31.3	406.2	414.5	—8.3	5	
1983 ^a	436.0	567.8	113.1	454.8	—131.8	—182.9	51.0	436.1	471.3	—35.2	1	
1981:												
I	461.8	468.8	112.2	356.6	—8.1	—43.4	35.3	466.8	455.5	11.3	5.1	
II	475.8	485.2	120.2	365.1	—10.6	—47.3	36.7	471.6	472.1	—5	—4.2	
III	507.6	531.6	149.7	381.9	—25.2	—62.4	37.3	495.5	495.8	—3	—12.0	
IV	490.1	552.8	159.0	393.8	—63.7	—95.8	32.0	481.7	476.2	5.5	—8.5	
1982:												
I	434.4	514.1	130.8	383.3	—79.7	—108.5	28.8	427.7	422.9	4.8	—6.7	
II	439.5	520.7	127.1	393.6	—81.2	—113.2	32.0	441.3	432.5	8.7	1.7	
III	397.9	524.9	123.0	401.9	—127.0	—158.3	31.3	400.5	425.3	—24.8	2.5	
IV	351.3	526.6	120.8	405.8	—175.3	—208.2	32.9	355.5	377.4	—21.9	4.2	
1983:												
I	398.5	541.5	121.7	419.8	—142.9	—183.3	40.4	397.4	404.1	—6.7	—1.2	
II	420.6	535.0	91.5	443.5	—114.4	—166.1	51.7	417.1	450.1	—33.0	—3.5	
III	455.4	587.2	115.8	471.4	—131.8	—187.3	55.5	457.9	501.1	—43.2	2.5	
IV ^b			123.5					472.0	529.8	—57.8		

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, 1946-83*¹

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Increase in financial assets										Net investment in ⁷			Less: Net increase in debt		
	Total	Total	Checkable deposits and currency	Time and savings deposits	Money market fund shares	Securities			Insurance and pension reserves ⁵	Other financial assets ⁶	Owner-occupied homes	Consumer durables	Noncorporate business assets ⁸	Mortgage debt on non-farm homes	Consumer credit	Other debt ⁹
						Government securities ²	Corporate equities ³	Other securities ⁴								
1946.....	24.6	18.8	5.6	6.3		-1.5	1.1	-0.9	5.3	2.8	3.6	6.1	2.3	3.6	3.1	-0.4
1947.....	20.1	13.2	.1	3.4		1.6	1.1	-8	5.4	2.4	6.7	9.0	1.8	4.7	3.7	2.2
1948.....	24.3	9.1	-2.9	2.2		1.3	1.0	.0	5.3	2.2	9.1	9.8	6.9	4.6	3.2	2.8
1949.....	20.9	9.9	-2.0	2.6		1.8	.7	-4	5.6	1.6	8.4	10.6	1.8	4.4	3.2	2.2
1950.....	30.6	13.7	2.6	2.4		-1	.7	-7	6.9	1.9	11.8	14.8	6.8	6.7	4.8	5.0
1951.....	34.7	19.1	4.6	4.7		-6	1.8	.3	6.3	1.9	11.7	11.3	4.5	6.6	1.6	3.7
1952.....	31.3	23.2	1.6	7.8		2.5	1.6	.0	7.7	2.0	11.3	8.6	2.3	6.2	5.3	2.7
1953.....	32.5	22.8	1.0	8.1		2.5	1.0	.3	7.9	2.1	12.3	10.1	1.0	7.6	4.2	1.9
1954.....	28.2	22.2	2.2	9.1		1.0	.8	-9	7.8	2.1	12.7	7.1	1.9	8.7	1.5	5.5
1955.....	34.1	28.0	1.2	8.6		5.8	1.0	.8	8.5	2.1	16.7	12.2	2.9	12.2	7.2	6.4
1956.....	37.2	30.2	1.8	9.4		3.9	2.0	1.2	9.5	2.5	15.6	8.5	1.2	11.2	3.9	3.2
1957.....	36.5	28.6	-4	11.9		2.3	1.5	1.0	9.5	2.8	13.2	7.7	2.7	8.9	2.9	3.8
1958.....	34.1	31.6	3.8	13.9		-2.5	1.5	1.1	10.4	3.5	12.3	3.6	2.6	9.5	5	6.0
1959.....	38.0	37.4	1.0	11.0		10.1	.5	-3	11.9	3.3	16.3	7.3	5.0	12.8	8.0	7.2
1960.....	36.7	32.1	1.0	12.0		2.2	-6	2.4	11.5	3.6	14.8	7.0	3.6	11.7	4.4	4.9
1961.....	35.9	35.4	-9	18.3		1.4	.3	.1	12.1	4.3	12.7	4.3	4.7	12.2	2.5	6.5
1962.....	42.0	40.1	-1.2	26.1		1.3	-1	.1	12.7	3.2	13.5	8.5	7.5	14.1	6.3	7.2
1963.....	46.7	46.6	4.2	26.2		.6	-2.6	1.4	13.9	2.9	14.3	11.8	9.8	16.2	8.9	10.7
1964.....	56.8	55.7	5.3	26.1		4.8	-2	.4	16.1	3.2	15.0	15.0	9.2	17.5	9.8	10.8
1965.....	65.0	58.8	7.6	27.8		3.7	-2.1	1.3	16.9	3.7	14.5	20.2	13.3	17.0	10.6	14.3
1966.....	72.8	57.9	2.4	19.0		11.3	-7	2.4	19.2	4.4	13.5	23.1	10.8	13.8	6.5	12.2
1967.....	77.0	69.8	9.9	35.3		-1.2	-4.7	5.2	18.6	6.7	11.7	21.1	10.2	12.5	5.7	17.6
1968.....	80.5	75.6	11.1	31.1		5.2	-7.5	7.9	19.8	8.1	15.7	27.0	10.0	16.9	11.5	19.2
1969.....	71.5	65.2	-2.5	9.1		25.9	-2.8	10.0	21.5	4.0	16.3	26.3	12.7	18.6	10.8	19.4
1970.....	86.4	81.5	8.9	43.6		-5.4	-1.7	6.9	23.9	5.4	13.6	20.0	11.5	14.1	5.4	20.7
1971.....	95.6	102.1	12.2	67.7		-12.2	-5.5	6.5	27.4	5.8	20.7	26.6	17.5	26.2	14.7	30.3
1972.....	109.3	131.5	13.9	74.4		2.7	-5.1	4.9	29.4	11.4	28.0	34.6	20.6	41.4	19.8	44.2
1973.....	132.0	148.5	14.1	63.6		24.2	-5.8	11.1	33.0	8.3	31.0	40.4	26.6	46.5	24.3	43.8
1974.....	128.3	147.3	7.4	55.7	2.4	28.3	-6	6.8	36.2	11.1	25.2	28.8	10.6	38.0	9.9	35.4
1975.....	153.0	174.3	6.9	83.4	1.3	25.0	-3.8	4.4	43.5	13.6	23.5	26.5	5.8	40.6	9.6	26.9
1976.....	165.1	210.5	15.7	107.5	-0	11.7	-4.6	8.6	52.4	19.2	36.1	40.0	3.3	61.4	25.4	37.9
1977.....	169.5	235.4	20.1	107.5	.2	18.2	-3.5	6.5	67.4	18.9	53.2	49.6	14.3	90.8	40.2	51.9
1978.....	196.0	275.3	22.5	100.3	6.9	33.6	-5.1	13.6	73.8	29.6	65.7	56.7	23.3	111.5	48.8	64.7
1979.....	202.9	293.6	22.0	78.5	34.4	56.0	-15.2	13.9	68.2	35.8	71.8	52.5	22.4	121.2	45.4	70.8
1980.....	236.1	323.1	3.8	125.6	29.2	39.5	.0	-2.6	89.6	37.9	52.6	32.8	3.4	98.3	4.9	72.6
1981.....	286.7	354.2	25.8	66.3	107.5	58.1	-31.6	-7.3	101.8	33.6	48.3	39.7	24.8	78.8	24.1	77.4
1982.....	306.9	365.2	23.0	120.5	24.7	59.7	3.5	-17.6	120.4	30.9	26.1	35.3	7.9	55.8	18.3	53.5
1981:																
I.....	222.2	294.0	42.7	21.0	148.4	3.0	-17.9	-14.4	76.7	34.6	53.0	45.8	21.5	88.4	26.3	77.4
II.....	259.8	356.4	6.2	92.6	59.9	89.7	-28.6	-5.9	103.5	39.1	52.2	38.4	30.1	97.2	31.5	88.6
III.....	320.8	379.8	5.5	88.9	137.3	73.0	-55.8	-20.5	117.7	33.7	47.9	45.2	26.6	71.8	32.3	74.5
IV.....	344.0	386.3	48.9	62.7	84.3	66.7	-24.3	11.8	109.4	27.0	40.2	29.4	21.0	57.6	6.3	69.0
1982:																
I.....	287.0	316.2	25.9	113.3	38.2	54.0	-8.6	-33.9	104.3	22.9	28.3	35.5	8.2	64.9	2.6	33.7
II.....	272.5	347.1	.7	97.9	40.5	64.1	12.2	-29.4	120.5	40.6	28.5	36.9	11.7	47.6	35.9	68.1
III.....	334.7	389.6	19.9	87.0	88.1	37.8	.5	-2	119.6	37.0	24.2	33.1	5.6	55.0	11.1	51.7
IV.....	333.1	409.9	45.2	183.3	-68.1	81.8	10.0	-7.0	137.2	27.6	27.4	35.5	2.3	57.7	23.6	60.7
1983:																
I.....	320.7	414.6	75.4	272.8	-105.2	22.1	7.6	-16.4	145.9	12.3	32.5	36.4	8.2	89.1	28.1	53.8
II.....	255.6	405.4	50.8	163.2	-62.7	95.8	28.6	-27.3	140.6	15.4	45.6	50.6	4.8	106.3	49.5	95.1
III.....	292.5	439.2	17.1	218.0	-6.5	50.0	7.9	3.2	139.8	9.7	56.8	51.5	-4.7	127.8	49.1	73.4

¹ Saving by households, personal trust funds, nonprofit institutions, farms, and other noncorporate business.² 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.³ Includes mutual fund shares.⁴ Corporate and foreign bonds and open market paper.⁵ Private life insurance reserves, private insured and noninsured pension reserves, and government insurance and pension reserves.⁶ 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.⁷ Purchases of physical assets less depreciation.⁸ Includes data for corporate farms.⁹ Other debt consists of security credit, policy loans, and noncorporate business debt.

Source: Board of Governors of the Federal Reserve System.

TABLE B-27.—Number and median income (in 1982 dollars) of families and persons, and poverty status, by race, selected years, 1947-82

Year	Families ¹						Persons below poverty level		Median income of persons 14 years old and over with income ²			
	Number (mil- lions)	Median income	Below poverty level						All persons	Year-round full-time workers	Males		Females
			Number (mil- lions)	Rate	Female householder		All persons	Year-round full-time workers			All persons	Year-round full-time workers
					Number (mil- lions)	Rate						
ALL RACES												
1947.....	37.2	\$13,098							\$9,635		\$4,394	
1950.....	39.9	13,308							10,304		3,821	
1955.....	42.9	15,926							12,104	\$15,289	4,037	\$9,860
1960.....	45.5	18,317	8.2	18.1	2.0	42.4	39.9	22.2	13,299	17,712	4,111	10,741
1961.....	46.4	18,504	8.4	18.1	2.0	42.1	39.6	21.9	13,517	18,271	4,128	10,781
1962.....	47.1	19,005	8.1	17.2	2.0	42.9	38.6	21.0	13,951	18,592	4,283	11,032
1963.....	47.5	19,701	7.6	15.9	2.0	40.4	36.4	19.5	14,221	19,138	4,326	11,211
1964.....	48.0	20,442	7.2	15.0	1.8	36.4	36.1	19.0	14,460	19,554	4,509	11,546
1965.....	48.5	21,283	6.7	13.9	1.9	38.4	33.2	17.3	15,367	20,185	4,653	11,675
1966 ³	49.2	22,402	5.8	11.8	1.7	33.1	28.5	14.7	15,781	20,687	4,873	11,974
1967.....	50.1	22,934	5.7	11.4	1.8	33.3	27.8	14.2	16,054	21,072	5,207	12,136
1968.....	50.8	23,949	5.0	10.0	1.8	32.3	25.4	12.8	16,591	21,680	5,602	12,674
1969.....	51.6	24,837	5.0	9.7	1.8	32.7	24.1	12.1	16,927	22,823	5,613	13,368
1970.....	52.2	24,528	5.3	10.1	2.0	32.5	25.4	12.6	16,580	22,830	5,561	13,523
1971.....	53.3	24,513	5.3	10.0	2.1	33.9	25.6	12.5	16,452	22,954	5,739	13,587
1972.....	54.4	25,648	5.1	9.3	2.2	32.7	24.5	11.9	17,189	24,314	5,997	13,966
1973.....	55.1	26,175	4.8	8.8	2.2	32.2	23.0	11.1	17,498	24,909	6,073	14,092
1974 ⁴	55.7	25,254	4.9	8.8	2.3	32.1	23.4	11.2	16,543	23,805	6,033	14,042
1975.....	56.2	24,604	5.5	9.7	2.4	32.5	25.9	12.3	15,877	23,196	6,071	13,843
1976.....	56.7	25,363	5.3	9.4	2.5	33.0	25.0	11.8	15,983	23,499	6,063	14,094
1977.....	57.2	25,500	5.3	9.3	2.6	31.7	24.7	11.6	16,124	24,004	6,277	14,039
1978.....	57.8	26,099	5.3	9.1	2.7	31.4	24.5	11.4	16,179	23,764	6,019	14,264
1979 ⁴	59.6	26,047	5.5	9.2	2.6	30.4	26.1	11.7	15,664	23,244	5,787	14,004
1980.....	60.3	24,626	6.2	10.3	3.0	32.7	29.3	13.0	14,678	22,459	5,763	13,578
1981.....	61.0	23,761	6.9	11.2	3.3	34.6	31.8	14.0	14,299	21,961	5,793	13,221
1982.....	61.4	23,433	7.5	12.2	3.4	36.3	34.4	15.0	13,950	21,655	5,887	13,663
WHITE												
1970.....	46.5	25,445	3.7	8.0	1.1	25.0	17.5	9.9	17,428	23,483	5,633	13,761
1971.....	47.6	25,435	3.8	7.9	1.2	26.5	17.8	9.9	17,248	23,600	5,834	13,745
1972.....	48.5	26,647	3.4	7.1	1.1	24.3	16.2	9.0	18,029	25,191	6,036	14,240
1973.....	48.9	27,357	3.2	6.6	1.2	24.5	15.1	8.4	18,360	25,630	6,132	14,331
1974 ⁵	49.4	26,244	3.4	6.8	1.3	24.8	15.7	8.6	17,330	24,269	6,101	14,161
1975.....	49.9	25,589	3.8	7.7	1.4	25.9	17.8	9.7	16,679	23,732	6,134	13,876
1976.....	50.1	26,345	3.6	7.1	1.4	25.2	16.7	9.1	16,849	24,200	6,114	14,202
1977.....	50.5	26,664	3.5	7.0	1.4	24.0	16.4	8.9	16,889	24,495	6,373	14,128
1978.....	50.9	27,176	3.5	6.9	1.4	23.5	16.3	8.7	16,945	24,205	6,091	14,399
1979 ⁴	52.2	27,180	3.6	6.9	1.4	22.3	17.2	19.0	16,363	23,915	5,842	14,127
1980.....	52.7	25,658	4.2	8.0	1.6	25.7	19.7	10.2	15,612	23,100	5,795	13,709
1981.....	53.3	24,959	4.7	8.8	1.8	27.4	21.6	11.1	15,172	22,476	5,857	13,441
1982.....	53.4	24,603	5.1	9.6	1.8	27.9	23.5	12.0	14,748	22,232	5,967	13,847
BLACK												
1970.....	4.9	15,608	1.5	29.5	.8	54.3	7.5	33.5	10,334	15,996	5,128	11,276
1971.....	5.2	15,349	1.5	28.8	.9	53.5	7.4	32.5	10,286	16,138	5,112	12,136
1972.....	5.3	15,837	1.5	29.0	1.0	53.3	7.7	33.3	10,920	17,011	5,639	12,182
1973.....	5.4	15,789	1.5	28.1	1.0	52.7	7.4	31.4	11,106	17,274	5,534	12,153
1974 ⁵	5.5	15,671	1.5	26.9	1.0	52.2	7.2	30.3	10,738	17,387	5,508	13,069
1975.....	5.6	15,744	1.5	27.1	1.0	50.1	7.5	31.3	9,971	17,661	5,572	13,257
1976.....	5.8	15,671	1.6	27.9	1.1	52.2	7.6	31.1	10,145	17,332	5,762	13,278
1977.....	5.8	15,232	1.6	28.2	1.2	51.0	7.7	31.3	10,022	16,887	5,503	13,205
1978.....	5.9	16,096	1.6	27.5	1.2	50.6	7.6	30.6	10,151	18,539	5,485	13,345
1979 ⁴	6.2	15,391	1.7	27.8	1.2	49.4	8.1	31.0	10,299	17,382	5,350	13,016
1980.....	6.3	14,846	1.8	28.9	1.3	49.4	8.6	32.5	9,382	16,253	5,365	12,786
1981.....	6.4	14,079	2.0	30.8	1.4	52.9	9.2	34.2	9,022	15,903	5,204	12,139
1982.....	6.5	13,598	2.2	33.0	1.5	56.2	9.7	35.6	8,838	15,790	5,263	12,376

¹ 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.

² Beginning 1979, data are for persons 15 years and over.

³ Based on revised methodology; comparable with succeeding years.

⁴ Based on 1980 census population controls; comparable with succeeding years.

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. 138.

Source: Department of Commerce, Bureau of the Census.

POPULATION, EMPLOYMENT, WAGES, AND PRODUCTIVITY

TABLE B-28.—*Population by age groups, 1929-83*

[Thousands of persons]

July 1	Total	Age (years)						
		Under 5	5-15	16-19	20-24	25-44	45-64	65 and over
1929.....	121,767	11,734	26,800	9,127	10,694	35,862	21,076	6,474
1933.....	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,363
1939.....	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,764
1940.....	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,031
1941.....	133,402	10,850	24,516	9,840	11,807	40,383	26,718	9,288
1942.....	134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,584
1943.....	136,739	12,016	24,093	9,607	12,064	41,420	27,671	9,867
1944.....	138,397	12,524	23,949	9,561	12,062	42,016	28,138	10,147
1945.....	139,928	12,979	23,907	9,361	12,036	42,521	28,630	10,494
1946.....	141,389	13,244	24,103	9,119	12,004	43,027	29,064	10,828
1947.....	144,126	14,406	24,468	9,097	11,814	43,657	29,498	11,185
1948.....	146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,538
1949.....	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,921
1950.....	152,271	16,410	26,721	8,542	11,680	45,672	30,849	12,397
1951.....	154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,803
1952.....	157,553	17,312	28,894	8,414	11,350	46,495	31,884	13,203
1953.....	160,184	17,638	30,227	8,460	11,062	46,786	32,394	13,617
1954.....	163,026	18,057	31,480	8,637	10,832	47,001	32,942	14,076
1955.....	165,931	18,566	32,682	8,744	10,714	47,194	33,506	14,525
1956.....	168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,938
1957.....	171,984	19,494	35,272	9,195	10,603	47,440	34,591	15,388
1958.....	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,806
1959.....	177,830	20,175	37,368	10,215	10,969	47,192	35,663	16,248
1960.....	180,671	20,341	38,494	10,683	11,134	47,140	36,203	16,675
1961.....	183,691	20,522	39,765	11,025	11,483	47,084	36,722	17,089
1962.....	186,538	20,469	41,205	11,180	11,959	47,013	37,255	17,457
1963.....	189,242	20,342	41,626	12,007	12,714	46,994	37,782	17,778
1964.....	191,889	20,165	42,297	12,736	13,269	46,958	38,338	18,127
1965.....	194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,451
1966.....	196,560	19,208	43,702	14,311	14,050	47,001	39,534	18,755
1967.....	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,071
1968.....	200,706	17,913	44,622	14,452	15,786	47,721	40,846	19,365
1969.....	202,677	17,376	44,840	14,800	16,480	48,064	41,437	19,680
1970.....	205,052	17,166	44,816	15,289	17,202	48,473	41,999	20,107
1971.....	207,661	17,244	44,591	15,688	18,159	48,936	42,482	20,561
1972.....	209,896	17,101	44,203	16,039	18,153	50,482	42,898	21,020
1973.....	211,909	16,851	43,582	16,446	18,521	51,749	43,235	21,525
1974.....	213,854	16,487	42,989	16,769	18,975	53,051	43,522	22,061
1975.....	215,973	16,121	42,508	17,017	19,527	54,302	43,801	22,696
1976.....	218,035	15,617	42,099	17,194	19,986	55,852	44,008	23,278
1977.....	220,239	15,564	41,298	17,276	20,499	57,561	44,150	23,892
1978.....	222,585	15,735	40,428	17,288	20,946	59,400	44,286	24,502
1979.....	225,055	16,063	39,552	17,242	21,297	61,379	44,390	25,134
1980.....	227,704	16,457	38,820	17,136	21,612	63,474	44,493	25,714
1981.....	229,849	16,943	38,046	16,682	21,946	65,496	44,476	26,260
1982.....	232,057	17,372	37,620	16,205	21,935	67,625	44,474	26,824
1983.....	234,249							

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, 1929-83

(Monthly data seasonally adjusted, except as noted)

Period	Civilian noninstitutional population ¹	Resident Armed Forces ¹	Labor force including resident Armed Forces	Employment including resident Armed Forces	Civilian labor force					Unemployment rate		Labor force participation rate	
					Total	Employment			Unemployment	All workers ²	Civilian workers	Total ³	Civilian ⁴
						Total	Agricultural	Nonagricultural					
	Thousands of persons 14 years of age and over									Percent			
1929					49,180	47,630	10,450	37,180	1,550		3.2		
1933					51,590	38,760	10,090	28,670	12,830		24.9		
1939					55,230	45,750	9,610	36,140	9,480		17.2		
1940	99,840				55,640	47,520	9,540	37,980	8,120		14.6		55.7
1941	99,900				55,910	50,350	9,100	41,250	5,560		9.9		56.0
1942	98,640				56,410	53,750	9,250	44,500	2,660		4.7		57.2
1943	94,640				55,540	54,470	9,080	45,390	1,070		1.9		58.7
1944	93,220				54,630	53,960	8,950	45,010	670		1.2		58.6
1945	94,090				53,860	52,820	8,580	44,240	1,040		1.9		57.2
1946	103,070				57,520	55,250	8,320	46,930	2,270		3.9		55.8
1947	106,018				60,168	57,812	8,256	49,557	2,356		3.9		56.8
	Thousands of persons 16 years of age and over												
1947	101,827				59,350	57,038	7,890	49,148	2,311		3.9		58.3
1948	103,068				60,621	58,343	7,629	50,714	2,276		3.8		58.8
1949	103,994				61,286	57,651	7,658	49,993	3,637		5.9		58.9
1950	104,995	1,169	63,377	60,087	62,208	58,918	7,160	51,758	3,288	5.2	5.3	59.7	59.2
1951	104,621	2,143	64,160	62,104	62,017	59,961	6,726	53,235	2,055	3.2	3.3	60.1	59.3
1952	105,231	2,386	64,524	62,636	62,138	60,250	6,500	53,749	1,883	2.9	3.0	60.0	59.0
1953 ^a	107,056	2,231	65,246	63,410	63,015	61,179	6,260	54,919	1,834	2.8	2.9	59.7	58.9
1954	108,321	2,142	65,785	62,251	63,643	60,109	6,205	53,904	3,532	5.4	5.5	59.6	58.8
1955	109,683	2,064	67,087	64,234	65,023	62,170	6,450	55,722	2,852	4.3	4.4	60.0	59.3
1956	110,954	1,965	68,517	65,764	66,552	63,799	6,283	57,514	2,750	4.0	4.1	60.7	60.0
1957	112,265	1,948	68,877	66,019	66,929	64,071	5,947	58,123	2,859	4.2	4.3	60.3	59.6
1958	113,727	1,847	69,486	64,883	67,639	63,036	5,586	57,450	4,602	6.6	6.8	60.1	59.5
1959	115,329	1,788	70,157	66,418	68,369	64,630	5,565	59,065	3,740	5.3	5.5	59.9	59.3
1960 ^a	117,245	1,861	71,489	67,639	69,628	65,778	5,458	60,318	3,852	5.4	5.5	60.0	59.4
1961	118,771	1,900	72,359	67,646	70,459	65,746	5,200	60,546	4,714	6.5	6.7	60.0	59.3
1962 ^a	120,153	2,061	72,675	68,763	70,614	66,702	4,944	61,759	3,911	5.4	5.5	59.5	58.8
1963	122,416	2,006	73,839	69,768	71,833	67,762	4,687	63,076	4,070	5.5	5.7	59.3	58.7
1964	124,485	2,018	75,109	71,323	73,091	69,305	4,523	64,782	3,786	5.0	5.2	59.4	58.7
1965	126,513	1,946	76,401	73,034	74,455	71,088	4,361	66,726	3,366	4.4	4.5	59.5	58.9
1966	128,058	2,122	77,892	75,017	75,770	72,895	3,979	68,915	2,875	3.7	3.8	59.8	59.2
1967	129,874	2,218	79,565	76,590	77,347	74,372	3,844	70,527	2,975	3.7	3.8	60.2	59.6
1968	132,028	2,253	80,990	78,173	78,737	75,920	3,817	72,103	2,817	3.5	3.6	60.3	59.6
1969	134,335	2,238	82,972	80,140	80,734	77,902	3,606	74,296	2,832	3.4	3.5	60.8	60.1
1970	137,085	2,118	84,889	80,796	82,771	78,678	3,463	75,215	4,093	4.8	4.9	61.0	60.4
1971	140,216	1,973	86,355	81,340	84,382	79,367	3,394	75,972	5,016	5.8	5.9	60.7	60.2
1972 ^a	144,126	1,813	88,847	83,966	87,034	82,153	3,484	78,669	4,882	5.5	5.6	60.9	60.4
1973 ^a	147,096	1,774	91,203	86,838	89,429	85,064	3,470	81,594	4,365	4.8	4.9	61.3	60.8
1974	150,120	1,721	93,670	88,515	91,949	86,794	3,515	83,279	5,156	5.5	5.6	61.7	61.3
1975	153,153	1,678	95,453	87,524	93,775	85,846	3,408	82,438	7,929	8.3	8.5	61.6	61.2
1976	156,150	1,668	97,826	90,420	96,158	88,752	3,331	85,421	7,406	7.6	7.7	62.0	61.6
1977	159,033	1,656	100,665	93,673	99,009	92,017	3,283	88,734	6,991	6.9	7.1	62.6	62.3
1978 ^a	161,910	1,631	103,882	97,679	102,251	96,048	3,387	92,661	6,202	6.0	6.1	63.5	63.2
1979	164,863	1,597	106,559	100,421	104,962	98,824	3,347	95,477	6,137	5.8	5.8	64.0	63.7
1980	167,745	1,604	108,544	100,907	106,940	99,303	3,364	95,938	7,637	7.0	7.1	64.1	63.8
1981	170,130	1,645	110,315	102,042	108,670	100,397	3,368	97,030	8,273	7.5	7.6	64.2	63.9
1982	172,271	1,668	111,872	101,194	110,204	99,526	3,401	96,125	10,678	9.5	9.7	64.3	64.0
1983	174,215	1,676	113,226	102,510	111,550	100,834	3,383	97,450	10,717	9.5	9.6	64.4	64.0

See next page for continuation of table.

TABLE B-29.—Population and the labor force, 1929-83—Continued

(Monthly data seasonally adjusted, except as noted)

Period	Civilian noninstitutional population ¹	Resident Armed Forces ¹	Labor force including resident Armed Forces	Employment including resident Armed Forces	Civilian labor force					Unemployment rate		Labor force participation rate	
					Total	Employment			Unemployment	All workers ²	Civilian workers	Total ³	Civilian ⁴
						Total	Agricultural	Nonagricultural					
Thousands of persons 16 years of age and over										Percent			
1981:													
Jan.....	169,104	1,632	109,657	101,583	108,025	99,951	3,421	96,530	8,074	7.4	7.5	64.2	63.9
Feb.....	169,280	1,632	109,899	101,849	108,267	100,217	3,355	96,862	8,050	7.3	7.4	64.3	64.0
Mar.....	169,453	1,636	110,233	102,245	108,597	100,609	3,367	97,242	7,988	7.2	7.4	64.4	64.1
Apr.....	169,641	1,633	110,598	102,707	108,965	101,074	3,536	97,538	7,891	7.1	7.2	64.6	64.2
May.....	169,829	1,627	110,834	102,723	109,207	101,096	3,376	97,720	8,111	7.3	7.4	64.6	64.3
June.....	170,042	1,629	110,063	102,008	108,434	100,379	3,340	97,039	8,055	7.3	7.4	64.1	63.8
July.....	170,246	1,648	110,237	102,353	108,589	100,705	3,305	97,400	7,884	7.2	7.3	64.1	63.8
Aug.....	170,399	1,664	110,345	102,302	108,681	100,638	3,365	97,273	8,043	7.3	7.4	64.1	63.8
Sept.....	170,593	1,661	109,918	101,674	108,257	100,013	3,357	96,656	8,244	7.5	7.6	63.8	63.5
Oct.....	170,809	1,654	110,631	101,978	108,977	100,324	3,393	96,931	8,653	7.8	7.9	64.1	63.8
Nov.....	170,996	1,659	110,828	101,814	109,169	100,155	3,410	96,745	9,014	8.1	8.3	64.2	63.8
Dec.....	171,166	1,665	110,547	101,250	108,882	99,585	3,231	96,354	9,297	8.4	8.5	64.0	63.6
1982:													
Jan.....	171,335	1,656	110,731	101,338	109,075	99,682	3,381	96,301	9,393	8.5	8.6	64.0	63.7
Feb.....	171,489	1,664	111,167	101,474	109,503	99,810	3,391	96,419	9,693	8.7	8.9	64.2	63.9
Mar.....	171,667	1,671	111,335	101,425	109,664	99,754	3,380	96,374	9,910	8.9	9.0	64.2	63.9
Apr.....	171,844	1,668	111,569	101,266	109,901	99,598	3,375	96,223	10,303	9.2	9.4	64.3	64.0
May.....	172,026	1,665	112,207	101,844	110,542	100,179	3,453	96,726	10,363	9.2	9.4	64.6	64.3
June.....	172,190	1,664	111,797	101,317	110,133	99,653	3,339	96,314	10,480	9.4	9.5	64.3	64.0
July.....	172,364	1,674	112,073	101,177	110,399	99,503	3,417	96,086	10,896	9.7	9.9	64.4	64.1
Aug.....	172,511	1,689	112,162	101,252	110,473	99,563	3,380	96,183	10,910	9.7	9.9	64.4	64.0
Sept.....	172,690	1,670	112,349	101,082	110,679	99,412	3,366	96,046	11,267	10.0	10.2	64.4	64.1
Oct.....	172,881	1,668	112,358	100,814	110,690	99,146	3,443	95,703	11,544	10.3	10.4	64.4	64.0
Nov.....	173,058	1,660	112,583	100,696	110,923	99,036	3,499	95,537	11,887	10.6	10.7	64.4	64.1
Dec.....	173,199	1,665	112,538	100,644	110,873	98,979	3,429	95,550	11,894	10.6	10.7	64.4	64.0
1983:													
Jan.....	173,354	1,667	112,344	100,821	110,677	99,154	3,420	95,734	11,523	10.3	10.4	64.2	63.8
Feb.....	173,505	1,664	112,352	100,836	110,688	99,172	3,415	95,757	11,516	10.2	10.4	64.1	63.8
Mar.....	173,656	1,664	112,399	100,980	110,735	99,316	3,386	95,930	11,419	10.2	10.3	64.1	63.8
Apr.....	173,794	1,671	112,646	101,277	110,975	99,606	3,392	96,214	11,369	10.1	10.2	64.2	63.9
May.....	173,953	1,669	112,619	101,431	110,950	99,762	3,374	96,388	11,188	9.9	10.1	64.1	63.8
June.....	174,125	1,668	113,573	102,411	111,905	100,743	3,479	97,264	11,162	9.8	10.0	64.6	64.3
July.....	174,306	1,664	113,489	102,889	111,825	101,225	3,499	97,726	10,600	9.3	9.5	64.5	64.2
Aug.....	174,440	1,682	113,799	103,166	112,117	101,484	3,449	98,035	10,633	9.3	9.5	64.6	64.3
Sept.....	174,602	1,695	113,924	103,571	112,229	101,876	3,308	98,568	10,353	9.1	9.2	64.6	64.3
Oct.....	174,779	1,695	113,561	103,665	111,866	101,970	3,240	98,730	9,896	8.7	8.8	64.3	64.0
Nov.....	174,951	1,685	113,720	104,291	112,035	102,606	3,257	99,349	9,429	8.3	8.4	64.4	64.0
Dec.....	175,121	1,688	113,824	104,629	112,136	102,941	3,356	99,585	9,195	8.1	8.2	64.4	64.0

¹ 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.

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."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-30.—*Civilian employment and unemployment by sex and age, 1947-83*

(Thousands of persons 16 years of age and over; monthly data seasonally adjusted)

Year or month	Civilian employment						Unemployment					
	Males			Females			Males			Females		
	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1947.....	57,038	40,995	2,218	38,776	16,045	1,691	14,354	2,311	1,692	270	1,422	619
1948.....	58,343	41,725	2,344	39,382	16,617	1,682	14,936	2,276	1,559	256	1,305	717
1949.....	57,651	40,925	2,124	38,803	16,723	1,588	15,137	2,637	2,572	353	2,219	1,065
1950.....	58,918	41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049
1951.....	59,961	41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834
1952.....	60,250	41,682	2,107	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698
1953 ¹	61,179	42,430	2,136	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632
1954.....	60,109	41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188
1955.....	62,170	42,621	2,095	40,526	19,551	1,547	18,002	2,852	1,854	274	1,580	998
1956.....	63,799	43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	269	1,442	1,039
1957.....	64,071	43,357	2,115	41,239	20,714	1,663	19,052	2,855	1,841	300	1,541	1,018
1958.....	63,036	42,423	2,012	40,411	20,613	1,570	19,043	4,602	3,098	416	2,681	1,504
1959.....	64,630	43,466	2,198	41,267	21,164	1,640	19,524	3,740	2,420	398	2,022	1,320
1960 ¹	65,778	43,904	2,361	41,543	21,874	1,768	20,105	3,852	2,486	426	2,060	1,366
1961.....	65,746	43,656	2,315	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717
1962 ¹	66,702	44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	408	2,016	1,488
1963.....	67,762	44,657	2,406	42,521	23,105	1,849	21,257	4,070	2,472	501	1,971	1,598
1964.....	69,305	45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581
1965.....	71,088	46,340	2,918	43,422	24,748	2,118	22,630	3,366	1,914	479	1,435	1,452
1966.....	72,895	46,919	3,253	43,668	25,976	2,468	23,510	2,875	1,551	432	1,120	1,324
1967.....	74,372	47,479	3,186	44,294	26,893	2,496	24,397	2,975	1,508	448	1,060	1,468
1968.....	75,920	48,114	3,255	44,859	27,807	2,526	25,281	2,817	1,419	426	993	1,397
1969.....	77,902	48,818	3,430	45,388	29,084	2,687	26,397	2,832	1,403	460	963	1,429
1970.....	78,678	48,990	3,409	45,581	29,688	2,735	26,952	4,093	2,238	599	1,638	1,855
1971.....	79,367	49,390	3,478	45,912	29,976	2,730	27,246	5,016	2,789	693	2,097	2,227
1972 ¹	82,153	50,896	3,475	47,130	31,257	2,980	28,276	4,882	2,659	711	1,948	2,222
1973 ¹	85,064	52,349	4,039	48,310	32,715	3,231	29,484	4,365	2,275	653	1,624	2,089
1974.....	86,794	53,024	4,103	48,922	33,769	3,345	30,424	5,156	2,714	757	1,957	2,441
1975.....	85,846	51,857	3,839	48,018	33,989	3,263	30,726	7,929	4,442	966	3,476	3,486
1976.....	88,752	53,138	3,947	49,190	35,615	3,389	32,226	7,406	4,036	939	3,098	3,369
1977.....	92,017	54,728	4,174	50,555	37,289	3,514	33,775	6,991	3,667	874	2,794	3,324
1978 ¹	96,048	56,479	4,336	52,143	39,569	3,734	35,836	6,202	3,142	813	3,328	3,061
1979.....	98,824	57,607	4,300	53,308	41,217	3,783	37,434	6,137	3,120	811	2,308	3,018
1980.....	99,303	57,186	4,085	53,101	42,117	3,625	38,492	7,637	4,267	913	3,353	3,370
1981.....	100,397	57,397	3,815	53,582	43,000	3,411	39,590	8,273	4,577	962	3,615	3,696
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
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
1982:												
Jan.....	99,682	56,677	3,561	53,116	43,005	3,191	39,814	9,393	5,411	1,037	4,374	3,982
Feb.....	99,810	56,758	3,548	53,210	43,052	3,202	39,850	9,693	5,482	1,055	4,427	4,211
Mar.....	99,754	56,594	3,511	53,083	43,160	3,216	39,944	9,910	5,674	1,059	4,615	4,236
Apr.....	99,598	56,539	3,448	53,093	43,059	3,224	39,835	10,303	5,862	1,096	4,766	4,441
May.....	100,179	56,812	3,557	53,251	43,367	3,219	40,148	10,363	5,894	1,107	4,787	4,469
June.....	99,653	56,166	3,240	52,926	43,487	3,174	40,313	10,480	6,119	1,054	5,065	4,361
July.....	99,503	56,073	3,211	52,862	43,430	3,161	40,269	10,896	6,293	1,086	5,207	4,603
Aug.....	99,563	56,099	3,323	52,776	43,464	3,140	40,324	10,910	6,336	1,091	5,245	4,574
Sept.....	99,412	56,028	3,292	52,736	43,384	3,174	40,210	11,267	6,672	1,109	5,563	4,595
Oct.....	99,146	55,918	3,298	52,620	43,228	3,149	40,079	11,544	6,828	1,118	5,710	4,716
Nov.....	99,036	55,818	3,310	52,483	43,218	3,136	40,082	11,887	6,984	1,137	5,847	4,903
Dec.....	98,979	55,765	3,282	52,483	43,214	3,052	40,162	11,894	6,969	1,133	5,836	4,925
1983:												
Jan.....	99,154	55,803	3,295	52,508	43,351	3,096	40,255	11,523	6,683	1,060	5,623	4,840
Feb.....	99,172	55,793	3,285	52,508	43,379	3,064	40,315	11,516	6,756	1,039	5,717	4,760
Mar.....	99,316	55,895	3,222	52,673	43,421	3,053	40,368	11,419	6,773	1,078	5,995	4,746
Apr.....	99,606	56,059	3,229	52,830	43,547	3,016	40,531	11,369	6,722	1,040	5,682	4,647
May.....	99,762	56,216	3,253	52,963	43,546	2,963	40,583	11,188	6,604	1,021	5,583	4,584
June.....	100,743	56,844	3,352	53,492	43,899	3,052	40,847	11,162	6,409	1,057	5,352	4,753
July.....	101,225	57,071	3,306	53,765	44,154	3,031	41,123	10,600	6,248	1,031	5,217	4,352
Aug.....	101,484	57,069	3,265	53,804	44,415	3,117	41,298	10,633	6,200	1,050	5,150	4,433
Sept.....	101,876	57,279	3,332	53,947	44,597	3,047	41,550	10,363	6,049	984	5,065	4,304
Oct.....	101,970	57,407	3,267	54,140	44,563	2,993	41,570	9,896	5,759	950	4,809	4,137
Nov.....	102,606	57,855	3,398	54,547	44,751	3,013	41,738	9,429	5,557	861	4,596	3,972
Dec.....	102,941	58,043	3,385	54,658	44,898	3,055	41,843	9,195	5,258	866	4,392	3,937

¹ See footnote 5, Table B-29.

Note.—See Note, Table B-29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-31.—Unemployment by duration and reason, 1947-83

[Monthly data seasonally adjusted ¹]

Year or month	Total unemployment	Duration of unemployment						Reason for unemployment			
		Less than 5 weeks	5-14 weeks	15-26 weeks	27 weeks and over	Average (mean) duration in weeks	Median duration in weeks	Job losers	Job leavers	Reentrants	New entrants
		Thousands of persons 16 years of age and over						Thousands of persons 16 years of age and over			
1947.....	2,311	1,210	704	234	164						
1948.....	2,276	1,300	669	193	116	8.6					
1949.....	3,637	1,756	1,194	428	256	10.0					
1950.....	3,288	1,450	1,055	425	357	12.1					
1951.....	2,055	1,177	574	166	137	9.7					
1952.....	1,883	1,135	516	148	84	8.4					
1953.....	1,834	1,142	482	132	78	8.0					
1954.....	3,532	1,605	1,116	495	317	11.8					
1955.....	2,852	1,335	815	366	336	13.0					
1956.....	2,750	1,412	805	301	232	11.3					
1957.....	2,859	1,408	891	321	239	10.5					
1958.....	4,602	1,753	1,396	785	667	13.9					
1959.....	3,740	1,585	1,114	469	571	14.4					
1960.....	3,852	1,719	1,176	503	454	12.8					
1961.....	4,714	1,806	1,376	728	804	15.6					
1962.....	3,911	1,663	1,134	534	585	14.7					
1963.....	4,070	1,751	1,231	535	553	14.0					
1964.....	3,786	1,697	1,117	491	482	13.3					
1965.....	3,366	1,628	983	404	351	11.8					
1966.....	2,875	1,573	779	287	239	10.4					
1967.....	2,975	1,634	893	271	177	8.7		1,229			
1968.....	2,817	1,584	810	256	156	8.4	4.5	1,670	431	945	396
1969.....	2,832	1,629	827	242	133	7.8	4.4	1,017	436	909	407
1970.....	4,093	2,139	1,290	428	235	8.6	4.9	1,811	550	1,228	504
1971.....	5,016	2,245	1,585	668	519	11.3	6.3	2,323	590	1,472	630
1972.....	4,882	2,242	1,472	601	566	12.0	6.2	2,108	641	1,456	677
1973.....	4,365	2,224	1,314	483	343	10.0	5.2	1,694	683	1,340	649
1974.....	5,156	2,604	1,597	574	381	9.8	5.2	2,242	768	1,463	681
1975.....	7,929	2,940	2,484	1,303	1,203	14.2	8.4	4,386	827	1,892	823
1976.....	7,406	2,844	2,196	1,018	1,348	15.8	8.2	3,679	903	1,928	895
1977.....	6,991	2,919	2,132	913	1,028	14.3	7.0	3,166	909	1,963	953
1978.....	6,202	2,865	1,923	766	648	11.9	5.9	2,585	874	1,857	885
1979.....	6,137	2,950	1,946	706	535	10.8	5.4	2,635	880	1,806	817
1980.....	7,637	3,295	2,470	1,052	820	11.9	6.5	3,947	891	1,927	872
1981.....	8,273	3,449	2,539	1,122	1,162	13.7	6.9	4,267	923	2,102	981
1982.....	10,678	3,883	3,311	1,708	1,776	15.6	8.7	6,268	840	2,384	1,885
1983.....	10,717	3,570	2,937	1,652	2,559	20.0	10.1	6,258	830	2,412	1,216
1982:											
Jan.....	9,393	3,882	3,088	1,215	1,182	13.4	7.2	5,314	829	2,083	1,077
Feb.....	9,693	3,809	3,116	1,480	1,268	14.1	7.5	5,275	928	2,285	1,119
Mar.....	9,910	3,918	3,120	1,598	1,351	14.0	7.7	5,646	876	2,285	1,081
Apr.....	10,303	3,979	3,244	1,602	1,500	14.4	8.1	5,909	904	2,348	1,099
May.....	10,363	3,912	3,312	1,647	1,612	14.8	8.4	5,916	870	2,427	1,155
June.....	10,480	3,579	3,435	1,646	1,803	16.0	9.1	6,172	841	2,389	1,069
July.....	10,896	3,987	3,330	1,769	1,820	15.4	8.4	6,404	831	2,485	1,223
Aug.....	10,910	3,899	3,280	1,859	1,851	16.1	8.8	6,385	836	2,412	1,292
Sept.....	11,267	3,947	3,510	1,864	2,043	16.6	9.6	6,890	784	2,443	1,279
Oct.....	11,544	3,881	3,458	1,951	2,250	17.2	9.8	7,359	787	2,242	1,300
Nov.....	11,887	3,961	3,485	2,131	2,354	17.4	10.1	7,361	790	2,576	1,242
Dec.....	11,894	3,898	3,419	2,077	2,583	18.4	10.4	7,114	826	2,684	1,282
1983:											
Jan.....	11,523	3,600	3,331	1,954	2,669	19.4	11.3	6,810	826	2,557	1,199
Feb.....	11,516	3,732	3,169	1,928	2,685	19.1	9.8	6,864	830	2,505	1,188
Mar.....	11,419	3,535	3,173	1,861	2,726	19.2	10.4	6,848	888	2,460	1,182
Apr.....	11,369	3,595	3,139	1,691	2,705	19.2	10.8	6,767	816	2,491	1,251
May.....	11,188	3,568	3,012	1,774	2,736	20.2	11.9	6,753	808	2,404	1,246
June.....	11,162	3,630	2,950	1,593	2,893	21.4	10.8	6,525	799	2,436	1,412
July.....	10,600	3,529	2,841	1,794	2,604	21.3	10.1	6,235	752	2,415	1,229
Aug.....	10,633	3,633	2,951	1,597	2,481	19.9	9.4	6,133	799	2,469	1,214
Sept.....	10,353	3,740	2,784	1,383	2,506	20.2	9.4	5,938	858	2,362	1,234
Oct.....	9,896	3,504	2,725	1,372	2,283	20.1	9.5	5,601	866	2,322	1,127
Nov.....	9,429	3,328	2,616	1,337	2,190	20.2	9.4	5,226	868	2,250	1,154
Dec.....	9,195	3,382	2,504	1,284	2,085	19.6	9.0	5,017	855	2,246	1,150

¹ Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—See footnote 5 and Note, Table B-29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-32.—Civilian labor force participation rate and civilian employment/population ratio, 1948-83

[Percent; monthly data seasonally adjusted]

Year or month	Civilian labor force participation rate ¹					Civilian employment/population ratio ²						
	Total	Both sexes 16-19	Males 20 years and over	Fe-males 20 years and over	White	Black and other	Total	Both sexes 16-19 years	Males 20 years and over	Fe-males 20 years and over	White	Black and other
1948	58.8	52.5	88.6	31.8			56.6	47.7	85.8	30.7		
1949	58.9	52.2	88.5	32.3			55.4	45.2	83.7	30.6		
1950	59.2	51.8	88.4	33.3			56.1	45.5	84.2	31.6		
1951	59.3	52.2	88.4	34.0			57.3	47.9	86.1	32.6		
1952	59.0	51.3	88.3	34.1			57.3	46.9	86.2	33.0		
1953	58.9	50.2	88.0	33.9			57.1	46.4	85.9	32.9		
1954	58.8	48.3	87.8	34.2	58.2	64.3	55.5	42.3	83.5	32.3	55.2	58.0
1955	59.3	48.9	87.6	35.4	58.7	64.3	56.7	43.5	84.3	33.8	56.5	58.7
1956	60.0	50.9	87.6	36.4	59.4	64.9	57.5	45.3	84.6	34.9	57.3	59.5
1957	59.6	49.6	86.9	36.5	59.1	64.4	57.1	43.9	83.8	35.0	56.8	59.3
1958	59.5	47.4	86.6	36.9	58.9	64.8	55.4	39.9	81.2	34.6	55.3	56.7
1959	59.3	46.7	86.3	37.0	58.7	64.3	56.0	39.9	82.3	35.1	55.9	57.5
1960	59.4	47.5	86.0	37.6	58.8	64.5	56.1	40.5	81.9	35.7	55.9	57.9
1961	59.3	47.0	85.7	38.0	58.8	64.1	55.4	39.1	80.8	35.6	55.3	56.2
1962	58.8	46.2	84.8	37.8	58.3	63.2	55.5	39.4	80.9	35.8	55.4	56.3
1963	58.7	45.2	84.4	38.3	58.2	63.0	55.4	37.4	80.6	36.3	55.3	56.2
1964	58.7	44.5	84.2	38.9	58.2	63.1	55.7	37.3	80.9	36.9	55.5	57.0
1965	58.9	45.7	83.9	39.4	58.4	62.9	56.2	38.9	81.2	37.6	56.0	57.8
1966	59.2	48.2	83.6	40.1	58.7	63.0	56.9	42.1	81.5	38.6	56.8	58.4
1967	59.6	48.4	83.4	41.1	59.2	62.8	57.3	42.2	81.5	39.3	57.2	58.2
1968	59.6	48.3	83.1	41.6	59.3	62.2	57.5	42.2	81.3	40.0	57.4	58.0
1969	60.1	49.5	82.8	42.7	59.9	62.1	58.0	43.4	81.1	41.1	58.0	58.1
1970	60.4	49.9	82.6	43.3	60.2	61.8	57.4	42.3	79.7	41.2	57.5	56.8
1971	60.2	49.7	82.1	43.3	60.1	60.9	56.6	41.3	78.5	40.9	56.8	54.9
1972	60.4	51.9	81.6	43.7	60.4	60.2	57.0	43.5	78.4	41.3	57.4	54.1
1973	60.8	53.7	81.3	44.4	60.8	60.5	57.8	45.9	78.6	42.2	58.2	55.0
1974	61.3	54.8	81.0	45.3	61.4	60.3	57.8	46.0	77.9	42.8	58.3	54.3
1975	61.2	54.0	80.3	46.0	61.5	59.6	56.1	43.3	74.8	42.3	56.7	51.4
1976	61.6	54.5	79.8	47.0	61.8	59.8	56.8	44.2	75.1	43.5	57.5	52.0
1977	62.3	56.0	79.7	48.1	62.5	60.4	57.9	46.1	75.6	44.8	58.6	52.5
1978	63.2	57.8	79.8	49.6	63.3	62.2	59.3	48.3	76.4	46.6	60.0	54.7
1979	63.7	57.9	79.8	50.6	63.9	62.2	59.9	48.5	76.5	47.7	60.6	55.2
1980	63.8	56.7	79.4	51.3	64.1	61.7	59.2	46.6	74.6	48.1	60.0	53.6
1981	63.9	55.4	79.0	52.1	64.3	61.3	59.0	44.6	74.0	48.6	60.0	52.6
1982	64.0	54.1	78.7	52.7	64.3	61.6	57.8	41.5	71.8	48.4	58.8	50.9
1983	64.0	53.5	78.5	53.1	64.3	62.1	57.9	41.5	71.4	48.8	58.9	51.0
1982:												
Jan	63.7	54.2	78.6	52.2	64.0	61.1	58.2	42.3	72.6	48.4	59.2	51.7
Feb	63.9	54.8	78.7	52.4	64.3	61.3	58.2	42.4	72.7	48.4	59.3	51.4
Mar	63.9	54.2	78.7	52.6	64.2	61.5	58.1	42.3	72.4	48.4	59.1	51.2
Apr	64.0	54.5	78.8	52.6	64.4	61.1	58.0	42.1	72.3	48.2	59.0	50.9
May	64.3	55.5	79.0	52.9	64.6	61.7	58.2	42.8	72.5	48.5	59.3	51.2
June	64.0	52.4	78.8	53.0	64.3	61.2	57.9	40.6	71.9	48.7	58.9	50.9
July	64.1	53.2	78.8	53.0	64.4	61.6	57.7	40.4	71.7	48.6	58.8	50.9
Aug	64.0	53.9	78.6	53.0	64.4	61.9	57.7	41.2	71.5	48.6	58.8	51.0
Sept	64.1	54.1	78.9	52.8	64.5	61.7	57.6	41.3	71.4	48.4	58.6	50.5
Oct	64.0	54.2	78.8	52.7	64.3	62.1	57.3	41.3	71.1	48.1	58.4	50.6
Nov	64.1	54.5	78.8	52.9	64.4	61.9	57.2	41.4	70.9	48.1	58.3	50.3
Dec	64.0	53.7	78.6	53.0	64.4	62.2	57.1	40.7	70.7	48.2	58.2	50.4
1983:												
Jan	63.8	53.5	78.2	53.0	64.1	61.9	57.2	41.2	70.6	48.2	58.3	50.3
Feb	63.8	53.1	78.2	52.9	64.1	62.0	57.2	41.0	70.5	48.2	58.2	50.7
Mar	63.8	53.2	78.2	52.9	64.0	62.1	57.2	40.7	70.7	48.2	58.2	50.7
Apr	63.9	53.0	78.4	52.9	64.1	62.2	57.3	40.6	70.8	48.4	58.4	50.6
May	63.8	52.6	78.4	52.8	64.0	62.1	57.3	40.5	70.9	48.4	58.4	50.6
June	64.3	54.7	78.7	53.2	64.5	62.7	57.9	41.8	71.5	48.6	58.9	51.0
July	64.2	53.7	78.7	53.1	64.4	62.4	58.1	41.5	71.8	48.9	59.1	51.3
Aug	64.3	54.4	78.6	53.3	64.6	62.3	58.2	42.0	71.7	49.0	59.3	51.2
Sept	64.3	53.8	78.6	53.4	64.6	62.3	58.3	42.1	71.8	49.3	59.4	51.5
Oct	64.0	52.8	78.4	53.2	64.4	61.5	58.3	41.4	72.0	49.2	59.4	51.2
Nov	64.0	53.3	78.4	53.2	64.5	61.4	58.6	42.5	72.3	49.4	59.8	51.5
Dec	64.0	53.7	78.3	53.2	64.5	61.5	58.8	42.9	72.5	49.4	59.9	51.5

¹ Civilian labor force as percent of civilian noninstitutional population in group specified.² 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.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-33.—Unemployment rate, 1948-83

[Percent; monthly data seasonally adjusted]

Year or month	Unemployment rate, all workers ¹	Unemployment rate, all workers ¹												
		All civilian workers	Males			Females			Both sexes 16-19 years	White	Black and other	Experienced wage and salary workers	Married men, spouse present	Women who maintain families
			Total	16-19 years	20 years and over	Total	16-19 years	20 years and over						
1948.....		3.8	3.6	9.8	3.2	4.1	8.3	3.6	9.2	3.5	5.9	4.3		
1949.....		5.9	5.9	14.3	5.4	6.0	12.3	5.3	13.4	5.6	8.9	6.8	3.5	
1950.....	5.2	5.3	5.1	12.7	4.7	5.7	11.4	5.1	12.2	4.9	9.0	6.0	4.6	
1951.....	3.2	3.3	2.8	8.1	2.5	4.4	8.3	4.0	8.2	3.1	5.3	3.7	1.5	
1952.....	2.9	3.0	2.8	8.9	2.4	3.6	8.0	3.2	8.5	2.8	5.4	3.4	1.4	
1953.....	2.8	2.9	2.8	7.9	2.5	3.3	7.2	2.9	7.6	2.7	4.5	3.2	1.7	
1954.....	5.4	5.5	5.3	13.5	4.9	6.0	11.4	5.5	12.6	5.0	9.9	6.2	4.0	
1955.....	4.3	4.4	4.2	11.6	3.8	4.9	10.2	4.4	11.0	3.9	8.7	4.8	2.6	
1956.....	4.0	4.1	3.8	11.1	3.4	4.8	11.2	4.2	11.1	3.6	8.3	4.4	2.3	
1957.....	4.2	4.3	4.1	12.4	3.6	4.7	10.6	4.1	11.6	3.8	7.9	4.6	2.8	
1958.....	6.6	6.8	6.8	17.1	6.2	6.8	14.3	6.1	15.9	6.1	12.6	7.3	5.1	
1959.....	5.3	5.5	5.2	15.3	4.7	5.9	13.5	5.2	14.6	4.8	10.7	5.7	3.6	
1960.....	5.4	5.5	5.4	15.3	4.7	5.9	13.9	5.1	14.7	5.0	10.2	5.7	3.7	
1961.....	6.5	6.7	6.4	17.1	5.7	7.2	16.3	6.3	16.8	6.0	12.4	6.8	4.6	
1962.....	5.4	5.5	5.2	14.7	4.6	6.2	14.6	5.4	14.7	4.9	10.9	5.6	3.6	
1963.....	5.5	5.7	5.2	17.2	4.5	6.5	17.2	5.4	17.2	5.0	10.8	5.6	3.4	
1964.....	5.0	5.2	4.6	15.8	3.9	6.2	16.6	5.2	16.2	4.6	9.6	5.0	2.8	
1965.....	4.4	4.5	4.0	14.1	3.2	5.5	15.7	4.5	14.8	4.1	8.1	4.3	2.4	
1966.....	3.7	3.8	3.2	11.7	2.5	4.8	14.1	3.8	12.8	3.4	7.3	3.5	1.9	
1967.....	3.7	3.8	3.1	12.3	2.3	5.2	13.5	4.2	12.9	3.4	7.4	3.6	1.8	4.9
1968.....	3.5	3.6	2.9	11.6	2.2	4.8	14.0	3.8	12.7	3.2	6.7	3.4	1.6	4.4
1969.....	3.4	3.5	2.8	11.4	2.1	4.7	13.3	3.7	12.2	3.1	6.4	3.3	1.5	4.4
1970.....	4.8	4.9	4.4	15.0	3.5	5.9	15.6	4.8	15.3	4.5	8.2	4.8	2.6	5.4
1971.....	5.8	5.9	5.3	16.6	4.4	6.9	17.2	5.7	16.9	5.4	9.9	5.7	3.2	7.3
1972.....	5.5	5.6	5.0	15.9	4.0	6.6	16.7	5.4	16.2	5.1	10.0	5.3	2.8	7.2
1973.....	4.8	4.9	4.2	13.9	3.3	6.0	15.3	4.9	14.5	4.3	9.0	4.5	2.3	7.1
1974.....	5.5	5.6	4.9	15.6	3.8	6.7	16.6	5.5	16.0	5.0	9.9	5.3	2.7	7.0
1975.....	8.3	8.5	7.9	20.1	6.8	9.3	19.7	8.0	19.9	7.8	13.8	8.2	5.1	10.0
1976.....	7.6	7.7	7.1	19.2	5.9	8.6	18.7	7.4	19.0	7.0	13.1	7.3	4.2	10.1
1977.....	6.9	7.1	6.3	17.3	5.2	8.2	18.3	7.0	17.8	6.2	13.1	6.6	3.6	9.4
1978.....	6.0	6.1	5.3	15.8	4.3	7.2	17.1	6.0	16.4	5.2	11.9	5.6	2.8	8.5
1979.....	5.8	5.8	5.1	15.9	4.2	6.8	16.4	5.7	16.1	5.1	11.3	5.5	2.8	8.3
1980.....	7.0	7.1	6.9	18.3	5.9	7.4	17.2	6.4	17.8	6.3	13.1	6.9	4.2	9.2
1981.....	7.5	7.6	7.4	20.1	6.3	7.9	19.0	6.8	19.6	6.7	14.2	7.3	4.3	10.4
1982.....	9.5	9.7	9.9	24.4	8.8	9.4	21.9	8.3	23.2	8.6	17.3	9.3	6.5	11.7
1983.....	9.5	9.6	9.9	23.3	8.9	9.2	21.3	8.1	22.4	8.4	17.8	9.2	6.5	12.2
1982:														
Jan.....	8.5	8.6	8.7	22.6	7.6	8.5	21.3	7.3	22.0	7.6	15.4	8.2	5.4	10.4
Feb.....	8.7	8.9	8.8	22.9	7.7	8.9	22.3	7.6	22.6	7.8	16.1	8.4	5.4	10.5
Mar.....	8.9	9.0	9.1	23.2	8.0	8.9	20.5	7.9	21.9	8.0	16.6	8.7	5.6	10.7
Apr.....	9.2	9.4	9.4	24.1	8.2	9.3	21.3	8.2	22.8	8.3	16.7	9.1	6.0	11.4
May.....	9.2	9.4	9.4	23.7	8.2	9.3	21.9	8.2	22.9	8.2	17.0	9.1	6.1	11.8
June.....	9.4	9.5	9.8	24.5	8.7	9.1	20.4	8.1	22.5	8.4	16.9	9.2	6.5	12.0
July.....	9.7	9.9	10.1	25.3	9.0	9.6	22.6	8.4	24.0	8.8	17.5	9.5	6.8	12.1
Aug.....	9.7	9.9	10.1	24.7	9.0	9.5	22.4	8.3	23.6	8.7	17.5	9.4	6.8	11.9
Sept.....	10.0	10.2	10.6	25.2	9.5	9.6	22.1	8.4	23.7	9.0	18.1	9.8	7.2	12.2
Oct.....	10.3	10.4	10.9	25.3	9.8	9.8	22.3	8.7	23.9	9.2	18.6	10.1	7.5	11.3
Nov.....	10.6	10.7	11.1	25.6	10.0	10.2	22.5	9.1	24.1	9.6	18.7	10.5	7.5	12.7
Dec.....	10.6	10.7	11.1	25.7	10.0	10.2	22.8	9.1	24.3	9.6	18.9	10.5	7.5	13.3
1983:														
Jan.....	10.3	10.4	10.7	24.3	9.7	10.0	21.8	9.0	23.1	9.1	18.9	10.1	7.2	13.2
Feb.....	10.2	10.4	10.8	24.0	9.8	9.9	21.3	8.9	22.7	9.2	18.2	10.1	7.2	13.2
Mar.....	10.2	10.3	10.7	25.1	9.6	9.9	21.9	8.8	23.6	9.1	18.6	10.0	7.1	13.3
Apr.....	10.1	10.2	10.7	24.4	9.7	9.6	22.3	8.5	23.4	8.9	18.7	9.9	7.1	13.0
May.....	9.9	10.1	10.5	23.9	9.5	9.5	22.0	8.5	23.0	8.8	18.5	9.8	7.0	12.7
June.....	9.8	10.0	10.1	24.0	9.1	9.8	23.1	8.6	23.6	8.6	18.6	9.4	6.7	12.5
July.....	9.3	9.5	9.9	23.8	8.8	9.0	21.5	7.9	22.7	8.2	17.9	9.1	6.2	11.8
Aug.....	9.3	9.5	9.8	24.3	8.7	9.1	21.1	8.0	22.8	8.2	17.9	9.1	6.3	11.8
Sept.....	9.1	9.2	9.6	22.8	8.6	8.8	20.6	7.8	21.8	8.0	17.3	8.8	6.1	12.0
Oct.....	8.7	8.8	9.1	22.5	8.2	8.5	20.5	7.5	21.6	7.7	16.7	8.5	5.7	11.4
Nov.....	8.3	8.4	8.6	20.2	7.8	8.2	20.1	7.2	20.2	7.3	16.1	8.1	5.5	10.5
Dec.....	8.1	8.2	8.3	20.4	7.4	8.1	19.8	7.1	20.1	7.1	16.3	7.9	5.2	10.9

¹ Unemployed as percent of labor force including resident Armed Forces.² Unemployed as percent of civilian labor force in group specified.³ 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

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-34.—Civilian labor force participation rate by demographic characteristic, 1954-83

[Percent;¹ monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black and other						
		Total	Males			Females			Total	Males			Females		
			Total	16-19 years	20 years and over	Total	16-19 years	20 years and over		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1954.....	58.8	58.2	85.6	57.6	87.8	33.3	40.6	32.7	64.3	85.2	61.2	87.1	46.1	31.0	47.7
1955.....	59.3	58.7	85.4	58.6	87.5	34.5	40.7	34.0	64.3	85.0	60.8	87.6	46.1	32.7	47.5
1956.....	60.0	59.4	85.6	60.4	87.6	35.7	43.1	35.1	64.9	85.1	61.5	87.8	47.3	36.3	48.4
1957.....	59.6	59.1	84.8	59.2	86.9	35.7	42.2	35.2	64.4	84.3	58.8	87.0	47.2	33.2	48.6
1958.....	59.5	58.9	84.3	56.5	86.6	35.8	40.1	35.5	64.8	84.0	57.3	87.1	48.0	31.9	49.8
1959.....	59.3	58.7	83.8	55.9	86.3	36.0	39.6	35.6	64.3	83.4	55.5	86.7	47.7	28.2	49.8
1960.....	59.4	58.8	83.4	55.9	86.0	36.5	40.3	36.2	64.5	83.0	57.6	86.2	48.2	32.9	49.9
1961.....	59.3	58.8	83.0	54.5	85.7	36.9	40.6	36.6	64.1	82.2	55.8	85.5	48.3	32.8	50.1
1962.....	58.8	58.3	82.1	53.8	84.9	36.7	39.8	36.5	63.2	80.8	53.5	84.2	48.0	33.1	49.6
1963.....	58.7	58.2	81.5	53.1	84.4	37.2	38.7	37.0	63.0	80.2	51.5	83.9	48.1	32.6	49.9
1964.....	58.7	58.2	81.1	52.7	84.2	37.5	37.8	37.5	63.1	80.0	49.9	84.1	48.5	31.7	50.7
1965.....	58.9	58.4	80.8	54.1	83.9	38.1	39.2	38.0	62.9	79.6	51.3	83.7	48.6	29.5	51.1
1966.....	59.2	58.7	80.6	55.9	83.6	39.2	42.6	38.8	63.0	79.0	51.4	83.3	49.3	33.5	51.6
1967.....	59.6	59.2	80.7	56.3	83.5	40.1	42.5	39.8	62.8	78.5	51.1	82.9	49.5	35.2	51.6
1968.....	59.6	59.3	80.4	55.9	83.2	40.7	43.0	40.4	62.2	77.6	49.7	82.2	49.3	34.8	51.4
1969.....	60.1	59.9	80.2	56.8	83.0	41.8	44.6	41.5	62.1	76.9	49.6	81.4	49.8	34.6	52.0
1970.....	60.4	60.2	80.0	57.5	82.8	42.6	45.6	42.2	61.8	76.5	47.4	81.4	49.5	34.1	51.8
1971.....	60.2	60.1	79.6	57.9	82.3	42.6	45.4	42.3	60.9	74.9	44.7	80.0	49.2	31.2	51.8
1972.....	60.4	60.4	79.6	60.1	82.0	43.2	48.1	42.7	60.2	73.9	46.0	78.6	48.8	32.3	51.2
1973.....	60.8	60.8	79.4	62.0	81.6	44.1	50.1	43.5	60.5	74.0	46.3	78.6	49.3	34.4	51.4
1974.....	61.3	61.4	79.4	62.9	81.4	45.2	51.7	44.4	60.3	73.5	47.2	78.0	49.3	34.1	51.5
1975.....	61.2	61.5	78.7	61.9	80.7	45.9	51.5	45.3	59.6	71.9	42.9	76.8	49.4	35.6	51.4
1976.....	61.6	61.8	78.4	62.3	80.3	46.9	52.8	46.2	59.8	71.2	42.3	76.1	50.4	33.6	52.8
1977.....	62.3	62.5	78.5	64.0	80.2	48.0	54.5	47.3	60.4	71.6	43.6	76.2	51.2	33.6	53.6
1978.....	63.2	63.3	78.6	65.0	80.1	49.4	56.7	48.7	62.2	72.6	45.4	77.1	53.5	38.0	55.6
1979.....	63.7	63.9	78.6	64.8	80.1	50.5	57.4	49.8	62.2	72.5	44.0	77.1	53.7	37.8	55.8
1980.....	63.8	64.1	78.2	63.7	79.8	51.2	56.2	50.6	61.7	71.5	43.5	75.9	53.6	35.9	55.9
1981.....	63.9	64.3	77.9	62.4	79.5	51.9	55.4	51.5	61.3	70.6	41.7	75.0	53.6	34.5	56.1
1982.....	64.0	64.3	77.4	60.0	79.2	52.4	55.0	52.2	61.6	71.0	40.6	75.4	53.9	34.5	56.3
1983.....	64.0	64.3	77.1	59.4	78.9	52.7	54.5	52.5	62.1	71.3	40.9	75.6	54.4	33.4	56.8
1982:															
Jan.....	63.7	64.0	77.4	61.2	79.1	51.9	54.4	51.6	61.1	70.4	40.1	74.8	53.5	34.1	56.0
Feb.....	63.9	64.3	77.6	60.9	79.3	52.1	55.2	51.8	61.3	70.6	42.3	74.7	53.7	35.7	56.0
Mar.....	63.9	64.2	77.5	60.6	79.2	52.2	54.3	52.0	61.5	70.8	42.0	75.0	53.8	34.5	56.2
Apr.....	64.0	64.4	77.6	60.8	79.3	52.4	55.9	52.0	61.1	70.8	39.9	75.4	53.1	31.4	55.8
May.....	64.3	64.6	77.9	62.7	79.4	52.6	55.6	52.3	61.7	71.0	40.7	75.5	54.0	34.3	56.5
June.....	64.0	64.3	77.3	57.9	79.3	52.5	54.3	52.4	61.2	70.6	36.9	75.6	53.6	30.7	56.4
July.....	64.1	64.4	77.3	58.0	79.2	52.7	55.1	52.5	61.6	71.0	38.3	75.8	54.0	35.7	56.2
Aug.....	64.0	64.4	77.3	59.5	79.1	52.6	54.8	52.4	61.9	71.1	41.7	75.5	54.3	36.1	56.5
Sept.....	64.1	64.5	77.6	59.3	79.4	52.5	55.4	52.3	61.7	71.1	41.3	75.5	53.9	35.8	56.1
Oct.....	64.0	64.3	77.5	59.3	79.3	52.4	55.5	52.1	62.1	71.5	41.8	75.8	54.3	35.0	56.7
Nov.....	64.1	64.4	77.5	60.0	79.2	52.5	55.3	52.3	61.9	71.4	40.9	75.8	54.0	35.0	56.3
Dec.....	64.0	64.4	77.3	59.5	79.1	52.6	54.2	52.5	62.2	71.4	40.6	75.9	54.5	35.3	56.8
1983:															
Jan.....	63.8	64.1	76.8	59.1	78.6	52.6	55.0	52.4	61.9	70.9	40.4	75.2	54.5	33.3	57.0
Feb.....	63.8	64.1	76.9	59.2	78.7	52.4	54.3	52.2	62.0	70.6	38.9	75.1	54.8	32.0	57.5
Mar.....	63.8	64.0	76.8	59.1	78.6	52.3	54.9	52.1	62.1	70.9	39.5	75.4	54.9	31.7	57.6
Apr.....	63.9	64.1	76.9	58.6	78.7	52.4	53.9	52.2	62.2	71.7	39.1	76.2	54.5	34.8	56.8
May.....	63.8	64.0	76.9	58.9	78.7	52.2	53.0	52.2	62.1	71.1	39.3	75.6	54.7	33.0	57.2
June.....	64.3	64.5	77.3	59.9	79.0	52.8	55.4	52.6	62.7	72.7	45.6	76.6	54.5	35.6	56.7
July.....	64.2	64.4	77.3	59.7	79.0	52.7	54.6	52.5	62.4	72.3	42.5	76.7	54.3	32.7	56.8
Aug.....	64.3	64.6	77.3	59.9	78.9	53.0	55.9	52.7	62.3	71.8	41.9	76.1	54.4	34.7	56.7
Sept.....	64.3	64.6	77.3	60.0	79.0	53.0	54.5	52.8	62.3	71.5	42.3	75.5	54.6	33.5	57.1
Oct.....	64.0	64.4	77.1	58.6	78.9	52.8	53.8	52.7	61.5	70.6	40.2	74.9	54.0	33.1	56.4
Nov.....	64.0	64.5	77.3	59.6	78.9	52.8	53.9	52.7	61.4	70.8	41.0	75.1	53.5	32.9	55.9
Dec.....	64.0	64.5	77.2	59.8	78.9	52.9	54.6	52.8	61.5	70.5	40.0	74.7	54.0	33.8	56.3

¹ 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, 1948-83

[Percent; ¹ monthly data seasonally adjusted]

Year or month	All civilian workers	White						Black and other					
		Males			Females			Males			Females		
		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over	Total	16-19 years	20 years and over
1948	3.8	3.5	3.4		3.8			5.9	5.8		6.1		
1949	5.9	5.6	5.6		5.7			8.9	9.6		7.9		
1950	5.3	4.9	4.7		5.3			9.0	9.4		8.4		
1951	3.3	3.1	2.6		4.2			5.3	4.9		6.1		
1952	3.0	2.8	2.5		3.3			5.4	5.2		5.7		
1953	2.9	2.7	2.5		3.1			4.5	4.8		4.1		
1954	5.5	5.0	4.8	13.4	4.4	5.5	10.4	9.9	10.3	14.4	9.9	9.2	20.6
1955	4.4	3.9	3.7	11.3	3.3	4.3	9.1	8.7	8.8	13.4	8.4	8.5	19.2
1956	4.1	3.6	3.4	10.5	3.0	4.2	9.7	8.7	8.3	15.0	7.4	8.9	22.8
1957	4.3	3.8	3.6	11.5	3.2	4.3	9.5	8.8	7.9	18.4	7.6	7.3	20.2
1958	6.8	6.1	6.1	15.7	5.5	6.2	12.7	5.6	12.6	13.7	26.8	12.7	10.8
1959	5.5	4.8	4.6	14.0	4.1	5.3	12.0	4.7	10.7	11.5	25.2	10.5	9.4
1960	5.5	5.0	4.8	14.0	4.2	5.3	12.7	4.6	10.2	10.7	24.0	9.6	9.4
1961	6.7	6.0	5.7	15.7	5.1	6.5	14.8	5.7	12.4	12.8	26.8	11.7	11.9
1962	5.5	4.9	4.6	13.7	4.0	5.5	12.8	4.7	10.9	10.9	22.0	10.0	11.1
1963	5.7	5.0	4.7	15.9	3.9	5.8	15.1	4.8	10.8	10.5	27.3	9.2	11.2
1964	5.2	4.6	4.1	14.7	3.4	5.5	14.9	4.6	9.6	8.9	24.3	7.7	10.7
1965	4.5	4.1	3.6	12.9	2.9	5.0	14.0	4.0	8.1	7.4	23.3	6.0	9.2
1966	3.8	3.4	2.8	10.5	2.2	4.3	12.1	3.3	7.3	6.3	21.3	4.9	8.7
1967	3.8	3.4	2.7	10.7	2.1	4.6	11.5	3.8	7.4	6.0	23.9	4.3	9.1
1968	3.6	3.2	2.6	10.1	2.0	4.3	12.1	3.4	6.7	5.6	22.1	3.9	8.3
1969	3.5	3.1	2.5	10.0	1.9	4.2	11.5	3.4	6.4	5.3	21.4	3.7	7.8
1970	4.9	4.5	4.0	13.7	3.2	5.4	13.4	4.4	8.2	7.3	25.0	5.6	9.3
1971	5.9	5.4	4.9	15.1	4.0	6.3	15.1	5.3	9.9	9.1	28.8	7.3	10.9
1972	5.6	5.1	4.5	14.2	3.6	5.9	14.2	4.9	10.0	8.9	29.7	6.9	11.4
1973	4.9	4.3	3.8	12.3	3.0	5.3	13.0	4.3	9.0	7.7	26.9	5.8	10.6
1974	5.6	5.0	4.4	13.5	3.5	6.1	14.5	5.1	9.9	9.2	31.5	6.9	10.8
1975	8.5	7.8	7.2	18.3	6.2	8.6	17.4	7.5	13.8	13.6	35.2	11.6	13.9
1976	7.7	7.0	6.4	17.3	5.4	7.9	16.4	6.8	13.1	12.7	35.1	10.6	13.6
1977	7.1	6.2	5.5	15.0	4.7	7.3	15.9	6.2	13.1	12.3	36.6	10.0	13.9
1978	6.1	5.2	4.6	13.5	3.7	6.2	14.4	5.2	11.9	11.0	34.0	8.7	13.1
1979	5.8	5.1	4.5	13.9	3.6	5.9	14.0	5.0	11.3	10.4	31.3	8.5	12.3
1980	7.1	6.3	6.1	16.2	5.3	6.5	14.8	5.6	13.1	13.2	34.4	11.3	13.1
1981	7.6	6.7	6.5	17.9	5.6	6.9	16.6	5.9	14.2	14.1	37.5	12.1	14.3
1982	9.7	8.6	8.8	21.7	7.8	8.3	19.0	7.3	17.3	18.2	44.0	16.2	16.4
1983	9.6	8.4	8.8	20.2	7.9	7.9	18.3	6.9	17.8	18.5	45.0	16.5	17.1
1982:													
Jan.	8.6	7.6	7.7	20.8	6.7	7.5	18.4	6.5	15.4	16.2	36.3	14.7	14.5
Feb.	8.9	7.8	7.8	20.5	6.8	7.8	19.4	6.6	16.1	16.7	40.3	14.7	15.6
Mar.	9.0	8.0	8.0	20.2	7.1	7.9	17.8	6.9	16.6	17.5	45.6	15.2	15.7
Apr.	9.4	8.3	8.3	21.8	7.3	8.2	18.9	7.2	16.7	17.2	43.1	15.2	16.2
May	9.4	8.2	8.3	21.0	7.3	8.2	18.6	7.1	17.0	17.5	43.9	15.4	16.5
June	9.5	8.4	8.7	21.7	7.8	8.0	17.6	7.1	16.9	17.9	47.6	15.7	15.8
July	9.9	8.8	9.1	22.5	8.1	8.4	19.1	7.4	17.5	17.8	44.7	15.8	17.0
Aug.	9.9	8.7	9.1	22.1	8.1	8.2	18.7	7.3	17.5	18.2	41.8	16.2	16.8
Sept.	10.2	9.0	9.4	22.2	8.5	8.4	19.1	7.4	18.1	19.5	44.5	17.5	16.6
Oct.	10.4	9.2	9.7	22.6	8.7	8.7	19.9	7.6	18.6	20.1	44.3	18.1	16.9
Nov.	10.7	9.6	10.0	22.7	9.0	9.0	19.8	7.9	18.7	19.8	48.6	17.6	17.5
Dec.	10.7	9.6	10.0	22.8	9.1	9.2	20.4	8.1	18.9	20.3	47.0	18.2	17.3
1983:													
Jan.	10.4	9.1	9.4	21.5	8.5	8.8	19.0	7.9	18.9	19.9	44.7	18.1	17.7
Feb.	10.4	9.2	9.6	21.4	8.8	8.6	18.7	7.7	18.2	19.2	43.2	17.5	17.1
Mar.	10.3	9.1	9.5	22.6	8.5	8.5	19.6	7.5	18.6	19.3	43.9	17.5	17.8
Apr.	10.2	8.9	9.4	21.4	8.5	8.2	19.1	7.3	18.7	19.8	46.5	17.9	17.5
May	10.1	8.8	9.2	20.4	8.4	8.2	19.4	7.2	18.5	19.8	49.1	17.6	17.2
June	10.0	8.6	8.8	20.4	7.9	8.4	19.7	7.4	18.6	19.6	47.4	17.2	17.6
July	9.5	8.2	8.6	20.3	7.7	7.7	18.4	6.8	17.9	19.1	46.0	16.9	16.6
Aug.	9.5	8.2	8.6	20.7	7.7	7.7	18.2	6.7	17.9	18.7	48.5	16.3	17.1
Sept.	9.2	8.0	8.4	18.9	7.7	7.5	17.4	6.6	17.3	17.7	48.2	15.4	16.7
Oct.	8.8	7.7	8.1	19.8	7.3	7.1	16.9	6.3	16.7	16.8	41.7	14.9	16.6
Nov.	8.4	7.3	7.6	17.6	6.9	6.9	16.6	6.0	16.1	16.1	39.0	14.3	16.1
Dec.	8.2	7.1	7.4	17.5	6.7	6.7	16.5	5.9	16.3	15.9	41.1	14.0	16.7

¹ 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, 1950-83

Year or month	All programs			State programs					
	Covered employment ¹	Insured unemployment (weekly average) ^{2,3}	Total benefits paid (millions of dollars) ^{2,4}	Insured unemployment	Initial claims	Exhaustions ⁵	Insured unemployment as percent of covered employment	Benefits paid	
								Total (millions of dollars) ⁴	Average weekly check (dollars) ⁶
	Thousands			Weekly average; thousands					
1950.....	34,308	1,605	1,467.6	1,513	236	36	4.6	1,373.1	20.76
1951.....	36,334	1,000	862.9	969	208	16	2.8	840.4	21.09
1952.....	37,006	1,069	1,043.5	1,044	215	18	2.9	998.2	22.79
1953.....	38,072	1,067	1,050.6	990	218	15	2.8	962.2	23.58
1954.....	36,622	2,051	2,291.6	1,870	304	34	5.2	2,026.9	24.93
1955.....	40,018	1,399	1,560.2	1,265	226	25	3.5	1,350.3	25.04
1956.....	42,751	1,323	1,540.6	1,215	227	20	3.2	1,380.7	27.02
1957.....	43,436	1,571	1,913.0	1,446	270	23	3.6	1,733.9	28.17
1958.....	44,411	2,773	4,290.6	2,510	369	50	6.4	3,512.7	30.58
1959.....	45,728	1,860	2,854.3	1,684	277	33	4.4	2,279.0	30.41
1960.....	46,334	2,071	3,022.8	1,908	331	31	4.8	2,726.7	32.87
1961.....	46,266	2,994	4,358.1	2,290	350	46	5.6	3,422.7	33.80
1962.....	47,776	1,946	3,145.1	1,783	302	32	4.4	2,675.4	34.56
1963.....	48,434	1,973	3,025.9	1,806	298	30	4.3	2,774.7	35.27
1964.....	49,637	1,753	2,749.2	1,605	268	26	3.8	2,522.1	35.92
1965.....	51,580	1,450	2,360.4	1,328	232	21	3.0	2,166.0	37.19
1966.....	54,739	1,129	1,890.9	1,061	203	15	2.3	1,771.3	39.75
1967.....	56,342	1,270	2,221.5	1,205	226	17	2.5	2,092.3	41.25
1968.....	57,977	1,187	2,191.0	1,111	201	16	2.2	2,031.6	43.43
1969.....	59,999	1,177	2,298.6	1,101	200	16	2.1	2,127.9	46.17
1970.....	59,526	2,070	4,209.3	1,805	296	25	3.4	3,848.5	50.34
1971.....	59,375	2,608	6,154.0	2,150	295	39	4.1	4,957.0	54.02
1972.....	66,458	2,192	5,491.1	1,848	261	35	3.5	4,471.0	56.76
1973.....	69,897	1,793	4,517.3	1,632	247	29	2.7	4,007.6	59.00
1974.....	72,451	2,558	6,933.9	2,262	363	37	3.5	5,974.9	64.25
1975.....	71,037	4,937	16,802.4	3,986	478	81	6.0	11,754.7	70.23
1976.....	73,459	3,846	12,344.8	2,991	386	63	4.6	8,974.5	75.16
1977.....	76,419	3,309	10,998.9	2,655	375	55	3.9	8,357.2	78.79
1978.....	88,804	2,645	9,006.9	2,359	346	39	3.3	7,717.2	83.67
1979.....	92,062	2,592	9,401.3	2,434	388	39	2.9	8,612.9	89.67
1980.....	92,659	3,837	16,175.4	3,350	488	59	3.9	13,761.1	98.95
1981.....	93,300	3,410	15,287.1	3,047	460	57	3.5	13,262.1	106.70
1982.....	*91,628	4,590	23,774.8	4,061	583	80	4.6	20,650.0	119.39
				**	**		**		
1982:									
Jan.....	4,681	1,836.0	3,577	563	61	4.1	1,765.1	114.95	
Feb.....	4,723	1,904.5	3,582	529	67	4.1	1,783.4	117.05	
Mar.....	4,892	2,298.1	3,775	574	74	4.3	2,075.5	117.44	
Apr.....	4,760	2,141.1	3,982	573	82	4.6	1,849.9	117.90	
May.....	4,387	1,871.9	3,972	579	80	4.5	1,573.4	118.33	
June.....	4,328	2,003.9	4,011	560	86	4.6	1,736.3	118.32	
July.....	4,495	1,966.7	3,988	539	82	4.6	1,682.1	117.67	
Aug.....	4,398	2,034.1	4,136	617	83	4.7	1,747.3	119.22	
Sept.....	4,282	2,004.4	4,379	654	80	5.0	1,711.3	121.03	
Oct.....	4,391	1,928.1	4,615	659	83	5.3	1,647.3	122.90	
Nov.....	4,635	2,065.3	4,635	618	87	5.3	1,820.0	123.46	
Dec.....	5,074	2,410.0	4,428	546	92	5.1	2,138.0	123.55	
1983:									
Jan.....	5,459	2,463.3	3,941	509	100	4.5	2,205.6	124.29	
Feb.....	5,437	2,349.7	3,907	485	99	4.5	2,052.4	124.47	
Mar.....	5,134	2,780.2	3,894	493	102	4.5	2,370.7	125.56	
Apr.....	4,642	2,182.9	3,832	484	102	4.4	1,816.5	124.85	
May.....	3,947	1,908.5	3,586	458	90	4.1	1,587.9	124.49	
June.....	3,481	1,798.0	3,329	411	87	3.8	1,537.3	123.44	
July.....	3,274	1,412.3	3,110	384	80	3.6	1,298.2	121.59	
Aug.....	2,917	1,425.4	2,991	414	73	3.5	1,337.2	121.42	
Sept.....	2,580	1,167.4	2,896	393	60	3.4	1,104.4	121.36	
Oct.....	2,478	1,066.5	2,848	403	59	3.3	1,010.8	123.06	
Nov.....	2,602	1,147.8	2,799	405	57	3.3	1,094.2	109.33	
Dec.....			2,729	397		3.2			

**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, UCFE, RR, UCX, UCV (unemployment compensation for veterans, October 1952-January 1960), and SRA (Servicemen's Readjustment Act, September 1944-September 1951) programs. Also includes Federal and State extended benefit programs. Does not include FSB (Federal supplemental benefits), SUA (special unemployment assistance), and Federal Supplemental Compensation programs.³ Covered workers who have completed at least 1 week of unemployment.⁴ Annual data are net amounts and monthly data are gross amounts.⁵ Individuals receiving final payments in benefit year.⁶ For total unemployment only.⁷ Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning July 1963.⁸ Latest data available for all programs combined. Workers covered by State programs account for about 97 percent of wage and salary earners.

Source: Department of Labor, Employment and Training Administration.

TABLE B-37.—*Wage and salary workers in nonagricultural establishments, 1929-83*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total wage and salary workers	Manufacturing			Mining	Construction	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government	
		Total	Durable goods	Non-durable goods							Federal	State and local
1929	31,324	10,702			1,087	1,512	3,916	6,123	1,494	3,425	533	2,532
1933	23,699	7,397			744	824	2,672	4,755	1,280	2,861	565	2,601
1939	30,603	10,278	4,715	5,564	854	1,165	2,936	6,426	1,447	3,502	905	3,090
1940	32,361	10,985	5,363	5,622	925	1,311	3,038	6,750	1,485	3,665	996	3,206
1941	36,539	13,192	6,968	6,225	957	1,814	3,274	7,210	1,525	3,905	1,340	3,320
1942	40,106	15,280	8,823	6,458	992	2,198	3,460	7,118	1,509	4,066	2,213	3,270
1943	42,434	17,602	11,084	6,518	925	1,587	3,647	6,982	1,481	4,130	2,905	3,175
1944	41,864	17,328	10,856	6,472	892	1,108	3,829	7,058	1,481	4,145	2,928	3,116
1945	40,374	15,524	9,074	6,450	836	1,147	3,906	7,314	1,481	4,222	2,808	3,137
1946	41,652	14,703	7,742	6,962	862	1,683	4,061	8,376	1,675	4,697	2,254	3,341
1947	43,857	15,545	8,385	7,159	955	2,009	4,166	8,955	1,728	5,025	1,892	3,582
1948	44,866	15,582	8,326	7,256	994	2,198	4,189	9,272	1,800	5,181	1,863	3,787
1949	43,754	14,441	7,469	6,953	930	2,194	4,001	9,264	1,828	5,240	1,908	3,948
1950	45,197	15,241	8,094	7,147	901	2,364	4,034	9,386	1,888	5,357	1,928	4,098
1951	47,819	16,393	9,089	7,304	929	2,637	4,226	9,742	1,956	5,547	2,302	4,087
1952	48,793	16,632	9,349	7,284	898	2,668	4,248	10,004	2,035	5,699	2,420	4,188
1953	50,202	17,549	10,110	7,438	866	2,659	4,290	10,247	2,111	5,835	2,305	4,340
1954	48,990	16,314	9,129	7,185	791	2,646	4,084	10,235	2,200	5,969	2,188	4,563
1955	50,641	16,882	9,541	7,341	792	2,839	4,141	10,535	2,298	6,240	2,187	4,727
1956	52,369	17,243	9,833	7,411	822	3,039	4,244	10,858	2,389	6,497	2,209	5,069
1957	52,853	17,174	9,855	7,321	828	2,962	4,241	10,886	2,438	6,708	2,217	5,399
1958	51,324	15,945	8,829	7,116	751	2,817	3,976	10,750	2,481	6,765	2,191	5,648
1959	53,268	16,675	9,373	7,303	732	3,004	4,011	11,127	2,549	7,087	2,233	5,850
1960	54,189	16,796	9,459	7,337	712	3,226	4,004	11,391	2,629	7,378	2,270	6,083
1961	53,999	16,326	9,070	7,256	672	2,859	3,903	11,337	2,688	7,620	2,279	6,315
1962	55,549	16,853	9,480	7,373	650	2,948	3,906	11,566	2,754	7,982	2,340	6,550
1963	56,653	16,995	9,616	7,380	635	3,010	3,903	11,778	2,830	8,277	2,358	6,868
1964	58,283	17,274	9,816	7,458	634	3,097	3,951	12,160	2,911	8,660	2,348	7,248
1965	60,765	18,062	10,405	7,656	632	3,232	4,036	12,716	2,977	9,036	2,378	7,696
1966	63,901	19,214	11,282	7,930	627	3,317	4,158	13,245	3,058	9,498	2,564	8,220
1967	65,803	19,447	11,439	8,007	613	3,248	4,268	13,606	3,185	10,045	2,719	8,672
1968	67,897	19,781	11,626	8,155	606	3,350	4,318	14,099	3,337	10,567	2,737	9,102
1969	70,384	20,167	11,895	8,272	619	3,575	4,442	14,705	3,512	11,169	2,758	9,437
1970	70,880	19,367	11,208	8,158	623	3,588	4,515	15,040	3,645	11,548	2,731	9,823
1971	71,214	18,623	10,636	7,987	609	3,704	4,476	15,352	3,772	11,797	2,696	10,185
1972	73,675	19,151	11,049	8,102	628	3,889	4,541	15,949	3,908	12,276	2,684	10,649
1973	76,790	20,154	11,891	8,262	642	4,097	4,656	16,607	4,046	12,857	2,663	11,066
1974	78,265	20,077	11,925	8,152	697	4,200	4,725	16,987	4,148	13,441	2,724	11,446
1975	76,945	18,323	10,688	7,635	752	3,525	4,542	17,060	4,165	13,892	2,748	11,937
1976	79,382	18,997	11,777	7,920	779	3,576	4,582	17,755	4,271	14,551	2,733	12,138
1977	82,471	19,682	11,597	8,086	813	3,851	4,713	18,516	4,467	15,303	2,727	12,399
1978	86,697	20,505	12,724	8,231	851	4,229	4,923	19,542	4,764	16,252	2,753	12,919
1979	89,823	21,040	12,760	8,280	958	4,463	5,136	20,192	4,975	17,112	2,773	13,174
1980	90,406	20,285	12,187	8,098	1,027	4,346	5,146	20,310	5,160	17,890	2,866	13,375
1981	91,156	20,170	12,109	8,061	1,139	4,188	5,165	20,547	5,298	18,619	2,772	13,259
1982	89,596	18,853	11,100	7,753	1,143	3,911	5,081	20,401	5,340	19,064	2,739	13,064
1983*	89,986	18,678	10,931	7,747	1,021	3,949	4,943	20,508	5,456	19,685	2,753	12,994
1982: Jan.	90,396	19,529	11,625	7,903	1,216	3,967	5,142	20,426	5,320	19,819	2,741	13,137
Feb.	90,417	19,450	11,561	7,889	1,218	4,001	5,136	20,461	5,322	19,870	2,737	13,121
Mar.	90,207	19,308	11,469	7,839	1,218	3,957	5,123	20,447	5,326	19,857	2,737	13,134
Apr.	90,024	19,160	11,350	7,810	1,204	3,943	5,117	20,427	5,328	19,884	2,733	13,128
May	90,016	19,078	11,289	7,789	1,177	3,971	5,117	20,454	5,331	19,020	2,731	13,137
June	89,775	18,918	11,169	7,749	1,150	3,933	5,099	20,454	5,339	19,046	2,738	13,098
July	89,450	18,802	11,095	7,707	1,125	3,916	5,075	20,438	5,342	19,083	2,737	12,932
Aug.	89,264	18,666	10,961	7,705	1,113	3,893	5,056	20,410	5,344	19,097	2,739	12,946
Sept.	89,235	18,559	10,862	7,693	1,100	3,875	5,054	20,380	5,351	19,136	2,735	13,049
Oct.	88,938	18,358	10,685	7,673	1,082	3,847	5,033	20,344	5,350	19,144	2,742	13,038
Nov.	88,785	18,222	10,577	7,645	1,066	3,843	5,019	20,320	5,356	19,187	2,746	13,026
Dec.	88,665	18,193	10,559	7,634	1,053	3,815	5,008	20,256	5,367	19,215	2,747	13,011
1983: Jan.	88,885	18,244	10,594	7,650	1,037	3,905	4,979	20,355	5,374	19,238	2,748	13,005
Feb.	88,746	18,245	10,608	7,637	1,014	3,790	4,966	20,343	5,384	19,262	2,742	13,000
Mar.	88,814	18,267	10,617	7,650	1,006	3,757	4,963	20,350	5,391	19,356	2,742	12,982
Apr.	89,090	18,376	10,689	7,687	997	3,786	4,968	20,329	5,423	19,478	2,738	12,975
May	89,421	18,493	10,788	7,705	994	3,860	4,993	20,356	5,435	19,546	2,756	12,988
June	89,844	18,582	10,844	7,738	1,003	3,933	4,992	20,494	5,451	19,668	2,742	12,979
July	90,152	18,733	10,961	7,772	1,017	3,974	4,984	20,529	5,465	19,770	2,738	12,942
Aug.	89,748	18,793	11,022	7,771	1,023	4,014	4,941	20,580	5,488	19,935	2,746	12,928
Sept.	90,851	18,871	11,081	7,790	1,026	4,038	5,031	20,612	5,499	19,913	2,778	13,083
Oct.	91,087	19,064	11,235	7,829	1,044	4,060	5,019	20,666	5,503	19,956	2,764	13,011
Nov.	91,413	19,182	11,326	7,856	1,044	4,096	5,027	20,705	5,523	20,051	2,771	13,014
Dec.	91,644	19,271	11,394	7,877	1,053	4,110	5,024	20,732	5,537	20,122	2,771	13,024

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 of industrial disputes, bad weather, etc., even if they are not paid for the time off; and which are based on a sample of the working-age population. For description and details of the various establishment data, see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-38.—Average weekly hours and hourly earnings in selected private nonagricultural industries, 1947-83

(For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted)

Year or month	Average weekly hours				Average gross hourly earnings, current dollars				Adjusted hourly earnings, total private nonagricultural ²			
	Total private non-agricultural ¹	Manufacturing	Construction	Wholesale and retail trade	Total private non-agricultural ¹	Manufacturing	Construction	Wholesale and retail trade	Index, 1977=100		Percent change from a year earlier ⁴	
									Current dollars	1977 dollars ³	Current dollars	1977 dollars
1947.....	40.3	40.4	38.2	40.5	\$1.151	\$1.216	\$1.540	\$0.940	21.6	58.5	.....	.....
1948.....	40.0	40.0	38.1	40.4	1.225	1.327	1.712	1.010	23.4	58.9	8.3	0.7
1949.....	39.4	39.1	37.7	40.5	1.275	1.376	1.792	1.060	24.5	62.3	4.7	5.8
1950.....	39.8	40.5	37.4	40.5	1.335	1.439	1.863	1.100	25.4	64.0	3.7	2.7
1951.....	39.9	40.6	38.1	40.5	1.45	1.56	2.02	1.18	27.3	63.6	7.5	—6
1952.....	39.9	40.7	38.9	40.0	1.52	1.64	2.13	1.23	28.7	65.5	5.1	3.0
1953.....	39.6	40.5	37.9	39.5	1.61	1.74	2.28	1.30	30.3	68.7	5.6	4.9
1954.....	39.1	39.6	37.2	39.5	1.65	1.78	2.38	1.35	31.3	70.5	3.3	2.6
1955.....	39.6	40.7	37.1	39.4	1.71	1.85	2.45	1.40	32.4	73.3	3.5	4.0
1956.....	39.3	40.4	37.5	39.1	1.80	1.95	2.57	1.47	34.0	75.9	4.9	3.5
1957.....	38.8	39.8	37.0	38.7	1.89	2.04	2.71	1.54	35.7	76.9	5.0	1.3
1958.....	38.5	39.2	36.8	38.6	1.95	2.10	2.82	1.60	37.2	78.0	4.2	1.4
1959.....	39.0	40.3	37.0	38.8	2.02	2.19	2.93	1.66	38.5	80.0	3.5	2.6
1960.....	38.6	39.7	36.7	38.6	2.09	2.26	3.07	1.71	39.8	81.4	3.4	1.8
1961.....	38.6	39.8	36.9	38.3	2.14	2.32	3.20	1.76	41.0	83.0	3.0	2.0
1962.....	38.7	40.4	37.0	38.2	2.22	2.39	3.31	1.83	42.4	85.0	3.4	2.4
1963.....	38.8	40.5	37.3	38.1	2.28	2.45	3.41	1.89	43.6	86.3	2.8	1.5
1964.....	38.7	40.7	37.2	37.9	2.36	2.53	3.55	1.97	44.8	87.5	2.8	1.4
1965.....	38.8	41.2	37.4	37.7	2.46	2.61	3.70	2.04	46.4	89.0	3.6	1.7
1966.....	38.6	41.4	37.6	37.1	2.56	2.71	3.89	2.14	48.4	90.3	4.3	1.5
1967.....	38.0	40.6	37.7	36.6	2.68	2.82	4.11	2.25	50.8	92.2	5.0	2.1
1968.....	37.8	40.7	37.3	36.1	2.85	3.01	4.41	2.41	53.9	94.0	6.1	2.0
1969.....	37.7	40.6	37.9	35.7	3.04	3.19	4.79	2.56	57.5	95.0	6.7	1.1
1970.....	37.1	39.8	37.3	35.3	3.23	3.35	5.24	2.72	61.3	95.7	6.6	.7
1971.....	36.9	39.9	37.2	35.1	3.45	3.57	5.69	2.88	65.7	98.3	7.2	2.7
1972.....	37.0	40.5	36.5	34.9	3.70	3.82	6.06	3.05	69.8	101.2	6.2	3.0
1973.....	36.9	40.7	36.8	34.6	3.94	4.09	6.41	3.23	74.1	101.1	6.2	—1
1974.....	36.5	40.0	36.6	34.2	4.24	4.42	6.81	3.48	80.0	98.3	8.0	—2.8
1975.....	36.1	39.5	36.4	33.9	4.53	4.83	7.31	3.73	86.7	97.6	8.4	—7
1976.....	36.1	40.1	36.8	33.7	4.86	5.22	7.71	3.97	92.9	99.0	7.2	1.4
1977.....	36.0	40.3	36.5	33.3	5.25	5.68	8.10	4.28	100.0	100.0	7.6	1.0
1978.....	35.8	40.4	36.8	32.9	5.69	6.17	8.66	4.67	108.2	100.5	8.2	.5
1979.....	35.7	40.2	37.0	32.6	6.16	6.70	9.27	5.06	116.8	97.4	7.9	—3.1
1980.....	35.3	39.7	37.0	32.2	6.66	7.27	9.94	5.48	127.3	93.5	9.0	—4.0
1981.....	35.2	39.8	36.9	32.2	7.25	7.99	10.82	5.92	138.9	92.6	9.1	—1.0
1982.....	34.8	38.9	36.7	31.9	7.67	8.50	11.62	6.21	148.3	93.3	6.8	.8
1983 ²	35.0	40.1	37.2	31.9	8.01	8.84	11.91	6.49	155.1	94.7	4.6	1.5
1982:												
Jan.....	34.3	37.5	35.1	31.7	7.53	8.39	11.59	6.09	144.9	93.1	8.3	.1
Feb.....	35.1	39.5	37.0	32.0	7.54	8.35	11.40	6.09	145.1	93.1	7.5	.1
Mar.....	34.9	39.0	37.1	31.9	7.56	8.38	11.46	6.12	145.5	93.5	7.2	.6
Apr.....	34.9	39.0	36.8	31.9	7.59	8.43	11.48	6.14	146.4	93.8	7.1	.7
May.....	35.0	39.1	37.3	32.0	7.65	8.47	11.57	6.18	147.5	93.5	7.2	.7
June.....	34.9	39.1	36.8	31.9	7.67	8.51	11.57	6.20	148.0	92.8	7.0	.1
July.....	34.9	39.1	37.1	32.0	7.70	8.54	11.63	6.23	148.8	92.8	7.0	.7
Aug.....	34.8	39.0	36.8	32.0	7.73	8.56	11.65	6.24	149.6	93.0	6.6	.7
Sept.....	34.8	38.8	36.5	31.9	7.73	8.57	11.66	6.24	150.0	93.1	6.1	1.2
Oct.....	34.7	38.9	36.3	31.9	7.76	8.58	11.77	6.29	150.7	93.1	6.2	1.2
Nov.....	34.7	39.0	36.4	31.8	7.78	8.61	11.71	6.32	151.1	93.4	5.7	1.1
Dec.....	34.8	39.0	36.8	32.1	7.82	8.63	11.88	6.33	151.9	94.1	6.0	2.0
1983:												
Jan.....	35.1	39.7	38.9	31.9	7.88	8.68	11.86	6.35	152.7	94.7	5.4	1.8
Feb.....	34.5	39.2	36.6	31.4	7.91	8.76	12.00	6.39	153.4	95.3	5.7	2.4
Mar.....	34.8	39.5	36.5	31.7	7.91	8.75	12.00	6.40	153.4	95.0	5.4	1.6
Apr.....	34.9	40.1	36.9	31.7	7.95	8.78	12.02	6.43	154.0	94.8	5.2	1.2
May.....	35.1	40.0	37.2	31.9	7.97	8.79	11.86	6.45	154.6	94.7	4.8	1.4
June.....	35.1	40.1	37.2	32.0	8.00	8.82	11.85	6.49	154.8	94.8	4.6	2.1
July.....	35.0	40.2	37.3	31.9	8.03	8.85	11.82	6.51	155.2	94.7	4.3	2.1
Aug.....	35.0	40.3	37.2	31.8	7.98	8.84	11.83	6.52	155.0	94.0	3.6	1.2
Sept.....	35.2	40.8	37.5	31.8	8.08	8.87	11.96	6.54	155.9	94.2	3.9	1.2
Oct.....	35.3	40.6	36.5	32.1	8.13	8.94	11.92	6.59	156.8	94.4	4.1	1.4
Nov.....	35.2	40.6	36.5	32.0	8.13	8.99	11.88	6.59	156.8	94.3	3.8	1.0
Dec.....	35.2	40.5	37.0	32.1	8.17	9.00	11.94	6.61	157.6	94.6	3.7	.5

¹ Also includes other private industry groups shown in Table B-37.

² Adjusted for overtime (in manufacturing only) and for interindustry employment shifts.

³ Current-dollar earnings index divided by the consumer price index for urban wage earners and clerical workers on a 1977=100 base.

⁴ Monthly data are computed from indexes to two decimal places and are based on data not seasonally adjusted.

Note.—See Note, Table B-37.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-39.—Average weekly earnings in selected private nonagricultural industries, 1947-83

[For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

Year or month	Average gross weekly earnings					Percent change from a year earlier, total private nonagricultural ³	
	Total private nonagricultural ¹		Manufacturing (current dollars)	Construction (current dollars)	Wholesale and retail trade (current dollars)	Current dollars	1977 dollars
	Current dollars	1977 dollars ²					
1947	\$45.58	\$123.52	\$49.13	\$58.83	\$38.07		
1948	49.00	123.43	53.08	65.23	40.80	7.5	-0.1
1949	50.24	127.84	53.80	67.56	42.93	2.5	3.6
1950	53.13	133.83	58.28	69.68	44.55	5.8	4.7
1951	57.86	134.87	63.34	76.96	47.79	8.9	.8
1952	60.65	138.47	66.75	82.86	49.20	4.8	2.7
1953	63.76	144.58	70.47	86.41	51.35	5.1	4.4
1954	64.52	145.32	70.49	88.54	53.33	1.2	.5
1955	67.72	153.21	75.30	90.90	55.16	5.0	5.4
1956	70.74	157.90	78.78	96.38	57.48	4.5	3.1
1957	73.33	158.04	81.19	100.27	59.60	3.7	.1
1958	75.08	157.40	82.32	103.78	61.76	2.4	-4
1959	78.78	163.78	88.26	108.41	64.41	4.9	4.1
1960	80.67	164.97	89.72	112.67	66.01	2.4	.7
1961	82.60	167.21	92.34	118.08	67.41	2.4	1.4
1962	85.91	172.16	96.56	122.47	69.91	4.0	3.0
1963	88.46	175.17	99.23	127.19	72.01	3.0	1.7
1964	91.33	178.38	102.97	132.06	74.66	3.2	1.8
1965	95.45	183.21	107.53	138.38	76.91	4.5	2.7
1966	98.82	184.37	112.19	146.26	79.39	3.5	.6
1967	101.84	184.83	114.49	154.95	82.35	3.1	.2
1968	107.73	187.68	122.51	164.49	87.00	5.8	1.5
1969	114.61	189.44	129.51	181.54	91.39	6.4	.9
1970	119.83	186.94	133.33	195.45	96.02	4.6	-1.3
1971	127.31	190.58	142.44	211.67	101.09	6.2	1.9
1972	136.90	198.41	154.71	221.19	106.45	7.5	4.1
1973	145.39	198.35	166.46	235.89	111.76	6.2	-0
1974	154.76	190.12	176.80	249.25	119.02	6.4	-4.1
1975	163.53	184.16	190.79	266.08	126.45	5.7	-3.1
1976	175.45	186.85	209.32	283.73	133.79	7.3	1.5
1977	189.00	189.00	228.90	295.65	142.52	7.7	1.2
1978	203.70	189.31	249.27	318.69	153.64	7.8	.2
1979	219.91	183.41	269.34	342.99	164.96	8.0	-3.1
1980	235.10	172.74	288.62	367.78	176.46	6.9	-5.8
1981	255.20	170.13	318.00	399.26	190.62	8.5	-1.5
1982	266.92	167.87	330.65	426.45	198.10	4.6	-1.3
1983 ^P	280.35	171.15	354.48	443.05	207.03	5.0	2.0
1982:							
Jan	258.28	165.88	314.63	406.81	193.05	3.7	-4.1
Feb	264.65	169.87	329.83	421.80	194.88	6.3	-1.0
Mar	263.84	169.56	326.82	425.17	195.23	5.1	-1.3
Apr	264.89	169.69	328.77	422.46	195.87	4.8	-1.4
May	267.75	169.78	331.18	431.56	197.76	5.3	-1.1
June	267.68	167.93	332.74	425.78	197.78	4.8	-2.0
July	268.73	167.54	333.91	431.47	199.36	4.9	-1.3
Aug	269.00	167.18	333.84	428.72	199.68	4.3	-1.4
Sept	269.00	166.98	332.52	425.59	199.06	4.0	-9
Oct	269.27	166.32	333.76	427.25	200.65	3.4	-1.6
Nov	269.97	166.96	335.79	426.24	200.98	3.4	-1.1
Dec	272.14	168.61	336.57	437.18	203.19	4.4	.5
1983:							
Jan	276.59	171.48	344.60	461.35	202.57	6.8	3.1
Feb	272.90	169.61	343.39	439.20	200.65	3.1	-2
Mar	275.27	170.45	345.63	438.00	202.88	4.3	.6
Apr	277.46	170.85	352.08	443.54	203.83	4.7	.7
May	279.75	171.42	351.60	441.19	205.76	4.6	1.2
June	280.80	171.85	353.68	440.82	207.68	4.9	2.4
July	281.05	171.37	355.77	440.89	207.67	4.8	2.5
Aug	279.30	169.48	356.25	440.08	207.34	3.7	1.3
Sept	284.42	171.85	361.90	448.50	207.97	6.0	3.2
Oct	286.99	172.78	362.96	435.08	211.54	6.4	3.7
Nov ^P	286.18	171.98	364.99	433.62	210.88	5.6	2.6
Dec ^P	287.58	172.62	364.50	441.78	212.18	5.8	2.5

¹ Also includes other private industry groups shown in Table B-37.² Earnings in current dollars divided by the consumer price index on a 1977=100 base.³ 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, 1947-83*

[1977=100; quarterly data seasonally adjusted]

Year or quarter	Output per hour of all persons		Output ¹		Hours of all persons ²		Compensation per hour ³		Real compensation per hour ⁴		Unit labor cost		Implicit price deflator ⁵	
	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
1947	43.7	49.9	35.0	34.0	80.2	68.1	17.0	18.5	46.1	50.1	38.9	37.0	38.1	36.6
1948	46.0	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	78.1	66.6	18.7	20.6	47.6	52.5	40.1	38.9	40.3	39.4
1950	50.4	56.3	39.8	38.6	78.9	68.7	20.0	21.8	50.5	55.0	39.8	38.8	41.0	40.1
1951	51.8	57.2	42.1	41.1	81.3	71.9	22.0	23.8	51.3	55.4	42.5	41.5	44.0	42.8
1952	53.5	58.6	43.5	42.5	81.4	72.6	23.4	25.1	53.4	57.2	43.8	42.8	44.5	43.5
1953	55.2	59.5	45.4	44.3	82.2	74.5	24.9	26.5	56.4	59.9	45.1	44.4	44.9	44.4
1954	56.1	60.4	44.6	43.4	79.5	71.9	25.7	27.3	58.0	61.6	45.9	45.2	45.3	45.0
1955	58.3	62.7	48.1	47.0	82.5	74.9	26.4	28.3	59.6	64.0	45.2	45.1	46.0	46.0
1956	58.9	62.9	49.3	48.3	83.7	76.8	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	76.4	29.9	31.7	64.4	68.2	49.5	49.5	49.2	49.3
1958	62.3	65.5	49.0	48.0	78.8	73.2	31.2	32.9	65.5	68.9	50.2	50.2	49.8	49.7
1959	64.2	67.7	52.6	51.8	81.9	76.5	32.6	34.2	67.7	71.1	50.7	50.5	50.8	50.9
1960	65.2	68.3	53.5	52.5	82.0	77.0	33.9	35.7	69.5	73.0	52.1	52.3	51.6	51.6
1961	67.3	70.3	54.4	53.5	80.8	76.1	35.2	36.8	71.3	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	73.7	76.7	52.7	52.6	52.6	52.7
1963	72.5	75.1	59.9	59.1	82.6	78.7	38.2	39.6	75.5	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	82.2	53.3	53.2	54.7	54.8
1966	80.7	82.5	71.5	71.2	88.6	86.3	44.6	45.4	83.3	84.7	55.3	55.0	56.4	56.3
1967	82.5	84.0	73.1	72.7	88.6	86.5	47.0	47.9	85.3	86.9	56.9	57.0	57.9	58.1
1968	85.3	86.8	76.8	76.6	90.1	88.2	50.7	51.5	88.3	89.6	59.4	59.3	60.3	60.4
1969	85.5	86.5	79.0	78.8	92.5	91.1	54.2	54.8	89.6	90.6	63.4	63.4	63.2	63.3
1970	86.2	86.8	78.4	78.0	91.0	89.8	58.2	58.7	90.8	91.5	67.5	67.6	66.0	66.3
1971	89.2	89.7	80.7	80.3	90.5	89.5	62.0	62.5	92.8	93.5	69.5	69.7	69.0	69.3
1972	92.4	93.0	86.1	85.8	93.2	92.3	66.1	66.7	95.7	96.6	71.5	71.7	71.3	71.3
1973	94.7	95.3	91.7	91.7	96.8	96.2	71.3	71.7	97.3	97.8	75.3	75.3	75.3	74.0
1974	92.5	92.9	89.9	89.8	97.3	96.7	78.0	78.5	95.9	96.4	84.4	84.5	82.4	81.6
1975	94.5	94.7	88.2	87.8	93.3	92.7	85.5	86.0	96.3	96.8	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	100.6	100.6	105.5	105.7	104.9	105.0	108.6	108.6	100.9	100.9	108.0	108.0	107.5	107.1
1979	99.4	99.1	107.8	108.0	108.5	109.0	118.7	118.4	99.1	98.9	119.5	119.5	117.2	116.5
1980	98.9	98.4	106.5	106.5	107.6	108.2	131.2	130.7	96.5	96.1	132.7	132.8	128.1	128.1
1981	101.3	100.3	109.8	109.3	108.4	109.0	143.9	143.5	95.9	95.6	142.1	143.0	140.1	140.4
1982	101.2	100.2	106.7	106.3	105.4	106.0	155.1	154.7	97.4	97.1	153.3	154.4	147.7	148.6
1983 P	103.8	103.4	111.0	110.9	106.9	107.3	163.1	163.5	99.2	99.4	157.1	158.1	153.2	154.1
1981:														
I	100.5	100.1	109.2	109.2	108.6	109.1	139.7	139.3	96.3	96.0	139.0	139.2	136.3	136.2
II	101.1	100.1	109.8	109.4	108.6	109.2	142.2	141.8	96.1	95.8	140.7	141.6	138.2	138.4
III	102.3	101.1	111.2	110.5	108.7	109.4	145.5	145.1	95.6	95.3	142.3	143.5	141.5	141.8
IV	101.2	99.9	108.9	108.2	107.7	108.2	148.2	147.7	95.6	95.4	146.4	147.8	144.3	145.0
1982:														
I	101.1	100.0	107.2	106.5	106.0	106.5	151.6	151.3	97.1	96.9	149.9	151.3	145.5	146.4
II	100.7	99.9	106.9	106.7	106.2	106.8	153.9	153.5	97.4	97.1	152.9	153.6	147.5	148.3
III	101.1	100.4	106.6	106.5	105.4	106.0	156.5	156.1	97.1	96.9	154.7	155.4	148.5	149.1
IV	101.9	100.8	106.0	105.4	104.0	104.6	158.7	158.3	98.0	97.8	155.6	157.1	149.4	149.5
1983:														
I	102.5	101.7	107.1	106.7	104.5	104.9	160.7	161.0	99.4	99.5	156.9	158.3	151.5	152.4
II	103.9	103.5	110.4	110.2	106.2	106.5	162.1	162.7	99.2	99.6	156.0	157.2	152.5	153.4
III	104.2	104.0	112.4	112.5	107.9	108.2	163.6	164.2	98.9	99.3	156.9	157.8	153.8	154.7
IV P	104.8	104.3	113.9	114.2	108.7	109.5	166.4	166.0	99.5	99.3	158.8	159.2	155.2	155.9

¹ 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, 1948-83*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Output per hour of all persons		Output ¹		Hours of all persons ²		Compensation per hour ³		Real compensation per hour ⁴		Unit labor cost		Implicit price deflator ⁵	
	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.....	5.3	4.3	6.1	6.0	0.7	1.6	8.5	8.6	0.7	0.8	3.0	4.1	7.0	6.8
1949.....	1.5	2.0	-1.9	-1.9	-3.3	-3.8	1.6	2.9	2.6	3.9	.1	.9	-1.0	.9
1950.....	7.9	6.0	9.1	9.4	1.1	3.1	7.1	5.8	6.0	4.8	-8	-2	1.6	1.7
1951.....	2.8	1.7	5.8	6.5	2.9	4.6	9.8	8.8	1.7	.7	6.9	6.9	7.4	6.6
1952.....	3.2	2.3	3.3	3.4	.1	1.0	6.4	5.5	4.1	3.2	3.0	3.1	1.1	1.8
1953.....	3.2	1.7	4.3	4.2	1.0	2.5	6.4	5.6	5.7	4.8	3.1	3.9	.9	2.0
1954.....	1.6	1.4	-1.8	-2.0	-3.3	-3.4	3.2	3.2	2.8	2.7	1.6	1.7	1.0	1.4
1955.....	4.0	3.9	7.9	8.2	3.8	4.1	2.5	3.6	2.8	3.9	-1.4	-3	1.6	2.2
1956.....	1.0	.3	2.6	2.8	1.5	2.5	6.5	6.0	4.9	4.4	5.5	5.7	3.3	3.5
1957.....	2.5	1.7	1.0	1.2	-1.5	-.5	6.5	5.7	2.9	2.2	3.9	3.9	3.5	3.6
1958.....	3.1	2.4	-1.6	-1.9	-4.5	-4.2	4.4	3.8	1.6	1.0	1.3	1.4	1.3	.9
1959.....	3.2	3.4	7.3	7.9	3.9	4.4	4.3	4.0	3.5	3.2	1.0	.6	2.0	2.3
1960.....	1.5	.8	1.6	1.5	.2	.6	4.2	4.3	2.6	2.7	2.7	3.5	1.4	1.5
1961.....	3.3	2.9	1.7	1.8	-1.5	-1.1	3.8	3.2	2.7	2.1	.5	.3	.6	.6
1962.....	3.8	3.6	5.5	5.8	1.6	2.2	4.6	4.0	3.4	2.8	.7	.4	1.5	1.5
1963.....	3.7	3.2	4.3	4.4	.6	1.1	3.7	3.5	2.5	2.2	.0	.2	1.1	1.2
1964.....	4.3	3.9	6.0	6.4	1.6	2.4	5.2	4.5	3.8	3.2	.8	.6	1.0	1.2
1965.....	3.5	3.1	6.8	6.9	3.2	3.7	3.9	3.4	2.2	1.7	.3	.3	1.9	1.6
1966.....	3.1	2.5	5.5	5.9	2.3	3.4	7.0	6.0	4.0	3.0	3.8	3.5	3.0	2.8
1967.....	2.3	1.9	2.2	2.1	.0	.3	5.3	5.5	2.4	2.6	3.0	3.5	2.7	3.2
1968.....	3.3	3.3	5.1	5.3	1.7	2.0	7.8	7.5	3.5	3.2	4.4	4.1	4.0	4.0
1969.....	.2	-.3	2.9	2.9	2.6	3.2	7.0	6.5	1.5	1.1	6.7	6.8	4.9	4.7
1970.....	.8	.3	-.8	-1.0	-1.6	-1.3	7.3	7.0	1.3	1.0	6.4	6.6	4.5	4.8
1971.....	3.6	3.3	3.0	2.9	-.5	-.4	6.6	6.6	2.2	2.2	2.9	3.1	4.4	4.5
1972.....	3.5	3.7	6.6	6.9	3.0	3.1	6.5	6.7	3.1	3.3	2.9	2.8	3.4	3.0
1973.....	2.6	2.4	6.6	6.8	3.9	4.3	8.0	7.6	1.6	1.3	5.3	5.0	5.5	3.8
1974.....	-2.4	-2.5	-2.0	-2.0	.4	.5	9.4	9.4	-1.4	-1.4	12.1	12.2	9.5	10.2
1975.....	2.2	2.0	-2.0	-2.2	-4.1	-4.1	9.6	9.6	.5	.4	7.3	7.5	9.8	10.3
1976.....	3.3	3.2	6.4	6.7	3.0	3.4	8.6	8.1	2.6	2.2	5.1	4.8	4.7	5.1
1977.....	2.4	2.2	6.6	6.7	4.1	4.4	7.7	7.5	1.2	1.0	5.1	5.2	5.6	5.7
1978.....	.6	.6	5.5	5.7	4.9	5.0	8.6	8.6	.9	.9	8.0	8.0	7.5	7.1
1979.....	-1.2	-1.5	2.3	2.2	3.5	3.7	9.4	9.0	-1.7	-2.0	10.7	10.7	9.0	8.8
1980.....	-.5	-.7	-1.3	-1.4	-.8	-.7	10.5	10.4	-2.6	-2.8	11.1	11.1	9.2	10.0
1981.....	2.4	1.9	3.1	2.7	.7	.7	9.7	9.8	-.6	-.6	7.1	7.7	9.4	9.6
1982.....	-.1	-.1	-2.8	-2.8	-2.7	-2.7	7.7	7.8	1.5	1.6	7.9	7.9	5.4	5.8
1983 ^p	2.6	3.1	4.0	4.4	1.4	1.2	5.2	5.6	1.9	2.3	2.5	2.4	3.7	3.7
1981:														
I.....	5.9	5.2	8.3	7.8	2.3	2.4	11.5	11.5	.8	.9	5.3	6.0	11.2	11.6
II.....	2.2	.4	2.3	.8	.1	.5	7.4	7.3	-1.0	-1.1	5.0	6.9	5.6	6.6
III.....	4.7	3.8	5.2	4.3	.5	.5	9.6	9.6	-2.2	-2.1	4.7	5.6	9.9	10.0
IV.....	-4.1	-4.4	-7.8	-8.3	-3.9	-4.0	7.5	7.6	.3	.3	12.2	12.6	8.2	9.5
1982:														
I.....	-.4	.1	-6.3	-6.2	-6.0	-6.2	9.4	10.0	6.3	6.8	9.8	9.9	3.4	3.7
II.....	-1.6	-.4	-1.0	.8	.6	1.2	6.4	5.8	1.1	.5	8.1	6.2	5.5	5.4
III.....	1.7	2.3	-1.1	-.6	-2.7	-2.9	6.7	7.2	-1.0	-.6	5.0	4.7	2.7	2.2
IV.....	3.3	1.3	-2.3	-4.1	-5.4	-5.3	5.7	5.8	3.7	3.7	2.3	4.4	2.6	3.7
1983:														
I.....	2.0	3.7	4.2	4.9	2.1	1.2	5.4	6.8	5.8	7.2	3.3	3.0	5.5	5.3
II.....	5.9	7.1	12.7	13.7	6.5	6.2	3.5	4.3	-.7	-.1	-2.2	-2.6	2.8	2.7
III.....	1.2	2.3	7.8	8.9	6.5	6.4	3.6	3.8	-1.1	-.9	2.3	1.5	3.3	3.3
IV ^p	2.2	1.0	5.3	6.0	3.0	5.0	7.1	4.5	2.2	-2	4.8	3.5	3.7	3.3

¹ 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.

Source: Department of Labor, Bureau of Labor Statistics.

PRODUCTION AND BUSINESS ACTIVITY

TABLE B-42.—Industrial production indexes, major industry divisions, 1929–83

[1967 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Manufacturing			Mining	Utilities
		Total	Durable	Non-durable		
1967 proportion.....	100.00	87.95	51.98	35.97	6.36	5.69
1929.....	21.6	22.8	22.5	23.2	43.1	7.4
1933.....	13.7	14.0	9.1	19.9	30.6	6.7
1939.....	21.7	21.5	17.7	26.1	42.1	10.7
1940.....	25.0	25.4	23.5	27.5	46.8	11.8
1941.....	31.6	32.4	31.4	33.3	49.7	13.3
1942.....	36.3	37.8	39.9	34.6	51.3	14.9
1943.....	44.0	47.0	54.2	37.1	52.5	16.5
1944.....	47.4	50.9	59.9	38.6	56.2	17.5
1945.....	40.7	42.6	45.2	38.5	55.1	17.8
1946.....	35.0	35.3	31.6	39.7	54.2	18.6
1947.....	39.4	39.4	37.7	41.3	61.3	20.1
1948.....	41.1	40.9	39.3	42.7	64.4	22.4
1949.....	38.8	38.7	35.7	42.0	57.1	23.9
1950.....	44.9	45.0	43.5	46.7	63.8	27.2
1951.....	48.7	48.6	48.9	48.3	70.0	31.0
1952.....	50.6	50.6	51.9	49.2	69.4	33.7
1953.....	54.8	55.2	58.7	51.2	71.2	36.5
1954.....	51.9	51.5	51.8	51.6	69.9	39.3
1955.....	58.5	58.2	59.2	57.2	77.9	43.9
1956.....	61.1	60.5	61.1	60.1	82.0	48.2
1957.....	61.9	61.2	61.6	61.1	82.1	51.5
1958.....	57.9	57.0	53.9	61.6	75.3	53.9
1959.....	64.8	64.2	61.9	67.7	78.7	59.3
1960.....	66.2	65.4	62.9	69.3	80.3	63.4
1961.....	66.7	65.6	61.8	71.5	80.8	67.0
1962.....	72.2	71.5	68.6	75.8	83.1	72.0
1963.....	76.5	75.8	73.1	80.0	86.4	77.0
1964.....	81.7	81.0	78.3	85.2	89.9	83.6
1965.....	89.8	89.7	89.0	90.9	93.2	88.7
1966.....	97.8	97.9	98.9	96.7	98.2	95.5
1967.....	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	106.3	106.4	106.5	106.2	104.2	108.4
1969.....	111.1	111.0	110.6	111.5	108.3	117.3
1970.....	107.8	106.4	102.3	112.3	112.2	124.5
1971.....	109.6	108.2	102.4	116.6	109.8	130.5
1972.....	119.7	118.9	113.7	126.5	113.1	139.4
1973.....	129.8	129.8	127.1	133.8	114.7	145.4
1974.....	129.3	129.4	125.7	134.6	115.3	143.7
1975.....	117.8	116.3	109.3	128.4	112.8	146.0
1976.....	130.5	130.3	122.3	141.8	114.2	151.7
1977.....	138.2	138.4	130.0	150.5	118.2	156.5
1978.....	146.1	146.8	139.7	156.9	124.0	161.4
1979.....	152.5	153.6	146.4	164.0	125.5	166.0
1980.....	147.0	146.7	136.7	161.2	132.7	168.3
1981.....	151.0	150.4	140.5	164.8	142.2	169.1
1982.....	138.6	137.6	124.7	156.2	126.1	168.7
1983 ^p	147.7	148.5	134.6	168.5	116.5	172.7
1982:						
Jan.....	140.7	138.5	127.1	155.1	144.5	171.8
Feb.....	142.9	140.9	129.3	157.8	142.4	170.4
Mar.....	141.7	140.1	128.2	157.3	138.1	170.0
Apr.....	140.2	138.7	126.7	156.1	134.1	171.0
May.....	139.2	137.9	126.1	155.0	128.9	170.9
June.....	138.7	137.7	125.5	155.3	123.5	169.4
July.....	138.8	138.1	125.9	155.7	120.1	167.7
Aug.....	138.4	138.0	124.9	156.9	116.9	168.5
Sept.....	137.3	137.1	123.5	156.7	114.7	167.5
Oct.....	135.7	135.0	120.3	156.2	115.9	167.8
Nov.....	134.9	134.0	119.3	155.3	116.8	166.7
Dec.....	135.2	134.5	119.9	155.6	118.4	164.2
1983:						
Jan.....	137.4	136.7	122.5	157.4	121.9	163.1
Feb.....	138.1	138.2	123.9	159.0	115.6	162.0
Mar.....	140.0	140.4	126.3	160.7	112.6	165.8
Apr.....	142.6	143.1	129.1	163.3	111.6	169.3
May.....	144.4	145.1	131.0	165.4	112.8	169.7
June.....	146.4	147.4	133.2	167.8	112.6	169.8
July.....	149.7	150.6	136.8	170.6	115.0	176.0
Aug.....	151.8	152.8	138.8	172.9	116.1	179.3
Sept.....	153.8	155.1	141.6	174.6	117.1	179.3
Oct.....	155.0	156.4	143.0	175.8	118.6	176.9
Nov ^p	156.1	157.2	144.0	176.3	120.9	178.8
Dec ^p	156.9	157.8	145.0	176.3	123.4	183.4

Source: Board of Governors of the Federal Reserve System.

TABLE B-43.—Industrial production indexes, market groupings, 1947-83

[1967 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Final products							Inter-mediate products	Materials ²		
		Total	Consumer goods ¹			Equipment				Total	Durable goods	Non-durable goods
			Total	Auto-motive products	Home goods	Total	Business	De-fense and space				
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	45.3	37.5	30.6	38.0	10.3	41.9	39.5	38.3	.....
1948.....	41.1	40.0	43.7	47.4	39.1	32.2	39.5	12.1	44.3	41.2	39.4	.....
1949.....	38.8	38.8	43.4	47.0	36.2	28.7	34.5	12.7	42.0	37.6	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	.....
1951.....	48.7	47.2	49.1	52.3	43.0	43.3	45.2	36.6	51.3	49.8	50.5	.....
1952.....	50.6	50.7	50.2	47.1	43.0	51.9	51.2	51.4	50.9	50.5	51.6	.....
1953.....	54.8	54.1	53.2	59.5	48.6	56.3	53.3	61.6	54.5	56.1	60.3	.....
1954.....	51.9	51.3	52.9	55.4	44.9	49.3	46.8	54.2	54.3	51.8	52.0	45.9
1955.....	58.5	55.4	59.0	73.6	53.0	50.4	50.8	49.7	61.7	61.3	63.7	52.5
1956.....	61.1	58.6	61.2	60.6	55.7	55.3	58.8	48.5	64.4	62.8	63.9	54.9
1957.....	61.9	60.3	62.6	63.5	54.5	57.5	61.1	50.7	64.4	62.8	63.8	54.7
1958.....	57.9	57.6	62.1	50.5	51.4	51.5	51.5	50.9	63.0	56.5	53.7	54.4
1959.....	64.8	63.2	68.1	63.3	59.0	56.5	57.9	53.7	69.5	65.2	64.0	62.1
1960.....	66.2	65.3	70.7	72.5	59.4	58.1	59.4	55.1	70.0	66.1	64.8	63.2
1961.....	66.7	65.8	72.2	66.1	61.3	57.3	57.7	56.0	71.4	66.2	63.3	65.8
1962.....	72.2	71.4	77.1	80.1	66.5	63.7	62.7	64.9	75.7	72.1	70.4	71.3
1963.....	76.5	75.5	81.3	87.7	71.8	67.5	65.8	69.9	79.9	76.7	75.1	75.6
1964.....	81.7	79.7	85.9	91.9	78.4	71.4	73.7	67.7	85.2	82.9	81.9	82.2
1965.....	89.8	87.6	92.6	113.3	88.9	80.7	84.4	74.9	90.6	92.4	93.8	90.3
1966.....	97.8	95.9	97.3	112.8	97.9	94.0	97.7	88.1	96.2	100.7	103.3	97.5
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	106.3	106.2	105.9	119.4	106.4	106.5	105.5	108.2	106.3	106.5	106.2	108.8
1969.....	111.1	109.6	109.8	118.1	113.2	109.3	112.5	104.0	112.9	112.5	112.1	115.7
1970.....	107.8	105.3	109.0	98.8	110.2	100.1	107.0	88.5	112.9	109.2	103.8	115.4
1971.....	109.6	106.3	114.7	124.4	115.6	94.7	104.1	78.8	116.7	111.3	104.9	120.2
1972.....	119.7	115.7	124.4	141.4	129.5	103.8	118.0	79.9	126.5	122.3	117.7	132.9
1973.....	129.8	124.4	131.5	153.0	142.5	114.5	134.2	81.4	137.2	133.9	134.6	142.2
1974.....	129.3	125.1	128.9	132.8	136.8	120.0	142.4	82.4	135.3	132.4	132.7	142.6
1975.....	117.8	118.2	124.0	125.8	118.8	110.2	128.2	80.0	123.1	115.5	109.1	126.6
1976.....	130.5	127.6	137.1	155.7	134.1	114.6	135.4	79.8	137.2	131.7	128.0	147.8
1977.....	138.2	135.9	145.3	175.6	141.9	123.0	147.8	81.3	145.1	138.6	136.1	155.6
1978.....	146.1	142.2	149.1	179.9	147.7	132.8	160.3	86.5	154.1	148.3	149.0	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
1980.....	147.0	145.3	145.4	132.8	138.9	145.2	173.2	98.2	151.9	147.6	143.0	171.5
1981.....	151.0	149.5	147.9	137.9	142.0	151.8	181.1	102.7	154.4	151.6	149.1	174.6
1982.....	138.6	141.5	142.6	129.5	129.1	139.8	157.9	109.4	143.3	133.7	125.0	157.5
1983 ^P	147.7	147.2	151.9	158.2	141.8	140.8	153.2	119.9	156.9	145.3	138.7	174.9
1982:												
Jan.....	140.7	142.8	139.6	109.2	126.3	147.2	172.2	105.2	143.4	137.2	129.7	156.8
Feb.....	142.9	144.1	141.8	117.5	130.6	147.3	171.6	106.5	146.3	140.4	132.4	164.2
Mar.....	141.7	143.3	141.5	125.0	129.9	145.9	169.0	107.0	145.2	138.5	130.7	162.0
Apr.....	140.2	142.6	142.1	129.9	131.1	143.4	164.9	107.2	143.7	136.2	128.1	160.3
May.....	139.2	142.2	143.6	138.9	129.1	140.4	159.9	107.7	142.6	134.3	126.6	156.6
June.....	138.7	142.1	144.8	143.0	129.9	138.4	156.7	107.6	141.9	133.5	126.6	153.5
July.....	138.8	142.5	145.8	149.7	130.4	138.0	154.9	109.5	142.8	133.0	126.0	152.3
Aug.....	138.4	141.2	144.1	135.5	131.4	137.3	153.9	109.5	144.7	132.8	125.1	154.5
Sept.....	137.3	140.0	143.4	135.5	128.9	135.2	150.5	109.5	143.7	132.0	123.0	158.5
Oct.....	135.7	138.7	142.2	123.6	128.1	134.0	147.1	111.9	141.6	130.0	118.5	158.2
Nov.....	134.9	138.3	141.3	120.7	126.8	134.2	146.4	113.6	141.8	128.4	116.4	157.3
Dec.....	135.2	139.5	142.0	128.7	124.3	136.1	148.1	115.9	141.5	127.8	116.5	155.6
1983:												
Jan.....	137.4	140.1	143.6	136.2	129.1	135.3	146.6	116.4	143.7	132.0	121.5	159.7
Feb.....	138.1	138.9	143.4	144.3	128.8	132.7	142.7	116.1	145.3	134.9	125.3	164.0
Mar.....	140.0	139.9	144.3	142.6	132.8	133.8	143.7	117.0	147.8	137.6	128.7	167.5
Apr.....	142.6	142.8	147.7	144.9	138.1	136.2	146.9	118.2	150.8	139.7	132.4	168.7
May.....	144.4	144.5	150.4	152.2	141.8	136.5	147.7	117.6	152.2	141.7	134.7	172.1
June.....	146.4	146.4	152.4	160.0	143.2	138.2	150.2	118.0	154.5	143.7	137.0	174.3
July.....	149.7	149.0	154.8	167.0	144.9	141.0	153.3	120.4	158.1	147.8	141.1	177.0
Aug.....	151.8	150.7	156.3	168.1	146.4	143.1	156.6	120.2	162.2	149.7	144.2	178.0
Sept.....	153.8	152.1	157.3	172.9	148.8	144.9	158.7	121.8	165.4	152.2	147.4	182.3
Oct.....	155.0	152.9	157.1	171.0	149.3	147.1	161.5	122.9	166.5	153.9	149.5	185.0
Nov ^P	156.1	154.2	157.8	171.9	148.1	149.3	164.4	123.9	167.2	154.9	150.9	185.1
Dec ^P	156.9	155.4	158.7	178.1	149.4	150.8	165.8	125.7	167.6	155.3	150.9	184.9

¹ Also includes clothing and consumer staples, not shown separately.² Also includes energy materials, not shown separately.

Source: Board of Governors of the Federal Reserve System.

TABLE B-44.—Industrial production indexes, selected manufactures, 1947-83

(1967 = 100; monthly data seasonally adjusted)

Year or month	Durable manufactures							Nondurable manufactures				
	Primary metals		Fabricated metal products	Non-electrical machinery	Electrical machinery	Transportation equipment		Lumber and products	Apparel products	Printing and publishing	Chemicals and products	Foods
	Total	Iron and steel				Total	Motor vehicles and parts					
1967 proportion.....	6.57	4.21	5.93	9.15	8.05	9.27	4.50	1.64	3.31	4.72	7.74	8.75
1947.....	63.3	.....	49.9	39.0	22.2	31.8	.....	58.9	57.8	43.3	19.7	55.8
1948.....	65.8	.....	50.8	39.2	23.0	34.8	.....	61.3	60.3	45.4	21.3	55.2
1949.....	55.4	.....	45.8	33.4	21.6	34.9	.....	54.1	59.7	46.6	21.0	55.9
1950.....	69.7	.....	56.1	37.5	29.6	41.8	.....	65.7	64.3	48.9	26.2	57.9
1951.....	75.8	.....	59.9	47.7	29.8	46.6	.....	65.5	63.1	49.7	29.7	59.0
1952.....	69.2	.....	58.5	51.9	34.0	54.2	.....	64.7	66.3	49.7	31.1	60.2
1953.....	78.5	.....	66.0	54.0	39.0	68.0	.....	68.4	67.2	52.0	33.6	61.4
1954.....	63.5	70.1	59.4	46.1	34.7	59.2	60.5	68.0	66.4	54.1	34.1	62.7
1955.....	82.5	93.2	67.8	50.6	39.9	68.0	81.2	75.9	73.3	59.5	39.8	66.3
1956.....	82.0	91.5	68.8	58.0	43.1	66.0	65.8	75.0	75.0	63.2	42.7	70.1
1957.....	78.5	88.2	70.6	57.9	42.8	70.7	69.0	68.8	74.9	65.4	45.2	71.1
1958.....	62.3	66.5	63.3	48.6	39.2	55.8	51.0	69.9	72.8	63.9	46.6	72.9
1959.....	72.7	76.5	71.0	56.7	47.6	63.2	66.2	79.3	80.1	68.2	54.3	76.5
1960.....	72.4	77.7	71.1	56.9	51.6	65.4	74.7	74.7	81.7	71.0	56.4	78.6
1961.....	71.1	74.2	69.4	55.4	54.8	61.5	65.5	78.2	82.2	71.3	59.2	80.9
1962.....	76.3	77.3	75.4	62.1	62.9	71.1	79.8	82.5	85.5	73.9	65.7	83.4
1963.....	82.3	84.3	77.8	66.3	64.7	78.0	88.3	86.3	89.1	77.8	71.8	86.4
1964.....	92.8	95.9	82.6	75.6	68.4	80.0	90.7	92.7	92.2	82.6	78.8	90.4
1965.....	102.1	105.2	90.8	80.5	81.7	95.1	115.9	96.3	97.4	87.9	87.8	92.4
1966.....	108.4	108.4	97.2	98.8	97.9	102.0	113.9	100.0	99.9	94.6	95.7	96.0
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.3	103.2	105.6	101.8	105.5	111.1	120.3	105.5	102.9	103.2	109.5	102.6
1969.....	113.8	112.6	107.9	109.3	111.9	108.4	116.5	107.9	106.7	107.4	118.4	106.1
1970.....	106.6	104.7	102.4	104.4	108.1	89.5	92.3	105.6	101.4	107.0	120.4	108.9
1971.....	100.2	96.1	103.5	100.2	107.7	97.9	118.6	113.8	104.7	107.1	125.9	112.8
1972.....	112.1	107.1	112.1	116.0	122.2	108.2	135.8	120.8	109.4	112.7	143.6	116.8
1973.....	126.7	122.3	124.7	133.7	143.1	118.3	148.8	126.0	117.3	118.2	154.5	120.9
1974.....	123.1	119.8	124.2	140.1	143.8	108.7	128.2	116.2	114.3	118.2	159.4	124.0
1975.....	96.4	95.8	109.9	125.1	116.5	97.4	111.1	107.6	107.6	113.3	147.2	123.4
1976.....	109.7	104.8	123.9	134.5	134.8	111.1	142.0	123.2	125.7	122.5	170.9	133.0
1977.....	111.1	103.8	131.0	143.6	145.4	122.2	161.1	131.2	134.2	127.6	185.7	138.8
1978.....	119.9	113.2	141.6	153.6	159.4	132.5	169.9	136.3	134.2	131.5	197.4	142.7
1979.....	121.3	113.2	148.5	163.7	175.0	135.4	159.9	136.9	134.4	136.9	211.8	147.5
1980.....	102.3	92.4	134.1	162.8	172.8	116.9	119.0	119.3	127.0	139.6	207.1	149.6
1981.....	107.9	99.8	136.4	171.2	178.4	116.1	122.3	119.1	120.4	144.2	215.6	152.1
1982.....	75.3	61.7	114.8	149.0	169.3	104.9	109.8	112.6	.....	144.1	196.1	151.1
1983.....	85.4	.....	120.4	150.6	185.8	117.4	136.9	.....	.....	152.9	.....	.....
1982:												
Jan.....	89.7	79.6	120.7	160.9	168.2	96.6	90.4	99.2	.....	145.6	196.7	151.1
Feb.....	88.5	78.5	121.4	160.0	172.9	102.0	98.6	104.9	.....	146.4	201.3	151.7
Mar.....	83.0	73.0	121.1	157.3	172.6	104.4	105.6	103.5	.....	145.9	200.3	150.8
Apr.....	76.4	65.1	119.1	153.7	172.2	105.9	110.7	106.2	.....	144.2	198.6	149.7
May.....	75.2	62.4	115.8	150.0	170.9	110.0	119.8	110.6	.....	143.8	193.6	150.5
June.....	72.8	58.0	115.0	147.4	170.8	111.6	124.0	112.2	.....	142.6	193.2	151.0
July.....	72.9	58.1	115.5	147.1	170.3	112.7	127.2	116.9	.....	143.9	194.1	151.0
Aug.....	72.9	57.4	114.3	147.2	169.7	107.0	116.7	120.3	.....	145.3	195.6	150.7
Sept.....	73.2	56.4	112.3	144.9	167.0	105.3	113.5	119.9	.....	144.3	196.4	149.0
Oct.....	69.6	54.1	107.6	140.4	165.4	100.8	103.0	117.2	.....	142.0	194.1	151.5
Nov.....	63.6	47.5	107.0	139.6	165.5	100.2	101.7	119.1	.....	141.7	192.8	152.0
Dec.....	63.5	46.6	107.3	139.2	165.5	103.7	108.8	121.4	.....	142.8	195.9	152.8
1983:												
Jan.....	73.1	59.0	107.6	138.0	169.5	106.3	113.9	130.0	.....	141.3	197.6	154.4
Feb.....	77.9	64.3	110.3	136.2	168.9	109.6	123.0	130.2	.....	144.0	202.3	153.0
Mar.....	81.2	66.9	113.9	138.6	173.8	110.1	123.2	128.7	.....	145.9	205.7	152.0
Apr.....	83.1	68.5	115.3	143.1	177.2	111.4	125.5	132.1	.....	145.7	208.5	153.7
May.....	84.9	69.5	115.5	146.1	180.1	113.8	130.4	135.8	.....	145.2	211.0	155.6
June.....	84.8	69.7	118.5	149.5	182.4	116.6	136.2	137.4	.....	147.4	214.7	157.7
July.....	85.5	71.8	122.7	154.2	188.3	119.7	142.3	141.3	.....	152.0	218.3	159.9
Aug.....	87.5	75.1	126.0	157.3	189.2	121.1	144.3	141.6	.....	157.8	220.3	159.3
Sept.....	90.6	78.2	127.4	158.3	195.8	124.7	150.9	142.3	.....	161.7	224.1	158.2
Oct.....	95.1	84.0	127.2	159.5	198.7	125.5	150.9	141.7	.....	162.7	228.1	157.6
Nov.....	92.0	80.5	129.3	162.9	200.6	125.8	152.5	142.0	.....	163.1	228.3	.....
Dec.....	91.1	.....	129.7	163.0	203.7	128.2	157.1	.....	.....	163.2	.....	.....

Source: Board of Governors of the Federal Reserve System.

TABLE B-45.—Capacity utilization rate in manufacturing, 1948-83

[Percent; quarterly data seasonally adjusted]

Year or quarter	FRB series ¹					Commerce series ²				
	Total manufacturing	Durable goods	Non-durable goods	Primary processing	Advanced processing	Total manufacturing	Durable goods	Non-durable goods	Primary-processed goods	Advanced-processed goods
1948.....	82.5			87.2	80.0					
1949.....	74.2			76.2	73.3					
1950.....	82.8			88.5	79.8					
1951.....	85.8			90.2	83.4					
1952.....	85.4			84.9	85.9					
1953.....	89.2			89.4	89.3					
1954.....	80.3			80.6	80.1					
1955.....	87.1			92.1	84.3					
1956.....	86.4			89.7	84.5					
1957.....	83.7			84.7	83.1					
1958.....	75.2			75.4	75.1					
1959.....	81.9			83.4	81.1					
1960.....	80.2			79.8	80.4					
1961.....	77.4			77.9	77.2					
1962.....	81.6			81.6	81.7					
1963.....	83.5			83.8	83.4					
1964.....	85.6			87.8	84.6					
1965.....	89.6			91.1	88.9	86.0	88.0	85.0	89.0	85.0
1966.....	91.1			91.4	91.2	86.0	87.0	86.0	88.0	85.0
1967.....	86.9	87.1	86.8	85.7	87.7	84.0	83.0	85.0	87.0	83.0
1968.....	87.2	87.2	87.1	87.7	86.9	85.0	84.0	86.0	86.0	84.0
1969.....	86.3	85.9	87.0	88.5	85.2	85.0	84.0	86.0	87.0	84.0
1970.....	79.5	76.5	83.9	82.9	77.6	81.0	78.0	83.0	83.0	79.0
1971.....	78.5	74.6	84.0	82.3	76.4	80.0	78.0	83.0	82.0	80.0
1972.....	83.5	80.7	87.4	88.1	81.0	83.0	82.0	85.0	85.0	82.0
1973.....	87.6	87.2	88.1	92.4	85.0	86.0	85.0	86.0	89.0	84.0
1974.....	83.7	83.1	84.7	87.8	81.5	83.0	82.0	84.0	85.0	82.0
1975.....	72.9	70.3	76.6	73.8	72.5	77.0	76.0	79.0	76.0	77.0
1976.....	79.6	77.1	83.0	82.3	78.2	81.0	81.0	82.0	82.0	81.0
1977.....	82.2	81.1	85.0	84.6	80.9	83.0	84.0	82.0	83.0	83.0
1978.....	84.7	86.0	85.6	87.9	82.9	83.6	84.4	82.6	84.2	83.3
1979.....	86.0	86.7	86.3	89.5	84.0	82.5	82.7	82.3	83.8	81.9
1980.....	79.6	77.8	81.8	80.3	79.2	77.5	76.6	78.7	76.9	77.8
1981.....	79.4	78.2	81.1	80.8	78.7	76.1	74.6	78.1	75.6	76.4
1982.....	71.1	68.2	74.8	68.9	72.3	70.0	66.5	74.6	66.5	71.8
1983 ^a	75.3	72.4	78.9	76.0	75.0					
1979:										
I.....	87.2	89.1	86.9	90.3	85.4	84.4	85.2	83.3	85.2	84.0
II.....	86.2	87.4	86.3	89.6	84.4	83.3	84.0	82.4	84.2	82.9
III.....	85.7	85.8	86.4	89.8	83.4	81.7	81.6	81.8	83.2	80.9
IV.....	84.8	84.4	85.6	88.5	82.8	80.7	80.0	81.7	82.6	79.7
1980:										
I.....	83.8	83.0	85.0	87.2	82.2	80.1	79.7	80.6	80.8	79.7
II.....	78.3	76.5	80.7	78.0	78.5	75.8	74.1	77.9	74.9	76.2
III.....	76.4	73.9	79.7	74.8	77.3	76.2	74.7	78.1	73.9	77.4
IV.....	79.7	78.0	81.9	81.3	78.7	78.0	77.8	78.3	78.1	77.9
1981:										
I.....	80.6	79.2	82.4	83.5	79.1	78.1	77.2	79.4	78.0	78.2
II.....	80.8	79.8	82.0	82.6	79.7	78.3	77.0	80.0	78.0	78.5
III.....	80.3	79.2	81.8	81.9	79.4	75.9	74.1	78.4	75.6	76.1
IV.....	75.9	74.3	78.0	75.2	76.3	72.1	70.1	74.7	70.9	72.7
1982:										
I.....	72.9	70.5	75.8	71.5	73.7	72.2	69.8	75.2	70.1	73.2
II.....	71.6	69.1	74.7	68.8	73.1	71.2	67.6	76.0	66.5	73.8
III.....	71.0	68.1	74.8	68.6	72.3	69.1	65.2	74.2	65.6	70.9
IV.....	69.0	65.1	74.0	66.8	70.2	67.5	63.4	72.8	63.9	69.3
1983:										
I.....	70.7	67.2	75.1	70.5	71.1	69.8	66.3	74.3	68.1	70.6
II.....	73.8	70.7	77.8	74.6	73.5	73.3	70.3	77.1	71.2	74.4
III.....	77.4	74.7	80.7	78.3	76.9	75.5	72.7	79.1	74.0	76.3
IV.....	79.2	77.1	81.9	80.5	78.5					

¹ For description of the series, see "New Federal Reserve Measures of Capacity and Capacity Utilization," *Federal Reserve Bulletin*, July 1983.² Quarterly data are for last month in quarter. Annual data are averages of the four indexes, except for 1965 (December index) and 1966-67 (averages of June and December indexes). For description of the series, see "Survey of Current Business," July 1974.

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

TABLE B-46.—New construction activity, 1929-83

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction						Public construction			
		Total	Residential buildings ¹		Nonresidential buildings and other construction ¹			Total	Federal	State and local ²	
			Total ²	New housing units	Total	Com-mercial ³	Indus-trial				Other ⁴
1929.....	10.8	8.3	3.6	3.0	4.7	1.1	0.9	2.6	2.5	0.2	2.3
1933.....	2.9	1.2	.5	.3	.8	.1	.2	.5	1.6	.5	1.1
1939.....	8.2	4.4	2.7	2.3	1.7	.3	.3	1.2	3.8	.8	3.1
1940.....	8.7	5.1	3.0	2.6	2.1	.3	.4	1.3	3.6	1.2	2.4
1941.....	12.0	6.2	3.5	3.0	2.7	.4	.8	1.5	5.8	3.8	2.0
1942.....	14.1	3.4	1.7	1.4	1.7	.2	.3	1.2	10.7	9.3	1.3
1943.....	8.3	2.0	.9	.7	1.1	.0	.2	.9	6.3	5.6	.7
1944.....	5.3	2.2	.8	.6	1.4	.1	.2	1.1	3.1	2.5	.6
1945.....	5.8	3.4	1.3	.7	2.1	.2	.6	1.3	2.4	1.7	.7
1946.....	14.3	12.1	6.2	4.8	5.8	1.2	1.7	3.0	2.2	.9	1.4
New series											
1947.....	20.0	16.7	9.9	7.8	6.9	1.0	1.7	4.2	3.3	.8	2.5
1948.....	26.1	21.4	13.1	10.5	8.2	1.4	1.4	5.5	4.7	1.2	3.5
1949.....	26.7	20.5	12.4	10.0	8.0	1.2	1.0	5.9	6.3	1.5	4.8
1950.....	33.6	26.7	18.1	15.6	8.6	1.4	1.1	6.1	6.9	1.6	5.2
1951.....	35.4	26.2	15.9	13.2	10.3	1.5	2.1	6.7	9.3	3.0	6.3
1952.....	36.8	26.0	15.8	12.9	10.2	1.1	2.3	6.8	10.8	4.2	6.6
1953.....	39.1	27.9	16.6	13.4	11.3	1.8	2.2	7.3	11.2	4.1	7.1
1954.....	41.4	29.7	18.2	14.9	11.5	2.2	2.0	7.2	11.7	3.4	8.3
1955.....	46.5	34.8	21.9	18.2	12.9	3.2	2.4	7.3	11.7	2.8	8.9
1956.....	47.6	34.9	20.2	16.1	14.7	3.6	3.1	8.0	12.7	2.7	10.0
1957.....	49.1	35.1	19.0	14.7	16.1	3.6	3.6	9.0	14.1	3.0	11.1
1958.....	50.0	34.6	19.8	15.4	14.8	3.6	2.4	8.8	15.5	3.4	12.1
1959.....	55.4	39.3	24.3	19.2	15.1	3.9	2.1	9.0	16.1	3.7	12.3
1960.....	54.7	38.9	23.0	17.3	15.9	4.2	2.9	8.9	15.9	3.6	12.2
1961.....	56.4	39.3	23.1	17.1	16.2	4.7	2.8	8.7	17.1	3.9	13.3
1962.....	60.2	42.3	25.2	19.4	17.2	5.1	2.8	9.2	17.9	3.9	14.0
1963.....	64.8	45.5	27.9	21.7	17.6	5.0	2.9	9.7	19.4	4.0	15.4
1964.....	68.0	47.7	28.0	21.8	19.7	5.4	3.6	10.7	20.4	3.9	16.5
1965.....	74.1	52.0	27.9	21.7	24.1				22.1	4.0	18.0
1966.....	76.8	52.8	25.7	19.4	27.1				24.0	4.0	20.0
1967.....	78.5	52.9	25.6	19.0	27.3				25.5	3.5	22.1
1968.....	87.5	59.9	30.6	24.0	29.3	7.8		15.5	27.6	3.4	24.2
1969.....	94.3	66.3	33.2	25.9	33.1	9.4	6.8	16.9	28.0	3.3	24.6
1970.....	95.2	67.1	31.9	24.3	35.3	9.8	6.5	19.0	28.1	3.3	24.8
1971.....	110.3	80.4	43.3	35.1	37.2	11.6	5.4	20.1	29.9	4.0	25.9
1972.....	124.4	94.2	54.3	44.9	40.0	13.5	4.7	21.8	30.2	4.4	25.8
1973.....	138.4	105.9	59.7	50.1	46.2	15.5	6.2	24.5	32.5	4.9	27.6
1974.....	139.2	100.9	50.4	40.6	50.5	15.9	7.9	26.7	38.3	5.3	33.0
1975.....	135.9	95.1	46.5	34.4	48.6	12.8	8.0	27.8	40.9	6.3	34.6
1976.....	151.1	112.0	60.5	47.3	51.4	12.8	7.2	31.5	39.1	7.0	32.1
1977.....	173.8	135.7	81.0	65.7	54.7	14.8	7.7	32.2	38.2	7.3	30.9
1978.....	205.6	159.7	93.4	75.8	66.2	18.6	11.0	36.7	45.9	8.4	37.5
1979.....	230.4	181.6	99.0	78.6	82.6	24.9	15.0	42.7	48.8	8.6	40.2
1980.....	230.7	175.7	87.3	63.1	88.4	29.9	13.8	44.7	55.0	9.6	45.4
1981.....	239.4	186.1	86.6	62.7	99.5	34.2	17.0	48.2	53.3	10.4	42.9
1982.....	232.0	181.0	74.8	51.9	106.2	37.3	17.3	51.5	51.1	10.2	40.8

See next page for continuation of table.

TABLE B-46.—*New construction activity, 1929-83—Continued*

(Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates)

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings ¹		Nonresidential buildings and other construction ¹				Total	Federal	State and local ⁵
			Total ²	New housing units	Total	Commercial ³	Industrial	Other ⁴			
1982:											
Jan.....	224.3	175.4	71.2	49.2	104.2	36.1	18.2	50.0	48.9	9.7	39.2
Feb.....	223.5	174.3	68.3	48.7	106.0	36.9	18.4	50.8	49.2	9.9	39.3
Mar.....	226.8	175.5	69.6	50.4	105.9	37.1	18.2	50.6	51.3	10.5	40.8
Apr.....	228.8	177.9	71.9	48.7	105.9	37.5	17.7	50.7	50.9	10.0	40.9
May.....	230.9	180.9	75.2	50.1	105.8	36.5	17.8	51.5	50.0	9.9	40.1
June.....	233.4	182.9	75.5	49.3	107.4	38.6	18.2	50.5	50.4	9.9	40.5
July.....	230.8	180.8	73.8	51.4	107.0	37.8	17.2	52.0	50.0	10.3	39.7
Aug.....	231.6	179.5	72.7	52.6	106.8	37.6	16.9	52.3	52.2	10.4	41.7
Sept.....	230.7	178.2	71.7	53.0	106.5	38.0	16.5	51.9	52.5	10.8	41.7
Oct.....	234.1	181.9	76.4	53.6	105.5	37.0	17.1	51.4	52.2	10.6	41.6
Nov.....	243.7	190.5	81.2	55.8	109.3	37.9	16.7	54.7	53.2	10.8	42.4
Dec.....	240.2	190.8	86.0	58.6	104.8	36.9	15.6	52.2	49.4	10.1	39.3
1983:											
Jan.....	247.9	195.0	89.7	63.4	105.3	38.2	15.2	52.0	52.9	10.5	42.4
Feb.....	243.0	194.3	93.6	68.8	100.8	36.7	14.3	49.8	48.7	10.5	38.2
Mar.....	241.9	194.9	96.1	72.3	98.7	35.5	14.3	49.0	47.0	11.0	36.1
Apr.....	247.4	199.5	102.0	77.3	97.5	33.6	13.2	50.7	47.9	11.1	36.8
May.....	254.8	206.0	107.5	82.2	98.5	33.3	13.0	52.2	48.7	10.1	38.6
June.....	264.3	214.7	113.5	87.9	101.2	35.9	13.1	52.2	49.6	9.9	39.7
July.....	274.2	222.8	122.3	92.7	100.5	35.9	12.2	52.4	51.4	11.7	39.8
Aug.....	282.0	228.5	127.1	94.8	101.4	36.3	14.2	50.9	53.5	11.1	42.4
Sept.....	285.4	232.6	129.1	95.0	103.4	36.9	13.2	53.4	52.8	11.3	41.5
Oct.....	271.9	223.0	121.7	92.2	101.3	36.1	10.5	54.6	48.9	10.5	38.4
Nov ^P	271.9	223.2	118.3	91.1	105.0	38.0	11.5	55.4	48.6	10.4	38.2

¹ Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.² Total includes additions and alterations and nonhousekeeping units, not shown separately.³ Office buildings, warehouses, stores, restaurants, garages, etc.⁴ Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities, and all other private.⁵ Includes Federal grants-in-aid for State and local projects.

Source: Department of Commerce, Bureau of the Census.

TABLE B-47.—New housing units started and authorized, 1959-83

[Thousands of units]

Year or month	New housing units started						New private housing units authorized ²			
	Private and public ¹		Private (farm and nonfarm) ¹			Total	Type of structure			
	Total (farm and nonfarm)	Nonfarm	Total	Type of structure			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	283.0	1,208.3	938.3	77.1	192.9	
1960.....	1,296.1	1,274.0	1,252.2	994.7	257.4	998.0	746.1	64.6	187.4	
1961.....	1,365.0	1,336.8	1,313.0	974.3	338.7	1,064.2	722.8	67.6	273.8	
1962.....	1,492.5	1,468.7	1,462.9	991.4	471.5	1,186.6	716.2	87.1	383.3	
1963.....	1,634.9	1,614.8	1,603.2	1,012.4	590.8	1,334.7	750.2	118.9	465.6	
1964.....	1,561.0	1,534.0	1,528.8	970.5	108.4	1,285.8	720.1	100.8	464.9	
1965.....	1,509.7	1,487.5	1,472.8	963.7	86.6	1,239.8	709.9	84.8	445.1	
1966.....	1,195.8	1,172.8	1,164.9	778.6	61.1	971.9	563.2	61.0	347.7	
1967.....	1,321.9	1,298.8	1,291.6	843.9	71.6	1,141.0	650.6	73.0	417.5	
1968.....	1,545.4	1,521.4	1,507.6	899.4	80.9	1,353.4	694.7	84.3	574.4	
1969.....	1,499.5	1,482.3	1,466.8	810.6	85.0	1,323.7	625.9	85.2	612.7	
1970.....	1,469.0	(*)	1,433.6	812.9	84.8	1,351.5	646.8	88.1	616.7	
1971.....	2,084.5	(*)	2,052.2	1,151.0	120.3	1,924.6	906.1	132.9	885.7	
1972.....	2,378.5	(*)	2,356.6	1,309.2	141.3	2,218.9	1,033.1	148.6	1,037.2	
1973.....	2,057.5	(*)	2,045.3	1,132.0	118.3	1,819.5	882.1	117.0	820.5	
1974.....	1,352.5	(*)	1,337.7	888.1	68.1	1,074.4	643.8	64.3	366.2	
1975.....	1,171.4	(*)	1,160.4	892.2	64.0	204.3	939.2	675.5	63.9	
1976.....	1,547.6	(*)	1,537.5	1,162.4	85.9	289.2	1,296.2	893.6	93.1	
1977.....	2,001.7	(*)	1,987.1	1,450.9	121.7	414.4	1,690.0	1,126.1	121.3	
1978.....	2,036.1	(*)	2,020.3	1,433.3	125.0	462.0	1,800.5	1,182.6	130.6	
1979.....	1,760.0	(*)	1,745.1	1,194.1	122.0	429.0	1,551.8	981.5	125.4	
1980.....	1,312.6	(*)	1,292.2	852.2	109.5	330.5	1,190.6	710.4	114.5	
1981.....	1,100.3	(*)	1,084.2	705.4	91.1	287.7	985.5	564.3	101.8	
1982.....	1,072.1	(*)	1,062.2	662.6	80.0	319.6	1,000.5	546.4	88.3	
1983 ³	1,712.6	(*)	1,703.1	1,066.9	114.9	521.3	1,593.7	894.3	132.7	
Seasonally adjusted annual rates										
1982:										
Jan.....	47.6	(*)	877	585	70	222	800	448	72	
Feb.....	52.0	(*)	911	561	83	267	820	451	73	
Mar.....	78.7	(*)	920	607	68	245	883	475	80	
Apr.....	85.1	(*)	911	583	65	263	880	462	76	
May.....	99.2	(*)	1,028	622	85	321	951	489	105	
June.....	91.8	(*)	910	617	86	207	924	513	87	
July.....	107.2	(*)	1,185	625	96	464	1,065	507	85	
Aug.....	97.2	(*)	1,046	651	87	308	928	515	88	
Sept.....	108.3	(*)	1,134	683	90	361	1,029	576	94	
Oct.....	111.5	(*)	1,142	716	66	360	1,154	657	87	
Nov.....	110.0	(*)	1,361	868	79	414	1,227	738	95	
Dec.....	83.4	(*)	1,280	842	79	359	1,326	753	111	
1983:										
Jan.....	92.9	(*)	1,694	1,126	100	468	1,447	866	120	
Feb.....	96.7	(*)	1,784	1,103	117	564	1,479	835	114	
Mar.....	135.8	(*)	1,605	1,008	100	497	1,467	859	126	
Apr.....	136.4	(*)	1,506	1,001	117	388	1,536	841	141	
May.....	175.5	(*)	1,807	1,183	96	528	1,635	940	136	
June.....	173.8	(*)	1,736	1,127	123	486	1,761	1,013	147	
July.....	161.9	(*)	1,804	1,032	135	637	1,782	920	137	
Aug.....	177.8	(*)	1,904	1,135	110	659	1,652	874	133	
Sept.....	156.8	(*)	1,664	1,031	117	516	1,506	837	130	
Oct.....	159.9	(*)	1,654	1,002	90	562	1,630	880	142	
Nov.....	137.3	(*)	1,755	1,097	133	525	1,642	911	142	
Dec ³	107.7	(*)	1,667	972	151	544	1,549	898	141	

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.—Nonfarm business expenditures for new plant and equipment, 1947-84

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Total	Plant	Equip- ment	Plant and equipment								
				Manufacturing			Nonmanufacturing					
				Total	Dura- ble goods	Non- durable goods	Total	Min- ing	Transpor- tation	Public utili- ties	Trade and serv- ices ¹	Com- munication and other ²
1947	21.80	8.47	13.33	8.73	3.39	5.34	13.07	0.69	2.21	1.64	6.13	2.40
1948	25.46	10.38	15.08	9.25	3.54	5.71	16.21	.93	2.66	2.67	6.92	3.04
1949	23.54	10.19	13.35	7.32	2.67	4.64	16.22	.88	2.30	3.28	7.13	2.63
1950	25.32	11.00	14.32	7.73	3.22	4.51	17.59	.84	2.38	3.42	8.37	2.58
1951	30.83	13.11	17.71	11.07	5.12	5.95	19.76	1.11	3.05	3.75	8.83	3.03
1952	31.59	13.12	18.46	12.12	5.75	6.37	19.47	1.21	2.99	3.96	8.05	3.25
1953	33.58	13.83	19.75	12.43	5.71	6.72	21.16	1.25	2.97	4.61	8.94	3.38
1954	33.13	14.09	19.03	12.00	5.49	6.51	21.13	1.29	2.42	4.23	9.59	3.60
1955	36.58	16.07	20.51	12.50	5.87	6.62	24.08	1.31	2.60	4.26	11.49	4.42
1956	44.76	19.39	25.37	16.33	8.19	8.15	28.43	1.64	3.07	4.78	13.64	5.30
1957	48.12	20.96	27.16	17.50	8.59	8.91	30.62	1.69	3.35	5.95	13.68	5.96
1958	42.17	19.39	22.78	12.98	6.21	6.77	29.19	1.43	2.34	5.74	14.11	5.58
1959	44.78	19.92	24.86	13.76	6.72	7.04	31.02	1.35	3.17	5.46	15.40	5.63
1960	48.63	20.94	27.70	16.36	8.28	8.08	32.28	1.29	3.19	5.40	16.15	6.25
1961	47.82	21.14	26.68	15.53	7.43	8.10	32.29	1.26	2.82	5.20	16.53	6.48
1962	51.28	22.16	29.12	16.03	7.81	8.22	35.25	1.41	3.26	5.12	18.27	7.19
1963	53.25	22.28	30.98	17.27	8.64	8.63	35.99	1.26	3.36	5.33	18.57	7.47
1964	61.66	25.01	36.65	21.23	10.98	10.25	40.43	1.33	4.46	5.80	20.38	8.46
1965	70.43	27.33	43.10	25.41	13.49	11.92	45.02	1.36	5.46	6.49	22.13	9.58
1966	82.22	32.27	49.95	31.37	17.23	14.15	50.84	1.42	6.43	7.82	24.69	10.49
1967	83.42	32.22	51.21	32.25	17.83	14.42	51.18	1.38	6.34	9.33	23.02	11.11
1968	88.45	35.54	52.91	32.34	17.93	14.40	56.11	1.44	6.79	10.52	25.31	12.06
1969	99.52	40.59	58.93	36.27	19.97	16.31	63.25	1.77	7.04	11.70	28.31	14.43
1970	105.61	44.27	61.33	36.99	19.80	17.19	68.62	2.02	6.95	13.03	29.77	16.85
1971	108.53	46.68	61.85	33.60	16.78	16.82	74.93	2.67	5.93	14.70	34.20	17.43
1972	120.25	49.36	70.89	35.42	18.22	17.20	84.82	2.88	6.72	16.26	40.00	18.96
1973	137.70	56.58	81.12	42.37	22.75	19.62	95.33	3.31	7.41	17.97	45.53	21.12
1974	156.98	64.30	92.67	53.21	27.44	25.76	103.78	4.62	8.23	19.83	47.79	23.30
1975	157.71	65.23	92.48	54.92	26.33	28.59	102.79	6.10	8.68	19.98	46.23	21.80
1976	171.45	71.12	100.33	59.95	28.47	31.47	111.50	7.44	8.89	22.37	49.30	23.51
1977	198.08	80.19	117.89	69.22	34.04	35.18	128.87	9.24	9.40	26.79	56.54	26.90
1978	231.24	92.63	138.60	79.72	40.43	39.29	151.52	10.21	10.68	29.95	68.66	32.02
1979	270.46	105.75	164.68	98.68	51.07	47.61	171.77	11.38	12.35	33.96	79.26	34.83
1980	295.63	117.57	178.06	115.81	58.91	56.90	179.81	13.51	12.09	35.44	81.79	36.99
1981	321.49	133.35	188.14	126.79	61.84	64.95	194.70	16.86	12.05	38.40	86.33	41.06
1982	316.43	134.58	181.86	119.68	56.44	63.23	196.75	15.45	11.95	41.95	86.95	40.46
1983 ³	303.20			111.18	51.45	59.74	192.01	12.00	11.25	42.62	88.02	38.11
1984 ³	333.32			125.98	59.87	66.11	207.34	13.48	10.96	44.17	96.35	42.38
1982:												
I	326.95	139.07	187.89	127.47	60.39	67.08	199.49	17.43	12.00	40.35	87.82	41.87
II	321.87	137.52	184.34	122.76	58.28	64.48	199.11	16.38	12.17	41.45	88.74	40.36
III	313.76	134.43	179.33	118.26	56.61	61.65	195.51	14.57	11.29	43.02	86.88	39.75
IV	303.18	127.32	175.86	110.23	50.51	59.72	192.95	13.41	12.33	43.00	84.36	39.84
1983:												
I	293.03	125.40	167.62	109.86	50.74	59.12	183.17	12.03	11.04	41.61	82.38	36.11
II	293.46	125.60	167.86	108.79	48.48	60.31	184.67	10.91	10.88	41.48	85.85	35.54
III	304.70	130.59	174.12	111.12	53.06	58.06	193.59	11.93	11.00	42.22	91.06	37.38
IV ³	321.60			114.97	53.52	61.45	206.62	13.14	12.10	45.17	92.79	43.42
1984:												
I ³	323.07			119.00	57.18	61.81	204.08	12.25	10.78	41.82	96.98	42.25
II ³	325.42			120.96	58.09	62.86	204.47	13.68	11.42	42.30	95.03	42.03

¹ Wholesale and retail trade; finance, insurance, and real estate; and personal, business, and professional services.² "Other" consists of construction; social services and membership organizations; and forestry, fisheries, and agricultural services.³ Planned capital expenditures reported by business in late October-December 1983, corrected for biases.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-49.—Sales and inventories in manufacturing and trade 1947-83

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	Total manufacturing and trade			Manufacturing			Merchant wholesalers			Retail trade		
	Sales ¹	Inventories ²	Ratio ³	Sales ¹	Inventories ²	Ratio ³	Sales ¹	Inventories ²	Ratio ³	Sales ¹	Inventories ²	Ratio ³
1947				15,513	25,897	1.58				10,200	14,241	1.26
1948	35,280	52,507	1.42	17,316	28,543	1.57	6,808	7,957	1.13	11,135	16,007	1.39
1949	33,788	49,497	1.53	16,126	26,321	1.75	6,514	7,706	1.19	11,149	15,470	1.41
1950	38,596	59,822	1.36	18,634	31,078	1.48	7,695	9,284	1.07	12,268	19,460	1.38
1951	43,356	70,242	1.55	21,714	39,306	1.66	8,597	9,886	1.16	13,046	21,050	1.64
1952	44,840	72,377	1.58	22,529	41,136	1.78	8,782	10,210	1.12	13,529	21,031	1.52
1953	47,987	76,122	1.58	24,843	43,948	1.76	9,052	10,686	1.17	14,091	21,488	1.53
1954	46,443	73,175	1.60	23,355	41,612	1.81	8,993	10,637	1.18	14,095	20,926	1.51
1955	51,694	79,516	1.47	26,480	45,069	1.62	9,893	11,678	1.13	15,321	22,769	1.43
1956	54,063	87,304	1.55	27,740	50,642	1.73	10,513	13,260	1.19	15,811	23,402	1.47
1957	55,879	89,052	1.59	28,736	51,871	1.80	10,475	12,730	1.23	16,667	24,451	1.44
1958	54,201	87,093	1.60	27,247	50,241	1.84	10,257	12,739	1.24	16,696	24,113	1.43
1959	59,729	92,129	1.50	30,286	52,945	1.70	11,491	13,879	1.15	17,951	25,305	1.40
1960	60,827	94,713	1.56	30,879	53,780	1.75	11,656	14,120	1.22	18,294	26,813	1.45
1961	61,159	95,594	1.54	30,923	54,885	1.74	11,988	14,488	1.20	18,249	26,221	1.43
1962	65,662	101,063	1.50	33,357	58,186	1.70	12,674	14,936	1.16	19,630	27,941	1.38
1963	68,995	105,480	1.49	35,058	60,046	1.69	13,382	16,048	1.15	20,556	29,386	1.39
1964	73,682	111,503	1.47	37,331	63,409	1.64	14,529	17,000	1.14	21,823	31,094	1.40
1965	80,283	120,907	1.45	40,995	68,185	1.60	15,611	18,317	1.15	23,677	34,405	1.39
1966	87,187	136,790	1.47	44,870	77,952	1.62	16,987	20,765	1.15	25,330	38,073	1.44
1967	90,348	144,796	1.56	46,487	84,664	1.76	19,448	24,833	1.24	24,413	35,299	1.43
1968	98,104	155,697	1.54	50,228	90,618	1.74	20,846	26,134	1.23	27,030	38,945	1.38
1969	105,003	169,343	1.55	53,501	98,202	1.77	22,609	28,624	1.22	28,893	42,517	1.41
1970	107,448	177,556	1.62	52,805	101,651	1.90	23,943	32,038	1.27	30,700	43,867	1.41
1971	116,017	187,766	1.58	55,906	102,658	1.83	26,257	35,045	1.27	33,853	50,063	1.41
1972	130,030	201,950	1.49	63,023	108,238	1.67	29,584	38,633	1.24	37,422	55,079	1.40
1973	153,412	233,237	1.41	72,937	124,628	1.58	38,014	45,372	1.11	42,462	63,237	1.40
1974	177,625	285,807	1.45	84,794	157,792	1.65	47,748	56,948	1.07	45,082	71,067	1.48
1975	182,230	288,375	1.57	86,595	159,934	1.84	46,623	56,697	1.21	49,012	71,744	1.44
1976	204,277	318,544	1.48	98,802	175,193	1.69	50,694	64,078	1.19	54,781	79,273	1.38
1977	229,624	351,036	1.46	113,202	189,195	1.61	55,987	72,311	1.21	60,435	89,530	1.40
1978	260,307	398,980	1.44	126,905	210,415	1.57	66,117	85,685	1.20	67,286	102,790	1.43
1979	297,663	450,736	1.43	143,936	241,113	1.57	78,680	98,394	1.18	75,047	111,229	1.44
1980	327,284	492,885	1.45	154,391	264,114	1.66	92,658	112,341	1.14	80,235	116,430	1.42
1981	356,099	526,152	1.44	168,129	282,333	1.64	100,673	116,986	1.13	87,298	126,833	1.40
1982	344,179	511,942	1.51	159,177	264,902	1.73	95,363	118,790	1.24	89,849	128,250	1.41
1982:												
Jan	340,746	523,647	1.54	157,498	280,794	1.78	96,706	117,266	1.21	86,542	125,587	1.45
Feb	345,687	521,291	1.51	160,740	280,941	1.75	96,898	115,029	1.19	88,049	125,321	1.42
Mar	347,061	520,440	1.50	160,162	279,337	1.74	99,198	115,861	1.17	87,701	125,242	1.43
Apr	344,934	523,370	1.52	159,118	278,468	1.75	97,348	119,423	1.23	88,468	125,479	1.42
May	353,110	519,119	1.47	163,007	276,356	1.70	99,290	118,132	1.19	90,813	124,631	1.37
June	349,742	521,040	1.49	163,120	274,912	1.69	98,019	119,828	1.22	88,603	126,300	1.43
July	347,676	521,145	1.50	162,417	274,629	1.69	95,790	119,854	1.25	89,469	126,662	1.42
Aug	343,426	521,257	1.52	160,016	273,809	1.71	94,341	119,190	1.26	89,069	128,258	1.44
Sept	342,882	521,000	1.52	160,458	271,675	1.69	92,527	119,537	1.29	89,897	129,788	1.44
Oct	336,905	519,797	1.54	154,194	270,786	1.76	91,806	120,162	1.31	90,905	128,849	1.42
Nov	338,722	513,888	1.52	154,318	267,920	1.74	91,912	118,349	1.29	92,492	127,619	1.38
Dec	338,391	511,942	1.51	154,543	264,902	1.71	91,389	118,790	1.30	92,459	128,250	1.39
1983:												
Jan	345,337	507,550	1.47	158,239	262,117	1.66	94,790	117,564	1.24	92,308	127,869	1.39
Feb	341,490	507,665	1.49	158,081	260,856	1.65	92,245	116,417	1.26	91,164	130,392	1.43
Mar	348,009	503,222	1.45	161,803	257,304	1.59	92,943	116,591	1.25	93,263	129,327	1.39
Apr	351,100	504,796	1.44	163,065	257,397	1.58	92,586	117,498	1.27	95,449	129,901	1.36
May	363,925	505,658	1.39	167,965	258,149	1.54	97,529	115,855	1.19	98,431	131,654	1.34
June	373,572	505,521	1.35	173,920	257,390	1.48	100,479	115,630	1.15	99,173	132,501	1.34
July	372,434	505,826	1.36	172,598	258,176	1.50	100,315	115,745	1.15	99,521	131,905	1.33
Aug	374,358	510,430	1.36	175,989	259,834	1.48	100,568	116,813	1.16	97,801	133,783	1.37
Sept	380,089	513,883	1.35	178,590	260,021	1.46	102,297	118,410	1.16	99,202	135,452	1.37
Oct	382,209	515,999	1.35	176,790	260,816	1.48	104,578	119,882	1.15	100,841	135,301	1.34
Nov ^p	386,841	518,291	1.34	181,029	260,988	1.44	103,831	119,555	1.15	101,981	137,748	1.35

¹ Monthly average for year and total for month.² Seasonally adjusted, end of period.³ Inventory/sales ratio. For annual periods, ratio of weighted average inventories to average monthly sales; for monthly data, ratio of inventories at end of month to sales for month.

Note.—Earlier data are not strictly comparable with data beginning 1958 for manufacturing and beginning 1967 for wholesale and retail trade.

The inventory figures in this table do not agree with the estimates of change in business inventories included in the gross national product since these figures cover only manufacturing and trade rather than all business, and show inventories in terms of current book value without adjustment for revaluation.

Source: Department of Commerce, Bureau of the Census.

TABLE B-50.—*Manufacturers' shipments and inventories, 1947-83*

(Millions of dollars; monthly data seasonally adjusted)

Year or month	Shipments ¹			Inventories ²								
	Total	Durable goods industries	Non-durable goods industries	Total	Durable goods industries				Nondurable goods industries			
					Total	Materials and supplies	Work in process	Finished goods	Total	Materials and supplies	Work in process	Finished goods
1947	15,513	6,694	8,819	25,897	13,061				12,836			
1948	17,316	7,579	9,738	28,543	14,662				13,881			
1949	16,126	7,191	8,935	26,321	13,060				13,261			
1950	18,634	8,845	9,789	31,078	15,539				15,539			
1951	21,714	10,493	11,221	39,306	20,991				18,315			
1952	22,529	11,313	11,216	41,136	23,731				17,405			
1953	24,843	13,349	11,494	43,948	25,878	8,966	10,720	6,206	18,070	8,317	2,472	7,409
1954	23,355	11,828	11,527	41,612	23,710	7,894	9,721	6,040	17,902	8,167	2,440	7,415
1955	26,480	14,071	12,409	45,069	26,405	9,194	10,756	6,348	18,664	8,556	2,571	7,666
1956	27,740	14,715	13,025	50,642	30,447	10,417	12,317	7,565	20,195	8,971	2,721	8,622
1957	28,736	15,237	13,499	51,871	31,728	10,608	12,837	8,125	20,143	8,775	2,864	8,624
1958	27,247	13,563	13,684	50,241	30,258	10,032	12,387	7,839	19,983	8,662	2,828	8,491
1959	30,286	15,609	14,677	52,945	32,077	10,776	13,063	8,239	20,868	9,080	2,944	8,845
1960	30,879	15,883	14,996	53,780	32,371	10,353	12,772	9,245	21,409	9,082	2,946	9,380
1961	30,923	15,616	15,307	54,885	32,544	10,279	13,203	9,063	22,341	9,493	3,110	9,738
1962	33,357	17,262	16,095	58,186	34,632	10,810	14,159	9,662	23,554	9,813	3,296	10,444
1963	35,058	18,280	16,778	60,046	35,866	11,068	14,871	9,925	24,180	9,978	3,406	10,796
1964	37,331	19,637	17,694	63,409	38,506	11,970	16,191	10,344	24,903	10,131	3,511	11,261
1965	40,995	22,221	18,774	68,185	42,257	13,325	18,075	10,854	25,928	10,448	3,806	11,674
1966	44,870	24,649	20,220	77,952	49,920	15,489	21,939	12,491	28,032	11,155	4,204	12,673
1967	46,487	25,267	21,220	84,664	55,005	16,455	25,005	13,547	29,659	11,715	4,421	13,523
1968	50,228	27,659	22,570	90,618	58,875	17,376	27,336	14,163	31,743	12,289	4,848	14,606
1969	53,501	29,437	24,064	98,202	64,739	18,693	30,408	15,639	33,463	12,724	5,122	15,617
1970	52,805	28,188	24,617	101,651	66,780	19,182	29,848	17,751	34,871	13,150	5,274	16,448
1971	55,906	29,954	25,952	102,658	66,289	19,759	28,650	17,880	36,368	13,683	5,665	17,019
1972	63,023	34,024	29,000	108,238	70,250	20,860	30,788	18,601	37,988	14,676	5,982	17,330
1973	72,937	39,686	33,250	124,628	81,398	26,028	35,545	19,823	43,230	18,132	6,707	18,391
1974	84,794	44,228	40,567	157,792	101,739	35,151	42,603	23,985	56,053	23,699	8,175	24,179
1975	86,595	43,656	42,939	159,934	102,874	33,920	43,369	25,586	57,060	23,542	8,837	24,681
1976	98,802	50,689	48,113	175,193	112,581	37,548	46,345	28,690	62,612	25,833	9,933	26,846
1977	113,202	59,267	53,935	189,195	121,575	40,256	50,395	30,720	67,620	27,401	10,996	29,223
1978	126,905	67,848	59,057	210,415	137,834	45,211	58,664	33,959	72,581	29,312	11,921	31,348
1979	143,936	76,060	67,876	241,113	160,554	52,678	69,314	38,562	80,559	32,477	13,750	34,332
1980	154,391	77,550	76,841	264,114	174,547	55,137	76,999	42,411	89,567	36,194	15,704	37,669
1981	168,129	83,872	84,257	282,333	186,222	57,953	81,107	47,162	96,111	37,726	15,995	42,390
1982	159,177	76,843	82,334	264,902	175,200	52,543	77,908	44,749	89,702	35,140	14,241	40,321
1982:												
Jan.	157,498	76,463	81,035	280,794	185,238	57,710	80,512	47,016	95,556	37,630	15,804	42,122
Feb.	160,740	78,525	82,215	280,941	185,200	57,541	80,473	47,186	95,741	37,653	15,497	42,591
Mar.	160,162	78,730	81,432	279,337	184,319	56,684	80,246	47,389	95,018	37,133	15,375	42,510
Apr.	159,118	77,808	81,310	278,468	184,053	56,538	80,080	47,435	94,415	37,289	15,373	41,753
May	163,007	79,680	83,327	276,356	183,378	55,889	79,890	47,599	92,978	36,990	15,267	40,721
June	163,120	79,197	83,923	274,912	182,811	55,618	79,802	47,391	92,101	36,632	15,301	40,168
July	162,417	78,856	83,561	274,629	182,099	55,354	79,044	47,701	92,530	36,646	15,364	40,520
Aug.	160,016	77,250	82,766	273,809	181,543	54,927	78,891	47,725	92,266	36,389	15,306	40,571
Sept.	160,458	76,419	84,039	271,675	180,520	54,355	78,776	47,389	91,155	35,801	14,949	40,405
Oct.	154,194	72,478	81,716	270,786	179,675	53,969	78,973	46,733	91,111	35,465	14,772	40,874
Nov.	154,318	73,005	81,313	267,920	177,061	53,100	78,308	45,653	90,859	35,509	14,608	40,742
Dec.	154,543	73,495	81,048	264,902	175,200	52,543	77,908	44,749	89,702	35,140	14,241	40,321
1983:												
Jan.	158,239	77,744	80,495	262,117	172,506	51,453	77,141	43,912	89,611	35,360	14,378	39,873
Feb.	158,081	77,769	80,312	260,856	171,572	51,410	76,420	43,742	89,284	35,257	14,477	39,550
Mar.	161,803	79,595	82,208	257,304	169,377	50,016	75,896	43,465	87,927	34,815	14,164	38,948
Apr.	163,065	80,241	82,824	257,397	169,814	50,268	76,018	43,528	87,583	34,722	14,347	38,514
May	167,965	82,669	85,296	258,149	170,734	50,582	76,686	43,466	87,415	34,592	14,174	38,649
June	173,920	86,582	87,338	257,390	169,840	50,333	75,928	43,579	87,550	34,989	14,206	38,355
July	172,598	85,646	86,952	258,176	169,693	50,137	76,081	43,475	88,483	35,031	14,441	39,011
Aug.	175,989	87,918	88,071	259,834	170,576	50,849	76,116	43,611	89,258	35,814	14,440	39,004
Sept.	178,590	88,970	89,620	260,021	170,385	51,006	76,270	43,109	89,636	36,176	14,477	38,983
Oct.	176,790	88,228	88,562	260,816	170,628	51,016	76,857	42,755	90,188	36,116	14,708	39,364
Nov.	181,029	92,191	88,838	260,988	170,934	51,389	76,619	42,926	90,054	36,115	14,813	39,126

¹ Monthly average for year and total for month.² 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, 1947-83

(Amounts in millions of dollars; monthly data seasonally adjusted)

Year or month	New orders ¹				Unfilled orders ²			Unfilled orders—shipments ratio ³		
	Total	Durable goods industries		Non-durable goods industries	Total	Durable goods industries	Non-durable goods industries	Total	Durable goods industries	Non-durable goods industries
		Total	Capital goods industries, non-defense							
1947	15,256	6,388		8,868	34,473	28,579	5,894			
1948	17,693	8,126		9,566	30,736	26,619	4,117			
1949	15,614	6,633		8,981	24,045	19,622	4,423			
1950	20,110	10,165		9,945	41,456	35,435	6,021			
1951	23,907	12,841		11,066	67,266	63,394	3,872			
1952	23,204	12,061		11,143	75,857	72,680	3,177			
1953	23,586	12,147		11,439	61,178	58,637	2,541			
1954	22,335	10,768		11,566	48,266	45,250	3,016	3.42	4.12	0.96
1955	27,465	14,996		12,469	60,004	56,241	3,763	3.63	4.27	1.12
1956	28,368	15,365		13,003	67,375	63,880	3,495	3.87	4.55	1.04
1957	27,559	14,111		13,448	53,183	50,352	2,831	3.35	4.00	.85
1958	27,002	13,290		13,712	47,370	44,559	2,811	3.09	3.69	.86
1959	30,724	16,003		14,720	52,732	49,373	3,359	3.01	3.54	.94
1960	30,235	15,303		14,932	45,080	42,514	2,566	2.78	3.37	.72
1961	31,104	15,759		15,345	47,407	44,375	3,032	2.63	3.13	.79
1962	33,436	17,374		16,061	48,577	45,965	2,612	2.69	3.24	.68
1963	35,524	18,709		16,815	54,327	51,270	3,057	2.80	3.37	.73
1964	38,357	20,652		17,705	66,882	63,691	3,191	3.10	3.72	.72
1965	42,100	23,278		18,823	80,071	76,298	3,773	3.33	3.95	.80
1966	46,402	26,177		20,225	98,401	94,575	3,826	3.81	4.55	.76
1967	47,056	25,825		21,231	104,547	100,576	3,971	3.70	4.40	.73
1968	50,687	28,116	6,903	22,571	109,926	105,950	3,976	3.85	4.65	.69
1969	53,950	29,871	7,660	24,079	115,422	111,250	4,172	3.75	4.50	.69
1970	52,038	27,388	6,738	24,650	106,158	101,566	4,592	3.65	4.39	.77
1971	55,983	29,998	7,444	25,986	107,147	102,119	5,027	3.38	4.06	.77
1972	64,167	35,064	8,622	29,104	121,061	114,725	6,336	3.31	3.90	.88
1973	76,259	42,930	10,971	33,330	161,256	153,876	7,380	3.91	4.63	.93
1974	87,268	46,853	12,673	40,415	191,102	185,560	5,542	4.19	5.03	.64
1975	85,149	42,019	11,011	43,130	173,829	165,930	7,898	3.80	4.57	.84
1976	99,543	51,398	12,799	48,145	182,499	174,211	8,288	3.34	3.99	.76
1977	115,061	61,111	15,291	53,950	205,675	197,215	8,460	3.31	3.94	.70
1978	131,616	72,409	19,458	59,207	262,671	252,385	10,286	3.64	4.27	.78
1979	147,466	79,513	23,231	67,953	305,453	294,230	11,223	3.92	4.66	.76
1980	156,142	79,341	23,259	76,801	325,908	315,185	10,723	3.85	4.60	.66
1981	167,924	82,744	24,059	84,199	323,346	313,337	10,009	3.82	4.64	.58
1982	157,371	75,103	20,687	82,268	300,971	291,764	9,207	3.81	4.72	.53
1982:										
Jan	157,694	76,695	21,860	80,998	323,542	313,570	9,972	3.93	4.79	.60
Feb	159,115	77,357	22,407	81,758	321,917	312,402	9,515	3.84	4.67	.56
Mar	159,576	78,176	21,708	81,400	321,331	311,848	9,483	3.82	4.65	.55
Apr	157,846	76,736	22,806	81,110	320,059	310,776	9,283	3.88	4.73	.55
May	159,466	76,353	20,306	83,113	316,518	307,449	9,069	3.77	4.59	.54
June	159,986	76,157	19,932	83,829	313,384	304,409	8,975	3.77	4.59	.53
July	158,913	75,563	19,931	83,350	309,880	301,116	8,764	3.75	4.57	.52
Aug	155,700	72,965	18,741	82,735	305,564	296,831	8,733	3.76	4.62	.51
Sept	156,572	72,348	20,217	84,224	301,678	292,760	8,918	3.71	4.55	.53
Oct	152,362	70,735	20,127	81,627	299,846	291,017	8,829	3.85	4.76	.53
Nov	152,604	71,067	19,983	81,537	298,132	289,079	9,053	3.80	4.70	.53
Dec	157,382	76,180	19,679	81,202	300,971	291,764	9,207	3.81	4.72	.53
1983:										
Jan	162,871	82,355	20,507	80,516	305,599	296,374	9,225	3.75	4.64	.53
Feb	157,757	77,449	19,175	80,308	305,268	296,049	9,219	3.79	4.67	.54
Mar	162,587	79,951	20,032	82,636	306,053	296,407	9,646	3.68	4.52	.55
Apr	166,025	83,101	22,592	82,924	309,015	299,270	9,745	3.69	4.54	.55
May	169,874	84,456	22,278	85,418	310,922	301,053	9,869	3.64	4.47	.55
June	178,489	90,905	24,289	87,584	315,488	305,374	10,114	3.55	4.33	.55
July	175,455	88,234	21,580	87,221	318,348	307,963	10,385	3.60	4.40	.57
Aug	178,302	89,978	23,028	88,324	320,664	310,024	10,640	3.58	4.40	.56
Sept	180,961	90,996	25,213	89,965	323,032	312,048	10,984	3.54	4.30	.59
Oct	181,802	93,366	26,003	88,436	328,041	317,185	10,856	3.60	4.40	.57
Nov	185,484	96,524	24,436	88,960	332,498	321,520	10,978	3.53	4.29	.56

¹ Monthly average for year and total for month.² Seasonally adjusted, end of period.³ 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, 1946-83

[1967=100]

Year or month	All items	Food and beverages		Housing				Apparel and upkeep	Transportation	Medical care	Entertainment	Other goods and services	Energy ³
		Total ¹	Food	Total ²	Shelter	Fuel and other utilities ²	Household furnishings and operation ²						
1946.....	58.5	58.1	60.6	60.6				67.5	50.3	44.4			
1947.....	66.9	70.6	65.2	65.2				78.2	55.5	48.1			
1948.....	72.1	76.6	69.8	69.8				83.3	61.8	51.1			
1949.....	71.4	73.5	70.9	70.9				80.1	66.4	52.7			
1950.....	72.1	74.5	72.8	72.8				79.0	68.2	53.7			
1951.....	77.8	82.8	77.2	77.2				86.1	72.5	56.3			
1952.....	79.5	84.3	78.7	78.7				85.3	77.3	59.3			
1953.....	80.1	83.0	80.8	80.8	76.5	83.0	91.3	84.6	79.5	61.4			
1954.....	80.5	82.8	81.7	81.7	78.2	83.5	90.9	84.5	78.3	63.4			
1955.....	80.2	81.6	82.3	79.1	85.1	89.5	89.9	84.1	77.4	64.8			
1956.....	81.4	82.2	83.6	80.4	87.3	89.9	91.9	85.8	78.8	67.2			
1957.....	84.3	84.9	86.2	83.4	89.9	91.9	92.3	87.3	83.3	69.9			90.1
1958.....	86.6	86.5	87.7	85.1	91.7	92.3	93.1	87.5	86.0	73.2			90.3
1959.....	87.3	87.1	88.6	86.0	93.8	93.1	93.1	88.2	89.6	76.4			91.8
1960.....	88.7	88.0	90.2	87.8	95.9	93.8	93.8	89.6	89.6	79.1			94.2
1961.....	89.6	89.1	90.9	88.5	97.1	93.7	93.7	90.4	90.6	81.4			94.4
1962.....	90.6	89.9	91.7	89.6	97.3	93.8	93.8	90.9	92.5	83.5			94.7
1963.....	91.7	91.2	92.7	90.7	98.2	94.6	94.6	91.9	93.0	85.6			95.0
1964.....	92.9	92.4	93.8	92.2	98.4	95.0	95.0	92.7	94.3	87.3			94.6
1965.....	94.5	94.4	94.9	93.8	98.3	95.3	95.3	93.7	95.9	89.5			96.3
1966.....	97.2	99.1	97.2	96.8	98.8	97.0	96.1	96.1	97.2	93.4			97.8
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.2	103.6	103.6	104.0	104.8	101.3	103.8	105.4	103.2	106.1	105.7	105.2	101.5
1969.....	109.8	108.8	108.9	110.4	113.3	103.6	107.7	111.5	107.2	113.4	111.0	110.4	104.2
1970.....	116.3	114.7	114.9	118.2	123.6	107.6	111.5	116.1	112.7	120.6	116.7	116.8	107.0
1971.....	121.3	118.3	118.4	123.4	128.8	115.0	115.7	119.8	118.6	128.4	122.9	122.4	111.2
1972.....	125.3	123.2	123.5	128.1	134.5	120.1	118.3	122.3	119.9	132.5	126.5	127.5	114.3
1973.....	133.1	139.5	141.4	133.7	140.7	126.9	121.6	126.8	123.8	137.7	130.0	132.5	123.5
1974.....	147.7	158.7	161.7	148.8	154.4	150.2	135.3	136.2	137.7	150.5	139.8	142.0	159.7
1975.....	161.2	172.1	175.4	164.5	169.7	167.8	151.0	142.3	150.6	168.6	152.2	153.9	176.6
1976.....	170.5	177.4	180.8	174.6	179.0	182.7	160.1	147.6	165.5	184.7	159.8	162.7	189.3
1977.....	181.5	188.0	192.2	186.5	191.1	202.2	167.5	154.2	177.2	202.4	167.7	172.2	207.3
1978.....	195.4	206.3	211.4	202.9	210.4	216.0	177.7	159.6	185.5	219.4	176.6	183.3	220.4
1979.....	217.4	228.5	234.5	227.6	239.7	239.3	190.3	166.6	212.0	239.7	188.5	196.7	275.9
1980.....	246.8	248.0	254.6	263.3	281.7	278.6	205.4	178.4	249.7	265.9	205.3	214.5	361.1
1981.....	272.4	267.3	274.6	293.5	314.7	319.2	221.3	186.9	280.0	294.5	221.4	235.7	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	416.1
1983.....	298.4	284.4	291.7	323.1	344.8	370.3	238.5	196.5	298.4	357.3	246.0	288.3	419.3
1982:													
Jan.....	282.5	273.6	281.0	306.1	328.3	336.2	228.4	187.3	289.9	313.4	229.2	248.4	416.4
Feb.....	283.4	275.8	283.3	307.3	329.5	337.1	230.2	188.0	288.0	316.2	231.2	250.3	413.0
Mar.....	283.1	275.6	283.0	306.7	327.6	339.3	231.6	191.1	285.1	318.8	232.8	252.2	406.1
Apr.....	284.3	276.5	283.9	309.4	331.4	339.2	232.6	191.9	282.9	321.7	233.9	253.8	395.7
May.....	287.1	278.1	285.5	313.8	336.7	345.4	233.4	191.5	285.6	323.8	234.4	255.0	402.1
June.....	290.6	280.2	287.8	317.5	340.9	352.2	233.7	190.8	292.8	326.4	235.6	255.8	418.6
July.....	292.2	280.8	288.5	319.2	342.8	354.7	234.1	189.7	296.1	330.0	236.6	257.2	424.5
Aug.....	292.8	279.9	287.4	320.1	344.2	356.3	233.4	191.8	296.2	333.3	237.4	258.3	424.5
Sept.....	293.3	280.1	287.6	319.7	342.6	359.5	234.2	194.9	295.3	336.0	238.3	266.6	424.2
Oct.....	294.1	279.6	287.0	320.7	342.8	363.4	235.4	195.5	295.5	338.7	240.3	271.2	425.0
Nov.....	293.6	279.1	286.4	319.0	340.7	362.2	235.1	195.4	295.8	342.2	239.9	273.8	422.6
Dec.....	292.4	279.1	286.5	316.3	335.9	364.1	235.7	193.6	294.8	344.3	240.1	276.6	419.9
1983:													
Jan.....	293.1	280.7	288.1	317.9	338.3	365.4	235.8	191.0	293.0	347.8	241.5	279.9	414.5
Feb.....	293.2	281.6	288.0	318.5	339.2	364.6	236.7	192.0	289.9	351.3	243.1	281.6	406.7
Mar.....	293.4	283.2	290.5	318.6	339.3	363.8	237.6	194.5	287.4	352.3	244.6	281.9	399.9
Apr.....	295.5	284.6	291.9	320.3	341.7	363.6	239.0	195.5	292.3	353.5	244.6	283.2	410.0
May.....	297.1	285.0	292.4	321.8	342.7	369.3	238.4	196.1	296.2	354.3	244.8	283.6	421.3
June.....	298.1	284.7	292.0	323.1	343.6	373.6	238.6	195.6	298.3	355.4	245.4	284.5	427.3
July.....	299.3	284.7	292.0	324.5	345.3	375.5	238.9	195.0	300.4	357.7	246.0	287.5	430.1
Aug.....	300.3	284.9	292.2	324.8	346.6	375.1	238.0	197.3	302.4	360.0	246.6	289.0	429.8
Sept.....	301.8	285.3	292.6	326.4	348.5	376.4	238.9	200.4	303.7	361.2	247.5	294.4	429.3
Oct.....	302.6	285.7	292.9	326.8	349.8	374.4	239.4	200.7	305.0	362.9	249.1	296.8	425.1
Nov.....	303.1	285.3	292.5	327.0	351.1	371.3	239.9	200.7	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

¹ Includes alcoholic beverages, not shown separately.

² Series beginning 1967 not comparable with series for earlier years.

³ See tables B-53 and B-54.

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.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-53.—Consumer price indexes, selected expenditure classes, 1946-83

[1967=100]

Year or month	Food and beverages			Shelter				Fuel and other utilities				
	Total ¹	Food		Total	Renters' costs			Total	Household fuels			Other utilities and public services
		Total	At home		Total	Rent, residential	Home-owners' costs		Total	Fuel oil, coal, and bottled gas	Gas (piped) and electricity	
1946.....		58.1				59.2				51.3	77.4	
1947.....		70.6	73.5			61.1				58.4	77.1	
1948.....		76.6	79.8			65.1				68.6	79.1	
1949.....		73.5	76.7			68.0				70.3	81.0	
1950.....		74.5	77.6			70.4				72.7	81.2	
1951.....		82.8	86.3			73.2				76.5	81.5	
1952.....		84.3	87.8			76.2				78.0	82.6	
1953.....		83.0	86.2	68.9	76.5	80.3		71.2	83.0	81.5	84.2	
1954.....		82.8	85.8	70.1	78.2	83.2		72.4	83.5	81.2	85.3	
1955.....		81.6	84.1	70.8	79.1	84.3		74.1	85.1	82.3	87.5	
1956.....		82.2	84.4	72.2	80.4	85.9		77.2	87.3	85.9	88.4	
1957.....		84.9	87.2	74.9	83.4	87.5		80.5	89.9	90.3	89.3	
1958.....		88.5	91.0	77.2	85.1	89.1		81.8	91.7	88.7	92.4	
1959.....		87.1	88.8	79.3	86.0	90.4		83.2	93.8	89.8	94.7	
1960.....		88.0	89.6	81.4	87.8	91.7		84.6	95.9	89.2	98.6	
1961.....		89.1	90.4	83.2	88.5	92.9		85.9	97.1	91.0	99.4	
1962.....		89.9	91.0	85.4	89.6	94.0		86.5	97.3	91.5	99.4	
1963.....		91.2	92.2	87.3	90.7	95.0		87.7	98.2	93.2	99.4	
1964.....		92.4	93.2	88.9	92.2	95.9		89.5	98.4	92.7	99.4	
1965.....		94.4	95.5	90.9	93.8	96.9		91.3	98.3	94.6	99.4	
1966.....		99.1	100.3	95.1	96.8	98.2		95.2	98.8	97.0	99.6	
1967.....	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0
1968.....	103.6	103.6	103.2	105.2	104.8	102.4		106.1	101.3	101.4	103.1	100.9
1969.....	108.8	108.9	108.2	111.6	113.3	105.7		115.0	103.6	103.4	105.6	102.8
1970.....	114.7	114.9	113.7	119.9	123.6	110.1		124.0	107.6	107.9	110.1	107.3
1971.....	118.3	118.4	116.4	126.1	128.8	115.2		133.7	115.0	115.3	117.5	114.7
1972.....	123.2	123.5	121.6	131.1	134.5	119.2		140.7	120.1	120.1	118.5	120.5
1973.....	139.5	141.4	141.4	141.4	140.7	124.3		151.0	126.9	128.4	136.0	126.4
1974.....	158.7	161.7	162.4	159.4	154.4	130.6		171.6	150.2	160.7	214.6	145.8
1975.....	172.1	175.4	175.8	174.3	169.7	137.3		187.6	167.8	183.8	235.3	169.6
1976.....	177.4	180.8	179.5	186.1	179.0	144.7		199.6	182.7	202.3	250.8	189.0
1977.....	188.0	192.2	190.2	200.3	191.1	153.5		214.7	202.2	228.6	283.4	213.4
1978.....	206.3	211.4	210.2	218.4	210.4	164.0		233.0	216.0	247.4	298.3	232.6
1979.....	228.5	234.5	232.9	242.9	239.7	176.0		256.4	239.3	286.4	403.1	257.8
1980.....	248.0	254.6	251.5	267.0	281.7	191.6		285.7	278.6	349.4	556.0	301.8
1981.....	267.3	274.6	269.9	291.0	314.7	208.2		314.4	319.2	407.0	675.9	345.9
1982.....	278.2	285.7	279.2	306.5	337.0	224.0		334.1	350.8	446.2	667.9	393.8
1983.....	284.4	291.7	282.2	319.9	344.8	236.9	102.5	346.3	370.3	469.2	628.0	428.7
1982:												
Jan.....	273.6	281.0	275.3	299.8	328.3	217.8		326.7	336.2	426.9	686.0	367.4
Feb.....	275.8	283.3	278.0	301.2	329.5	218.6		328.2	337.1	427.6	683.1	368.7
Mar.....	275.6	283.0	277.1	302.4	327.6	219.6		327.2	339.3	430.5	664.0	375.9
Apr.....	276.5	283.9	277.9	303.6	331.4	220.1		331.6	339.2	428.2	641.3	377.8
May.....	278.1	285.5	279.8	304.8	336.7	221.8		334.5	345.4	438.0	644.6	389.0
June.....	280.2	287.8	282.6	305.9	340.9	222.6		336.1	352.2	448.4	656.6	398.9
July.....	280.8	288.5	282.8	307.6	342.8	224.8		334.7	354.7	452.0	659.9	402.1
Aug.....	279.9	287.4	280.8	308.7	344.2	226.0		335.9	356.3	454.0	659.9	404.4
Sept.....	280.1	287.6	280.6	309.8	342.6	226.9		338.4	359.5	458.5	662.8	409.2
Oct.....	279.6	287.0	279.4	310.7	342.8	228.9		339.4	363.4	464.5	677.2	413.4
Nov.....	279.1	286.4	278.3	311.4	340.7	230.2		339.0	362.2	461.9	681.3	407.6
Dec.....	279.1	286.5	277.8	312.6	335.9	230.8	100.0	337.8	364.1	464.0	688.5	410.6
1983:												
Jan.....	280.7	288.1	279.3	314.5	338.3	232.2	100.7	342.9	365.4	463.5	671.1	413.5
Feb.....	281.6	289.0	280.3	315.2	339.2	233.1	100.9	339.4	364.6	461.5	654.0	414.5
Mar.....	283.2	290.5	281.9	316.5	339.3	233.6	100.9	339.9	363.8	459.7	625.3	418.0
Apr.....	284.6	291.9	283.4	318.0	341.7	234.5	101.7	343.6	363.6	459.2	610.6	420.5
May.....	285.0	292.4	283.8	318.6	342.7	235.1	102.0	344.3	369.3	468.3	621.0	429.1
June.....	284.7	292.0	283.0	319.3	340.6	235.9	102.2	345.1	373.6	475.2	620.0	437.4
July.....	284.7	292.0	282.8	319.8	345.3	237.1	102.7	346.1	375.5	477.7	619.3	440.5
Aug.....	284.9	292.2	282.5	321.0	346.6	237.2	103.0	347.9	375.1	476.5	619.0	439.1
Sept.....	285.3	292.6	282.5	322.2	348.5	239.5	103.5	346.6	376.4	478.3	623.2	440.5
Oct.....	285.7	292.9	282.3	323.9	349.8	240.4	103.9	351.1	374.4	474.4	624.7	435.6
Nov.....	285.3	292.5	281.4	324.8	351.1	241.3	104.3	353.4	371.3	468.1	623.9	428.2
Dec.....	286.5	293.9	283.0	325.5	351.8	242.0	104.5	354.7	370.6	467.4	623.9	427.5

See next page for continuation of table.

TABLE B-53.—Consumer price indexes, selected expenditure classes, 1946-83—Continued

[1967=100]

Year or month	Transportation						Medical care			
	Total	Private transportation					Public transportation	Total	Medical care commodities	Medical care services
		Total ²	New cars	Used cars	Motor fuel ³	Auto-mob ile maintenance and repair					Other
1946	50.3	54.3			54.9	52.0	34.4	44.4	76.2	40.1
1947	55.5	61.5	69.2		62.2	56.4	36.0	48.1	81.8	43.5
1948	61.8	68.2	75.6		70.4	59.6	40.7	51.1	86.1	46.4
1949	66.4	72.3	82.8		72.3	61.1	45.2	52.7	87.4	48.1
1950	68.2	72.5	83.4		71.8	62.3	48.9	53.7	88.5	49.2
1951	72.5	75.8	87.4		73.9	67.0	54.0	56.3	91.0	51.7
1952	77.3	80.8	94.9		75.8	68.6	57.5	59.3	91.8	55.0
1953	79.5	82.4	95.8	89.2	80.3	72.3	61.3	61.4	92.6	57.0
1954	78.3	80.3	94.3	75.9	82.5	74.8	65.5	63.4	93.7	58.7
1955	77.4	78.9	90.9	71.8	83.6	76.5	67.4	64.8	94.7	60.4
1956	78.8	80.1	93.5	69.1	86.5	79.5	70.0	67.2	96.7	62.8
1957	83.3	84.7	98.4	77.4	90.0	82.4	72.7	69.9	99.3	65.5
1958	86.0	87.4	101.5	80.2	88.8	83.7	76.1	73.2	102.8	68.7
1959	89.6	91.1	105.9	89.5	89.9	85.5	78.3	76.4	104.4	72.0
1960	89.6	90.6	104.5	83.6	92.5	87.2	81.0	79.1	104.5	74.9
1961	90.6	91.3	104.5	86.9	91.4	89.3	84.6	81.4	103.3	77.7
1962	92.5	93.0	104.1	94.8	91.9	90.4	87.4	83.5	101.7	80.2
1963	93.0	93.4	103.5	96.0	91.8	91.6	88.5	85.6	100.8	82.6
1964	94.3	94.7	103.2	100.1	91.4	92.8	90.1	87.3	100.5	84.6
1965	95.9	96.3	100.9	99.4	94.9	94.5	91.9	89.5	100.2	87.3
1966	97.2	97.5	99.1	97.0	97.0	96.2	95.2	93.4	100.5	92.0
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.2	103.0	102.8	(*)	101.4	105.5	103.4	104.6	106.1	100.2
1969	107.2	106.5	104.4	103.1	104.7	112.2	109.7	112.7	113.4	101.3
1970	112.7	111.1	107.6	104.3	105.6	120.6	119.2	128.5	120.6	103.6
1971	118.6	116.6	112.0	110.2	106.3	129.2	128.4	137.7	128.4	105.4
1972	119.9	117.5	111.0	110.5	107.6	135.1	129.1	143.4	132.5	105.6
1973	123.8	121.5	111.1	117.6	118.1	142.2	127.8	144.8	137.7	105.9
1974	137.7	136.6	117.5	122.6	159.9	156.8	132.4	148.0	150.5	109.6
1975	150.6	149.8	127.6	146.4	170.8	176.6	141.2	158.6	168.6	118.8
1976	165.5	164.6	135.7	167.9	177.9	189.7	163.1	174.2	184.7	126.0
1977	177.2	176.6	142.9	182.8	188.2	203.7	177.3	182.4	202.4	134.1
1978	185.5	185.0	153.8	186.5	196.3	220.6	184.6	187.8	219.4	143.5
1979	212.0	212.3	166.0	201.0	265.6	242.6	198.6	200.3	239.7	153.8
1980	249.7	249.2	179.3	208.1	369.1	268.3	222.6	251.6	265.9	168.1
1981	280.0	277.5	190.2	256.9	410.9	293.6	241.3	312.0	294.5	186.5
1982	291.5	287.5	197.6	296.4	389.4	315.8	257.8	346.0	328.7	205.7
1983	298.4	293.9	202.6	329.7	376.4	330.0	260.8	362.6	357.3	223.3
1982:										
Jan	289.9	286.6	197.4	280.5	406.1	305.5	253.3	334.9	313.4	195.9
Feb	288.0	284.5	195.5	279.7	399.2	307.7	253.4	336.8	316.2	197.7
Mar	285.1	281.3	194.4	280.9	384.1	310.2	254.5	336.7	318.8	200.0
Apr	282.9	278.8	196.0	285.1	366.9	311.9	255.1	339.3	321.7	202.4
May	285.6	281.5	197.5	291.4	370.6	313.6	255.7	342.1	323.8	204.1
June	292.8	288.9	198.1	298.2	392.4	316.0	258.7	345.6	326.4	205.6
July	296.1	292.3	198.6	302.4	400.2	318.0	260.8	347.2	330.0	206.5
Aug	296.2	292.4	198.7	304.4	398.4	319.2	260.8	348.1	333.3	208.2
Sept	295.3	291.1	197.7	304.6	394.2	320.6	260.0	353.3	336.0	209.9
Oct	295.5	291.1	197.7	306.7	390.7	321.9	261.4	356.3	338.7	211.6
Nov	295.8	291.4	199.0	310.5	388.3	322.3	260.7	356.0	342.2	212.9
Dec	294.8	290.4	200.1	312.6	381.7	323.1	259.6	355.6	344.3	213.7
1983:										
Jan	293.0	288.4	201.0	311.0	372.2	324.4	259.9	357.7	347.8	215.3
Feb	289.9	285.2	201.3	309.1	359.7	325.9	259.7	355.2	351.3	216.7
Mar	287.4	282.7	201.2	309.3	348.8	326.6	259.2	354.5	352.3	218.6
Apr	292.3	287.5	201.1	312.7	367.6	327.4	258.4	361.1	353.5	221.2
May	296.2	291.7	201.6	317.1	380.7	328.7	258.7	359.2	354.3	222.5
June	298.3	293.8	201.6	322.7	385.9	329.5	258.1	361.2	355.4	223.2
July	300.4	296.0	201.4	329.6	389.0	329.8	258.6	363.2	357.7	224.2
Aug	302.4	298.0	202.1	336.8	389.4	331.0	260.0	365.0	360.0	225.4
Sept	303.7	299.2	202.7	343.9	387.0	332.3	260.8	366.6	361.2	226.3
Oct	305.0	300.4	204.3	350.4	382.5	333.5	263.3	368.2	362.9	227.5
Nov	306.3	301.7	206.2	356.1	378.3	335.2	265.6	370.3	364.9	228.9
Dec	306.3	301.8	207.0	357.6	375.4	335.4	266.8	369.0	366.2	229.9

¹ Includes alcoholic beverages, not shown separately.² Includes direct pricing of new trucks and motorcycles, beginning September 1982.³ Includes direct pricing of diesel fuel and gasoline beginning September 1981.⁴ Not available.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.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-54.—Consumer price indexes, commodities, services, and special groups, 1939-83

[1967=100]

Year or month	Commodities						Services			Special indexes			
	All items	All commodities	Food	Commodities less food			All services	Medical care services	Services less medical care	All items less food	All items less energy	All items less food and energy	Energy ¹
				All	Durable	Non-durable							
1939.....	41.6	40.2	34.6	47.7	48.5	44.3	43.5	32.5	.....	47.2	.....	.....	.....
1940.....	42.0	40.6	35.2	48.0	48.1	44.7	43.6	32.5	.....	47.3	.....	.....	.....
1941.....	44.1	43.3	38.4	50.4	51.4	46.7	44.2	32.7	.....	48.7	.....	.....	.....
1942.....	48.8	49.6	45.1	56.0	58.4	51.6	45.6	33.7	.....	52.1	.....	.....	.....
1943.....	51.8	54.0	50.3	58.4	60.3	53.8	46.4	35.4	.....	53.6	.....	.....	.....
1944.....	52.7	54.7	49.6	61.6	65.9	56.6	47.5	36.9	.....	55.7	.....	.....	.....
1945.....	53.9	56.3	50.7	64.1	70.9	58.6	48.2	37.9	.....	56.9	.....	.....	.....
1946.....	58.5	62.4	58.1	68.1	74.1	62.9	49.1	40.1	.....	59.4	.....	.....	.....
1947.....	66.9	75.0	70.6	76.8	80.3	72.2	51.1	43.5	.....	64.9	.....	.....	.....
1948.....	72.1	80.4	76.6	82.7	86.2	77.8	54.3	46.4	.....	69.6	.....	.....	.....
1949.....	71.4	78.3	73.5	81.5	87.4	76.3	56.9	48.1	.....	70.3	.....	.....	.....
1950.....	72.1	78.8	74.5	81.4	88.4	76.2	58.7	49.2	.....	71.1	.....	.....	.....
1951.....	77.8	85.9	82.8	87.5	95.1	82.0	61.8	51.7	.....	75.7	.....	.....	.....
1952.....	79.5	87.0	84.3	88.3	96.4	82.4	64.5	55.0	.....	77.5	.....	.....	.....
1953.....	80.1	86.7	83.0	88.5	95.7	83.1	67.3	57.0	.....	79.0	.....	.....	.....
1954.....	80.5	85.9	82.8	87.5	93.3	83.5	69.5	58.7	.....	79.5	.....	.....	.....
1955.....	80.2	85.1	81.6	86.9	91.5	83.5	70.9	60.4	.....	79.7	.....	.....	.....
1956.....	81.4	85.9	82.2	87.8	91.5	85.3	72.7	62.8	.....	81.1	.....	.....	.....
1957.....	84.3	88.6	84.9	90.5	94.4	87.6	75.6	65.5	77.6	83.8	83.9	83.3	90.1
1958.....	86.6	90.6	88.5	91.5	95.9	88.2	78.5	68.7	80.4	85.7	86.3	85.2	90.3
1959.....	87.3	90.7	87.1	92.7	97.3	89.3	80.8	72.0	82.5	87.3	87.0	87.0	91.8
1960.....	88.7	91.5	88.0	93.1	96.7	90.7	83.5	74.9	85.2	88.8	88.3	88.3	94.2
1961.....	89.6	92.0	89.1	93.4	96.6	91.2	85.2	77.7	86.7	89.7	89.3	89.3	94.4
1962.....	90.6	92.8	89.9	94.1	97.6	91.8	86.8	80.2	88.1	90.8	90.4	90.4	94.5
1963.....	91.7	93.6	91.2	94.8	97.9	92.7	88.5	82.6	89.6	92.0	91.6	91.6	95.0
1964.....	92.9	94.6	92.4	95.6	98.8	93.5	90.2	84.6	91.2	93.2	92.9	92.9	94.6
1965.....	94.5	95.7	94.4	96.2	98.4	94.8	92.2	87.3	93.2	94.5	94.3	94.3	96.3
1966.....	97.2	98.2	96.1	97.5	98.5	97.0	95.8	92.0	96.4	96.7	97.3	96.6	97.8
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.2	103.7	103.6	103.7	103.1	104.1	105.2	107.3	104.9	104.4	104.4	104.6	101.5
1969.....	109.8	108.4	108.9	108.1	107.0	108.8	112.5	116.0	112.0	110.1	110.3	110.7	104.2
1970.....	116.3	113.5	114.9	112.5	111.8	113.1	121.6	124.2	121.3	116.7	117.0	117.6	107.0
1971.....	121.3	117.4	118.4	116.8	116.5	117.0	128.4	133.3	127.7	122.1	122.0	123.1	111.2
1972.....	125.3	120.9	123.5	119.4	118.9	119.8	133.3	138.2	132.6	125.8	126.1	126.9	114.3
1973.....	133.1	129.9	141.4	123.5	121.9	124.8	139.1	144.3	138.3	130.7	133.8	131.3	123.5
1974.....	147.7	145.5	161.7	136.6	130.6	140.9	152.1	159.1	150.1	143.7	146.9	142.2	159.7
1975.....	161.2	158.4	175.4	149.1	145.5	151.7	166.6	179.1	164.7	157.1	160.2	155.3	176.6
1976.....	170.5	165.2	180.8	156.6	154.3	158.3	180.4	197.1	177.7	167.5	169.2	165.5	189.3
1977.....	181.5	174.7	192.2	165.1	163.2	166.5	194.3	216.7	190.6	178.4	179.8	175.8	207.3
1978.....	195.4	187.1	211.4	174.7	173.9	174.3	210.9	235.4	206.9	191.2	193.8	188.7	220.4
1979.....	217.4	208.4	234.5	195.1	191.1	198.7	234.2	258.3	230.1	213.0	213.1	207.0	275.9
1980.....	246.8	233.9	254.6	222.0	210.4	235.2	270.3	287.4	266.6	244.0	238.0	232.0	361.1
1981.....	272.4	253.6	274.6	241.2	227.1	257.5	305.7	318.2	302.2	270.6	261.7	257.1	410.0
1982.....	289.1	263.8	285.7	250.9	241.1	261.6	333.3	356.0	328.6	288.4	279.3	276.1	416.1
1983.....	298.4	271.5	291.7	259.0	253.0	266.3	344.9	387.0	338.1	298.3	289.3	287.0	419.3
1982:													
Jan.....	282.5	258.8	281.0	245.9	233.4	260.2	323.9	339.4	320.0	281.4	272.1	268.5	416.4
Feb.....	283.4	259.5	283.3	246.0	233.7	260.1	325.3	342.4	321.1	282.1	273.4	269.5	413.0
Mar.....	283.1	258.8	283.0	245.2	233.5	258.4	325.5	345.1	321.1	281.7	273.6	269.8	406.1
Apr.....	284.3	258.9	283.9	245.0	235.8	255.0	328.4	348.0	324.0	282.9	275.7	272.2	395.7
May.....	287.1	261.5	285.5	247.8	239.8	256.2	331.8	350.2	327.5	286.0	278.3	274.9	402.1
June.....	290.6	265.1	287.8	251.9	243.2	261.2	334.9	353.0	330.7	289.7	280.7	277.3	418.6
July.....	292.2	266.5	288.5	253.5	244.7	263.0	337.0	357.3	332.5	291.5	282.0	278.7	424.5
Aug.....	292.8	266.4	287.4	253.8	244.6	263.6	338.9	361.0	334.1	292.5	282.7	279.8	424.5
Sept.....	293.3	266.6	287.6	253.9	244.1	264.6	339.7	364.0	334.8	292.9	283.1	280.4	424.2
Oct.....	294.1	267.5	287.0	255.4	246.0	265.7	340.3	366.9	335.1	294.0	284.0	281.5	425.0
Nov.....	293.6	267.8	286.4	256.0	246.6	266.1	338.6	371.0	332.9	293.6	283.6	281.2	422.6
Dec.....	292.4	267.7	286.5	255.8	247.3	264.7	335.6	373.4	329.3	292.1	282.5	279.9	419.9
1983:													
Jan.....	293.1	267.2	288.1	254.4	247.3	262.4	337.9	377.4	331.4	292.6	283.8	281.1	414.5
Feb.....	293.2	266.7	289.0	253.2	247.1	260.5	338.9	381.5	332.2	292.6	284.7	282.0	406.7
Mar.....	293.4	266.7	290.5	252.4	247.4	258.9	339.4	382.2	332.7	292.4	285.6	282.6	399.9
Apr.....	295.5	269.2	291.9	255.4	248.7	263.0	341.2	382.8	334.5	294.7	287.0	284.0	410.0
May.....	297.1	270.9	292.4	257.6	249.5	266.3	342.6	383.5	336.0	296.5	287.6	284.7	421.3
June.....	298.1	271.6	292.0	258.9	251.2	267.3	344.0	384.6	337.4	297.8	288.2	285.5	427.3
July.....	299.3	272.5	292.0	260.2	252.9	268.4	345.6	387.2	338.9	299.3	289.2	286.8	430.1
Aug.....	300.3	273.4	292.2	261.4	254.3	269.6	346.8	388.3	339.9	300.5	290.3	288.2	429.8
Sept.....	301.8	274.5	292.6	262.9	256.4	270.6	349.0	391.0	342.2	302.3	292.1	290.2	429.3
Oct.....	302.6	275.0	292.9	263.6	258.7	270.2	350.2	392.9	343.3	303.2	293.4	291.8	425.1
Nov.....	303.1	275.2	293.5	264.1	261.0	269.5	351.0	395.0	344.1	303.9	294.4	293.2	419.9
Dec.....	303.5	275.5	293.9	263.8	261.8	268.5	351.6	396.3	344.5	304.0	295.0	293.6	418.0

¹ 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. 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.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-55.—Changes in consumer price indexes, 1958-83

(Percent change)

Year or month	All items		All items less food		All items less energy		All items less food and energy		All items less food, energy, and shelter	
	Dec. to Dec. ¹	Year to Year	Dec. to Dec. ¹	Year to Year	Dec. to Dec. ¹	Year to Year	Dec. to Dec. ¹	Year to Year	Dec. to Dec. ¹	Year to Year
1958.....	1.8	2.7	1.6	2.3	1.9	2.9	1.8	2.3		
1959.....	1.5	.8	2.3	1.9	1.4	.8	2.2	2.1		
1960.....	1.5	1.6	1.0	1.7	1.4	1.5	.8	1.5		
1961.....	.7	1.0	1.1	1.0	.8	1.1	1.5	1.1		
1962.....	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.3		
1963.....	1.6	1.2	1.6	1.3	1.8	1.3	1.8	1.2		
1964.....	1.2	1.3	1.0	1.3	1.3	1.4	1.2	1.5		
1965.....	1.9	1.7	1.6	1.4	1.9	1.5	1.5	1.4		
1966.....	3.4	2.9	3.3	2.3	3.5	3.2	3.3	2.4		
1967.....	3.0	2.9	3.5	3.4	3.1	2.8	3.9	3.5		
1968.....	4.7	4.2	4.9	4.4	4.9	4.4	5.1	4.6	4.6	4.6
1969.....	6.1	5.4	5.7	5.5	6.4	5.7	6.1	5.8	5.0	4.8
1970.....	5.5	5.9	6.5	6.0	5.6	6.1	6.6	6.2	5.7	5.1
1971.....	3.4	4.3	3.1	4.6	3.3	4.3	3.1	4.7	3.2	4.9
1972.....	3.4	3.3	3.0	3.0	3.5	3.4	3.0	3.1	2.6	2.4
1973.....	8.8	6.2	5.6	3.9	8.3	6.1	4.7	3.5	3.5	3.0
1974.....	12.2	11.0	12.2	9.9	11.5	9.8	11.3	8.3	11.3	7.6
1975.....	7.0	9.1	7.1	9.3	6.7	9.1	6.7	9.2	6.4	8.9
1976.....	4.8	5.8	6.2	6.6	4.6	5.6	6.1	6.6	7.0	7.0
1977.....	6.8	6.5	6.3	6.5	6.8	6.3	6.4	6.2	5.2	6.0
1978.....	9.0	7.7	8.5	7.2	9.2	7.8	8.5	7.3	6.5	5.7
1979.....	13.3	11.3	14.0	11.4	11.1	10.0	11.3	9.7	7.2	6.9
1980.....	12.4	13.5	12.9	14.6	11.7	11.7	12.1	12.5	9.9	8.8
1981.....	8.9	10.4	9.9	10.9	8.6	10.0	9.6	10.4	9.4	9.5
1982.....	3.9	6.1	4.0	6.6	4.2	6.7	4.5	7.4	6.1	7.7
1983.....	3.8	3.2	4.1	3.4	4.4	3.6	4.9	3.9	5.0	5.2
Change from preceding month										
	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed
1982:										
Jan.....	0.4	0.3	0.2	0.2	0.4	0.4	0.2	0.4	0.3	0.5
Feb.....	.3	.1	.2	0	.5	.5	.4	.5	.4	.4
Mar.....	-.1	-.0	-.1	-.1	.1	.1	.1	.1	.7	.6
Apr.....	.4	.2	.4	.2	.8	.7	.9	.8	.7	.5
May.....	1.0	1.0	1.1	1.1	.9	.8	1.0	.8	.5	.4
June.....	1.2	1.1	1.3	1.2	.9	.7	.9	.8	.6	.8
July.....	.6	.6	.6	.6	.5	.5	.5	.6	.4	.5
Aug.....	.2	.3	.3	.4	.2	.4	.4	.4	.4	.4
Sept.....	.2	.1	.1	.1	.1	.2	.2	.1	.8	.4
Oct.....	.3	.4	.4	.4	.3	.2	.4	.2	.6	.6
Nov.....	-.2	0	-.1	-.0	-.1	-.1	-.1	-.1	.3	.2
Dec.....	-.4	-.3	-.5	-.3	-.4	-.2	-.5	-.2	.2	.5
1983:										
Jan.....	.2	.2	.2	.3	.5	.4	.4	.5	.3	.5
Feb.....	.0	-.2	0	-.3	.3	.3	.3	.4	.4	.4
Mar.....	.1	.1	-.1	.1	.3	.3	.2	.2	.4	.3
Apr.....	.7	.6	.8	.6	.5	.4	.5	.4	.4	.2
May.....	.5	.5	.6	.6	.2	.3	.3	.3	.2	.2
June.....	.3	.2	.4	.3	.2	.2	.3	.3	.3	.4
July.....	.4	.4	.5	.5	.3	.4	.5	.6	.4	.6
Aug.....	.3	.4	.4	.5	.4	.4	.5	.5	.5	.5
Sept.....	.5	.5	.6	.5	.6	.4	.7	.5	.8	.5
Oct.....	.3	.4	.3	.4	.4	.5	.6	.5	.6	.6
Nov.....	.2	.3	.2	.4	.3	.4	.5	.4	.5	.4
Dec.....	.1	.3	.0	.2	.2	.3	.1	.3	.1	.3

¹ 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. 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.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-56.—Changes in consumer price indexes, commodities and services, 1948–83

(Percent change)

Year or month	All items		Commodities						Services				Energy ²	
	Dec. to Dec. ¹	Year to year	Total		Food		Commodities less food		Total		Medical care services		Dec. to Dec. ¹	Year to year
			Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year		
1948.....	2.7	7.8	1.7	7.2	-0.8	8.5	5.3	7.7	6.1	6.3	7.0	6.7	.....	.....
1949.....	-1.8	-1.0	-4.1	-2.6	-3.7	-4.0	-4.8	-1.5	3.6	4.8	2.1	3.7	.....	.....
1950.....	5.8	1.0	7.7	.6	9.6	1.4	5.7	-1.1	3.6	3.2	3.3	2.3	.....	.....
1951.....	5.9	7.9	5.9	9.0	7.4	11.1	4.6	7.5	5.2	5.3	5.8	5.1	.....	.....
1952.....	9	2.2	-7	1.3	-1.1	1.8	-5	.9	4.6	4.4	5.5	6.4	.....	.....
1953.....	.6	.8	-6	-3	-1.3	-1.5	.2	.2	4.2	4.3	3.6	3.6	.....	.....
1954.....	-5	.5	-1.4	-9	-1.6	-2	-1.4	-1.1	1.9	3.3	2.6	3.0	.....	.....
1955.....	4	-4	-4	-9	-9	-1.4	0	-7	2.3	2.0	3.2	2.9	.....	.....
1956.....	2.9	1.5	2.6	.9	3.1	.7	2.5	1.0	3.1	2.5	4.1	4.0	.....	.....
1957.....	3.0	3.6	2.6	3.1	2.8	3.3	2.2	3.1	4.5	4.0	4.5	4.3	.....	.....
1958.....	1.8	2.7	1.3	2.3	2.2	4.2	.8	1.1	2.7	3.8	4.9	4.9	-0.7	0.2
1959.....	1.5	.8	.6	.1	-.8	-1.6	1.5	1.3	3.7	2.9	4.6	4.8	4.3	1.7
1960.....	1.5	1.6	1.1	.9	3.1	1.0	-3	.4	2.7	3.3	3.8	4.0	1.5	2.6
1961.....	.7	1.0	0	.5	-.9	1.3	.6	.3	1.9	2.0	3.5	3.7	-1.1	.2
1962.....	1.2	1.1	1.0	.9	1.5	.9	.7	.7	1.7	1.9	3.0	3.2	2.1	.3
1963.....	1.6	1.2	1.4	.9	1.9	1.4	1.2	.7	2.3	2.0	2.6	3.0	-.8	.3
1964.....	1.2	1.3	.8	1.1	1.4	1.3	.4	.8	1.8	1.9	2.6	2.4	-.2	-.4
1965.....	1.9	1.7	1.6	1.2	3.4	2.2	.7	.6	2.6	2.2	3.5	3.2	2.0	1.8
1966.....	3.4	2.9	2.5	2.6	3.9	5.0	1.9	1.4	4.9	3.9	8.1	5.4	1.8	1.6
1967.....	3.0	2.9	2.5	1.8	1.2	.9	3.1	2.6	4.0	4.4	7.9	8.7	1.4	2.2
1968.....	4.7	4.2	3.8	3.7	4.3	3.6	3.7	3.7	6.1	5.2	7.4	7.3	1.7	1.5
1969.....	6.1	5.4	5.5	4.5	7.2	5.1	4.5	4.2	7.4	6.9	7.0	8.1	3.1	2.7
1970.....	5.5	5.9	4.0	4.7	2.2	5.5	4.8	4.1	8.2	8.1	8.3	7.1	4.5	2.7
1971.....	3.4	4.3	2.9	3.4	4.3	3.0	2.3	3.8	4.1	5.6	5.3	7.3	3.1	3.9
1972.....	3.4	3.3	3.4	3.0	4.7	4.3	2.5	2.2	3.6	3.8	3.8	3.7	2.8	2.8
1973.....	8.8	6.2	10.4	7.4	20.1	14.5	5.0	3.4	6.2	4.4	5.8	4.4	16.8	8.0
1974.....	12.2	11.0	12.7	12.0	12.2	14.4	13.2	10.6	11.3	9.3	13.3	10.3	21.6	29.3
1975.....	7.0	9.1	6.3	8.9	6.5	8.5	6.2	9.2	8.1	9.5	10.3	12.6	11.6	10.6
1976.....	4.8	5.8	3.3	4.3	.6	3.1	5.1	5.0	7.3	8.3	10.7	10.1	6.9	7.2
1977.....	6.8	6.5	6.1	5.8	8.0	6.3	4.9	5.4	7.9	7.7	9.0	9.9	7.2	9.5
1978.....	9.0	7.7	8.9	7.1	11.8	10.0	7.7	5.8	9.3	8.5	9.2	8.6	8.0	6.3
1979.....	13.3	11.3	13.0	11.4	10.2	10.9	14.3	11.7	13.7	11.0	10.6	9.7	37.4	25.2
1980.....	12.4	13.5	11.1	12.2	10.2	8.6	11.5	13.8	14.2	15.4	10.0	11.3	18.1	30.9
1981.....	8.9	10.4	6.0	8.4	4.3	7.9	6.7	8.6	13.0	13.1	12.7	10.7	11.9	13.5
1982.....	3.9	6.1	3.6	4.0	3.1	4.0	3.8	4.0	4.3	9.0	11.2	11.9	1.3	1.5
1983.....	3.8	3.2	2.9	2.9	2.6	2.1	3.1	3.2	4.8	3.5	6.1	8.7	-.5	.8

¹ Changes from December to December are based on unadjusted indexes.² 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. 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.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-57.—*Producer price indexes by stage of processing, 1947-83*

[1967=100]

Year or month	Finished goods									Total finished consumer goods
	Total finished goods	Consumer foods			Finished goods excluding consumer foods					
		Total	Crude	Proc- essed	Total	Consumer goods			Capital equipment	
						Total	Durable	Non-durable		
1947.....	74.0	82.8	99.4	80.2	79.0	74.6	80.7	55.4	80.5	
1948.....	79.9	90.4	107.1	87.6	84.0	79.7	85.8	60.4	86.5	
1949.....	77.6	83.1	101.3	80.1	82.2	81.8	82.3	63.4	82.5	
1950.....	79.0	84.7	92.2	83.4	83.5	82.7	83.6	64.9	83.9	
1951.....	86.5	95.2	105.9	93.2	89.5	88.2	90.0	71.2	91.8	
1952.....	86.0	94.3	112.8	91.3	88.3	88.9	87.8	72.4	90.7	
1953.....	85.1	89.4	105.2	86.7	89.1	89.6	88.6	73.6	89.2	
1954.....	85.3	88.7	94.7	87.6	89.4	90.3	88.9	74.5	89.1	
1955.....	85.5	86.5	98.8	84.4	90.1	91.2	89.4	76.7	88.5	
1956.....	87.9	86.3	98.7	84.3	92.3	94.3	91.1	82.4	89.8	
1957.....	91.1	89.3	97.4	87.9	94.6	97.1	93.2	87.5	92.4	
1958.....	93.2	94.5	103.5	93.1	94.7	98.4	92.6	89.8	94.4	
1959.....	93.0	90.1	94.3	89.5	95.9	99.6	94.0	91.5	93.6	
1960.....	93.7	92.1	100.6	90.7	96.3	99.2	94.7	91.7	94.5	
1961.....	93.7	91.7	96.1	90.9	96.2	98.8	94.7	91.8	94.3	
1962.....	94.0	92.5	97.0	91.7	96.0	98.3	94.8	92.2	94.6	
1963.....	93.7	91.4	95.5	90.7	96.0	97.8	95.1	92.4	94.1	
1964.....	94.1	91.9	98.2	90.8	95.9	98.2	94.8	93.3	94.3	
1965.....	95.7	95.4	98.6	94.9	96.6	97.9	95.9	94.4	96.1	
1966.....	98.8	101.6	104.8	101.0	98.1	98.5	97.8	96.8	99.4	
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1968.....	102.8	103.6	107.5	103.0	102.6	102.1	102.2	103.5	102.7	
1969.....	106.6	110.0	116.0	108.9	105.4	104.6	105.0	106.9	106.6	
1970.....	110.3	113.5	116.3	113.1	109.1	107.7	106.9	108.3	109.9	
1971.....	113.7	115.3	115.8	115.1	113.1	111.4	110.8	111.7	112.9	
1972.....	117.2	121.7	121.2	121.7	115.4	113.5	113.3	113.6	119.5	
1973.....	127.9	146.4	160.7	143.9	120.1	118.6	115.4	120.5	123.5	
1974.....	147.5	166.9	180.8	164.6	139.3	138.6	125.9	146.8	141.0	
1975.....	163.4	181.0	181.2	181.3	156.2	153.1	138.2	163.0	162.5	
1976.....	170.6	180.4	193.9	177.8	166.1	162.6	144.5	174.8	173.4	
1977.....	181.7	189.9	201.0	187.3	177.7	174.3	152.8	189.3	184.6	
1978.....	195.9	207.2	216.8	204.6	190.7	186.7	166.9	200.0	199.2	
1979.....	217.7	226.2	233.1	223.8	213.3	211.5	183.2	231.3	216.5	
1980.....	247.0	239.5	237.2	237.8	247.8	250.8	206.2	283.9	248.9	
1981.....	269.8	253.6	263.8	250.6	273.3	276.5	218.6	319.6	271.3	
1982.....	280.7	259.3	252.7	257.7	285.8	287.8	226.7	333.6	279.4	
1983 ¹	285.2	261.8	259.5	259.9	290.9	291.3	233.1	335.3	287.3	
1982:										
Jan.....	277.9	256.4	280.6	252.1	283.0	285.2	226.2	329.3	276.2	
Feb.....	277.9	258.2	282.5	254.0	282.4	284.9	224.0	330.3	275.0	
Mar.....	277.3	257.1	283.3	254.5	281.9	284.0	223.9	328.8	275.8	
Apr.....	277.3	260.0	286.6	257.3	281.1	282.3	224.1	325.7	277.2	
May.....	277.8	262.3	259.9	260.3	281.0	281.8	225.0	324.3	278.1	
June.....	279.9	263.4	254.7	262.0	283.4	284.8	225.9	328.7	279.2	
July.....	281.7	260.6	241.0	260.2	286.7	288.8	226.7	335.3	280.2	
Aug.....	282.3	259.7	239.2	259.4	287.9	290.2	227.5	337.2	280.7	
Sept.....	281.2	259.9	228.2	260.6	286.3	288.9	223.0	338.3	278.7	
Oct.....	284.1	257.7	232.4	257.9	290.8	293.3	231.0	340.0	283.2	
Nov.....	284.9	257.4	236.1	257.2	292.0	294.8	231.2	342.5	283.8	
Dec.....	285.5	258.3	247.6	257.1	292.5	295.0	232.0	342.2	284.9	
1983: ¹										
Jan.....	283.9	258.4	232.9	258.5	290.3	291.4	231.7	336.6	285.2	
Feb.....	284.1	261.0	240.8	260.7	289.6	290.3	232.9	337.7	285.6	
Mar.....	283.4	261.1	247.9	260.1	288.7	288.9	231.9	332.0	285.6	
Apr.....	283.1	262.9	265.8	260.5	287.7	287.3	232.2	328.7	286.2	
May.....	284.2	262.6	267.2	260.1	289.3	289.4	232.9	332.0	286.5	
June.....	285.0	261.2	251.2	260.0	290.8	291.6	233.1	335.7	286.7	
July.....	285.7	260.7	247.1	259.8	291.8	292.8	233.4	337.7	287.2	
Aug.....	286.1	260.7	259.9	258.7	292.5	293.5	233.8	338.6	287.7	
Sept.....	285.1	263.3	269.8	260.5	290.3	291.3	228.9	338.6	285.4	
Oct.....	287.9	264.3	289.8	259.9	293.7	293.8	235.4	337.9	287.1	
Nov.....	286.8	261.8	272.8	258.7	293.0	293.0	235.3	336.6	285.8	
Dec.....	287.1	264.0	269.1	261.5	292.6	292.5	235.7	335.3	286.1	

See next page for continuation of table.

TABLE B-57.—*Producer price indexes by stage of processing, 1947-83—Continued*

[1967=100]

Year or month	Intermediate materials, supplies, and components							Crude materials for further processing					
	Total	Foods and feeds ^a	Other	Materials and components		Processed fuels and lubricants	Containers	Supplies	Total	Food-stuffs and feed-stuffs	Other		
				For manufacturing	For construction						Total	Fuel	Other
1947.....	72.4	.....	70.0	72.1	66.0	85.5	66.8	77.5	101.2	111.7	.....	66.6	90.6
1948.....	78.3	.....	76.1	77.8	73.1	96.9	69.8	81.0	110.9	120.8	.....	78.7	100.7
1949.....	75.2	.....	74.2	74.5	73.2	88.2	70.1	76.3	96.0	100.3	.....	78.3	91.6
1950.....	78.6	.....	77.7	78.1	77.0	89.9	72.0	78.9	104.6	107.6	.....	77.9	104.7
1951.....	88.1	.....	87.0	88.5	84.3	93.9	84.5	88.8	120.1	124.5	.....	79.4	120.7
1952.....	85.5	.....	84.3	84.8	83.7	92.8	79.9	88.8	110.3	117.2	.....	79.9	104.6
1953.....	86.0	.....	85.3	86.2	85.1	93.4	80.0	84.3	101.9	104.9	.....	82.7	100.1
1954.....	86.5	.....	85.7	86.3	85.5	93.3	81.5	86.3	101.0	104.9	.....	79.0	98.2
1955.....	88.1	.....	88.3	88.4	88.9	93.3	82.6	84.8	97.1	95.1	.....	78.8	103.8
1956.....	92.0	.....	92.6	92.6	93.5	96.2	88.6	87.1	97.6	93.1	.....	84.4	107.6
1957.....	94.1	.....	95.0	94.8	94.0	101.9	92.5	88.0	99.8	97.2	.....	89.2	106.2
1958.....	94.3	.....	94.8	95.2	94.0	96.0	94.7	90.0	102.0	103.0	.....	90.3	102.2
1959.....	95.6	.....	96.4	96.5	96.6	95.6	94.2	91.2	99.4	96.2	.....	91.9	105.8
1960.....	95.6	.....	96.8	96.5	95.9	98.2	95.5	90.7	97.0	95.1	.....	92.8	101.4
1961.....	95.0	.....	95.5	95.3	94.6	99.4	94.7	91.8	96.5	93.8	.....	92.6	102.5
1962.....	94.9	.....	95.3	94.7	94.2	99.0	95.9	93.8	97.5	95.7	.....	92.1	102.0
1963.....	95.2	.....	95.0	94.9	94.5	98.1	94.7	95.2	95.4	92.9	.....	93.2	100.7
1964.....	95.5	.....	95.6	95.9	95.4	96.0	94.0	94.3	94.5	90.8	.....	92.8	102.4
1965.....	96.8	.....	96.9	97.4	96.2	97.4	95.8	95.2	99.3	97.1	.....	93.5	104.5
1966.....	99.2	.....	98.9	99.3	98.8	99.2	98.4	99.4	105.7	105.9	.....	96.3	106.7
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	102.3	99.4	102.5	102.2	105.0	97.6	102.4	101.0	101.6	101.3	102.2	102.3	102.1
1969.....	105.8	102.7	106.1	105.8	110.8	98.5	106.3	102.8	108.4	109.3	106.8	106.6	106.9
1970.....	109.9	109.1	109.9	110.0	112.6	105.0	111.4	108.0	112.3	112.0	112.7	122.6	109.8
1971.....	114.1	111.7	114.3	112.8	119.7	115.2	116.6	111.0	115.1	114.2	117.0	139.0	110.7
1972.....	118.7	118.5	118.9	117.0	126.2	118.9	121.9	115.6	127.6	127.5	128.0	148.7	121.9
1973.....	131.6	168.4	128.1	127.7	136.7	131.5	129.2	140.6	174.0	180.0	162.5	164.5	161.5
1974.....	162.9	200.2	159.5	162.2	161.6	199.1	152.2	154.5	196.1	189.4	208.9	219.4	205.4
1975.....	180.0	195.3	178.6	178.7	176.4	233.0	171.4	168.1	196.9	191.8	206.9	271.5	188.3
1976.....	189.1	185.3	189.4	185.4	188.4	250.1	180.2	179.0	202.7	190.2	228.5	305.3	206.7
1977.....	201.5	190.5	202.3	195.4	203.4	282.5	188.3	188.7	209.2	192.1	245.0	372.1	212.2
1978.....	215.6	203.1	216.5	208.7	224.7	295.3	202.8	198.5	234.4	216.2	272.3	426.8	233.1
1979.....	243.2	226.1	244.4	234.4	247.4	364.8	226.8	218.2	274.3	247.9	330.0	507.6	284.5
1980.....	280.3	252.6	282.3	265.7	268.3	503.0	254.5	244.5	304.6	259.2	401.0	615.0	346.1
1981.....	306.0	250.3	310.1	286.1	287.6	595.4	276.1	263.8	329.0	257.4	482.3	751.2	413.7
1982.....	310.4	239.4	315.7	289.8	293.7	591.7	285.6	272.1	319.5	247.8	473.9	886.1	376.8
1983 ¹	312.4	247.8	317.2	293.3	301.7	566.8	286.6	277.0	323.6	252.3	477.2	931.5	372.0
1982: Jan.....	311.0	238.8	316.4	290.4	292.0	604.4	282.5	269.8	318.4	242.6	481.5	812.9	399.5
Feb.....	311.1	239.4	316.4	290.9	293.0	596.8	285.5	270.4	321.6	248.3	479.3	824.5	394.8
Mar.....	310.6	237.7	316.0	290.4	293.3	593.0	286.3	270.6	320.0	247.9	475.2	839.7	387.1
Apr.....	309.9	240.9	315.1	290.6	294.0	579.9	287.0	272.1	322.6	254.4	469.9	851.2	378.8
May.....	309.8	245.0	314.6	291.4	293.7	570.9	287.0	273.4	328.3	262.6	470.2	864.8	376.6
June.....	309.9	245.1	314.7	289.8	294.5	581.1	286.5	273.4	325.6	259.9	467.7	883.9	370.0
July.....	311.1	243.6	316.1	289.2	294.3	600.7	286.3	273.1	323.4	255.5	469.8	901.3	369.2
Aug.....	310.8	240.2	316.0	288.7	293.5	603.8	285.4	272.6	319.8	249.6	471.0	906.9	369.5
Sept.....	310.5	238.1	315.9	289.9	294.2	592.3	285.3	272.2	316.1	242.9	473.7	923.5	369.5
Oct.....	309.9	234.4	315.5	289.4	293.7	590.0	285.1	272.0	312.0	236.3	474.8	917.2	371.9
Nov.....	309.9	234.4	315.5	288.7	293.6	593.0	284.9	272.8	313.2	236.3	478.6	954.7	369.2
Dec.....	310.1	235.1	315.7	288.3	294.7	595.0	285.0	273.0	312.7	237.1	475.3	952.2	365.8
1983: Jan.....	309.2	236.4	314.6	288.6	296.5	577.9	285.0	273.1	313.9	239.6	473.6	930.7	368.0
Feb.....	309.9	238.8	315.2	291.1	298.8	565.4	285.3	273.5	320.2	249.3	473.0	937.7	366.0
Mar.....	309.5	238.0	314.8	290.2	299.6	564.2	285.2	273.9	321.6	249.1	477.7	961.8	366.8
Apr.....	308.7	243.6	313.6	291.0	300.9	543.3	284.8	275.5	325.8	256.8	474.6	941.6	367.0
May.....	309.7	244.4	314.6	291.9	301.2	547.8	285.8	275.6	325.8	256.5	475.4	935.9	369.0
June.....	311.3	242.8	316.4	292.4	302.4	562.0	285.9	275.6	323.3	252.1	476.8	936.7	370.5
July.....	312.8	244.0	318.0	294.1	302.9	567.9	286.1	276.2	320.6	248.4	476.2	927.8	371.6
Aug.....	314.0	250.9	318.7	294.7	303.7	572.0	286.3	277.9	327.1	256.4	479.6	926.9	375.6
Sept.....	315.7	262.2	319.8	296.3	302.8	579.2	287.3	280.1	328.3	257.4	481.1	931.2	376.6
Oct.....	316.0	258.2	320.4	296.4	303.5	579.9	288.3	280.4	324.5	253.9	476.7	911.2	375.3
Nov.....	315.7	257.1	320.1	296.1	304.0	574.0	289.3	281.0	324.1	252.0	479.5	915.2	377.7
Dec.....	315.8	256.6	320.3	297.0	304.6	568.5	289.5	281.0	327.8	256.2	482.1	921.4	379.6

¹ Data have been revised through August 1983 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.^a Intermediate materials for food manufacturing and feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-58.—*Producer price indexes by stage of processing, special groups, 1974-83*

[1967=100]

Year or month	Finished goods						Intermediate materials, supplies, and components				Crude materials for further processing			
	Total	Foods	Energy	Excluding foods and energy			Total	Foods and feeds ¹	Energy	Other	Total	Food-stuffs and feed-stuffs	Energy	Other
				Total	Capital equipment	Consumer goods excluding foods and energy								
1974.....	147.5	166.9	215.2	133.3	141.0	129.1	162.9	200.2	188.7	156.7	196.1	189.4	223.0	198.3
1975.....	163.4	181.0	252.4	148.5	162.5	141.0	180.0	195.3	220.8	174.7	196.9	191.8	266.9	165.0
1976.....	170.6	180.4	282.3	156.8	173.4	148.1	189.1	185.3	236.8	185.0	202.7	190.2	283.1	191.0
1977.....	181.7	189.9	326.7	166.3	184.6	156.6	201.5	190.5	267.3	196.1	209.2	192.1	323.5	190.1
1978.....	195.9	207.2	347.7	178.7	199.2	168.0	215.6	203.1	280.3	210.4	234.4	216.2	362.5	209.2
1979.....	217.7	226.2	469.9	194.7	216.5	183.3	243.2	226.1	348.6	234.2	274.3	247.9	439.9	253.0
1980.....	247.0	239.5	701.3	216.4	239.8	204.2	280.3	252.6	484.9	261.8	304.6	259.2	586.1	269.4
1981.....	269.8	253.6	835.4	235.1	264.3	220.1	306.0	250.3	573.6	283.4	329.0	257.4	783.4	266.0
1982.....	280.7	259.3	822.9	248.6	279.4	232.6	310.4	239.4	570.8	290.1	319.5	247.8	801.5	258.1
1983 ²	285.2	261.8	784.0	256.1	287.3	239.9	312.4	247.8	545.8	294.7	323.6	252.3	791.2	230.3
1982:														
Jan.....	277.9	256.4	842.3	244.7	276.2	228.6	311.0	238.8	582.6	289.4	318.4	242.6	801.5	250.3
Feb.....	277.9	258.2	832.6	244.6	275.0	229.0	311.1	239.4	575.7	290.2	321.6	248.3	796.9	249.9
Mar.....	277.3	257.1	814.0	245.2	275.8	229.5	310.6	237.7	572.2	290.2	320.0	247.9	788.8	248.5
Apr.....	277.3	260.0	775.3	246.4	277.2	230.6	309.9	240.9	560.2	290.7	322.6	254.4	778.5	246.8
May.....	277.8	262.3	758.2	247.3	278.1	231.5	309.8	245.0	552.0	291.1	328.3	262.6	784.0	243.7
June.....	279.9	263.4	789.8	248.1	279.2	232.1	309.9	245.1	561.4	290.1	325.6	259.9	792.0	234.3
July.....	281.7	260.6	834.7	248.8	280.2	232.6	311.1	243.6	579.3	289.6	323.4	255.5	799.4	232.9
Aug.....	282.3	259.7	844.3	249.5	280.7	233.3	310.8	240.2	582.2	289.2	319.8	249.6	801.7	233.3
Sept.....	281.2	259.9	843.5	247.9	278.7	232.0	310.5	238.1	571.6	290.2	316.1	242.9	808.6	233.1
Oct.....	284.1	257.7	839.8	252.8	283.2	236.9	309.9	234.4	569.0	290.1	312.0	236.3	815.6	230.3
Nov.....	284.9	257.4	854.0	253.2	283.8	237.3	309.9	234.4	571.2	289.9	313.2	236.3	829.9	227.0
Dec.....	285.5	258.3	845.7	254.2	284.9	238.2	310.1	235.1	572.5	290.0	312.7	237.1	821.2	227.4
1983: ²														
Jan.....	283.9	258.4	811.1	253.8	285.2	237.5	309.2	236.4	556.8	290.5	313.9	239.6	812.1	230.7
Feb.....	284.1	261.0	788.0	254.5	285.6	238.5	309.9	238.8	545.3	292.4	320.2	249.3	799.9	237.8
Mar.....	283.4	261.1	774.1	254.4	285.6	238.2	309.5	238.0	543.7	292.3	321.6	249.1	801.6	244.3
Apr.....	283.1	262.9	749.2	254.9	286.2	238.7	308.7	243.6	524.3	293.1	325.8	256.8	793.3	244.7
May.....	284.2	262.6	769.0	255.3	286.5	239.2	309.7	244.4	528.0	293.7	325.8	256.5	790.9	247.5
June.....	285.0	261.2	791.1	255.6	286.7	239.5	311.3	242.8	541.0	294.3	323.3	252.1	791.1	249.7
July.....	285.7	260.7	794.1	256.5	287.2	240.5	312.8	244.0	546.4	295.4	320.6	248.4	786.3	251.9
Aug.....	286.1	260.7	797.6	256.9	287.7	240.9	314.0	250.9	550.1	295.8	327.1	256.4	785.8	257.7
Sept.....	285.1	263.3	797.0	254.6	285.4	238.7	315.7	262.2	556.7	296.4	328.3	257.4	788.1	258.7
Oct.....	287.9	264.3	789.3	258.7	290.9	242.0	316.0	258.2	557.4	297.0	324.5	253.9	780.0	256.9
Nov.....	286.8	261.8	778.5	258.6	290.3	242.2	315.7	257.1	552.1	297.2	324.1	252.0	781.7	260.3
Dec.....	287.1	264.0	769.4	258.8	290.5	242.4	315.8	256.6	547.2	298.0	327.8	256.2	783.6	263.3

¹ Intermediate materials for food manufacturing and feeds.² Data have been revised through August 1983 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-59.—*Producer price indexes for major commodity groups, 1947-83*

[1967=100]

Year or month	Farm products and processed foods and feeds			Industrial commodities				
	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products, and power ¹	Chemicals and allied products ¹
1947.....	94.3	109.4	82.9	70.8	103.6	83.3	76.9	93.7
1948.....	101.5	117.5	88.7	76.9	108.1	84.2	90.5	95.9
1949.....	89.6	101.6	80.6	75.3	98.9	79.9	86.2	87.6
1950.....	93.9	106.7	83.4	78.0	102.7	86.3	87.1	88.9
1951.....	106.9	124.2	92.7	86.1	114.6	99.1	90.3	101.7
1952.....	102.7	117.2	91.6	84.1	103.4	80.1	90.1	96.5
1953.....	96.0	106.2	87.4	84.8	100.8	81.3	92.6	97.7
1954.....	95.7	104.7	88.9	85.0	98.6	77.6	91.3	98.9
1955.....	91.2	98.2	85.0	86.9	98.7	77.3	91.2	98.5
1956.....	90.6	96.9	84.9	90.8	98.7	81.9	94.0	99.1
1957.....	93.7	99.5	87.4	93.3	98.8	82.0	99.1	101.2
1958.....	98.1	103.9	91.8	93.6	97.0	82.9	95.3	102.0
1959.....	93.5	97.5	89.4	95.3	98.4	94.2	95.3	101.6
1960.....	93.7	97.2	89.5	95.3	99.5	90.8	96.1	101.8
1961.....	93.7	96.3	91.0	94.8	97.7	91.7	97.2	100.7
1962.....	94.7	98.0	91.9	94.8	98.6	92.7	96.7	99.1
1963.....	93.8	96.0	92.5	94.7	98.5	90.0	96.3	97.9
1964.....	93.2	94.6	92.3	95.2	99.2	90.3	93.7	98.3
1965.....	97.1	98.7	95.5	96.4	99.8	94.3	95.5	99.0
1966.....	103.5	105.9	101.2	98.5	100.1	103.4	97.8	99.4
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	102.4	102.5	102.2	102.5	103.7	103.2	98.9	99.8
1969.....	108.0	109.1	107.3	106.0	106.0	108.9	100.9	99.9
1970.....	111.7	111.0	112.1	110.0	107.1	110.3	106.2	102.2
1971.....	113.9	112.9	114.5	114.1	109.0	114.1	115.2	104.1
1972.....	122.4	125.0	120.8	117.9	113.6	131.3	118.6	104.2
1973.....	159.1	176.3	148.1	125.9	123.8	143.1	134.3	110.0
1974.....	177.4	187.7	170.9	153.8	139.1	145.1	208.3	146.8
1975.....	184.2	186.7	182.6	171.5	137.9	148.5	245.1	181.3
1976.....	183.1	191.0	178.0	182.4	148.2	167.8	265.6	187.2
1977.....	188.8	192.5	186.1	195.1	154.0	179.3	302.2	192.8
1978.....	206.6	212.5	202.6	209.4	159.8	200.0	322.5	198.8
1979.....	229.8	241.4	222.5	236.5	168.7	252.4	408.1	222.3
1980.....	244.7	249.4	241.2	274.8	183.5	248.9	574.0	260.3
1981.....	251.5	254.9	248.7	304.1	199.7	260.9	694.5	287.6
1982.....	248.9	242.4	251.5	312.3	204.6	262.6	693.2	292.3
1983 ^a	253.9	248.2	256.0	315.8	204.9	271.4	665.9	292.9
1982:								
Jan.....	246.0	242.2	247.1	311.8	205.0	261.8	705.1	292.9
Feb.....	248.4	247.1	248.1	311.6	205.6	261.6	697.8	293.6
Mar.....	247.5	244.7	248.1	311.0	205.0	260.6	689.7	294.6
Apr.....	251.6	250.6	251.1	309.9	205.4	263.4	670.6	294.3
May.....	255.8	256.5	254.4	309.6	205.4	263.2	662.2	295.0
June.....	255.3	252.7	255.8	310.6	205.0	261.8	677.3	293.3
July.....	252.4	246.6	254.6	312.8	204.1	263.1	701.1	291.6
Aug.....	249.6	240.8	253.5	313.2	204.2	262.0	705.6	291.6
Sept.....	247.4	234.5	253.5	312.7	204.3	263.5	700.4	290.7
Oct.....	243.8	229.2	250.8	314.3	204.1	263.2	698.8	289.9
Nov.....	243.9	230.7	250.2	315.0	203.9	263.2	706.1	290.5
Dec.....	244.8	232.6	250.5	315.2	202.6	264.1	703.4	289.6
1983: ^a								
Jan.....	245.8	233.2	251.7	313.9	202.7	266.7	683.6	289.3
Feb.....	250.4	240.7	254.7	313.9	202.6	264.3	668.6	290.5
Mar.....	250.6	241.5	254.5	313.5	203.4	264.9	658.0	289.8
Apr.....	254.7	250.5	256.0	312.4	203.5	267.4	644.8	281.3
May.....	254.7	250.4	256.1	313.6	204.3	269.4	651.9	281.1
June.....	252.5	247.4	254.3	315.3	204.7	271.2	665.5	290.8
July.....	251.5	244.3	254.4	316.5	205.3	272.3	668.7	293.7
Aug.....	255.7	253.5	255.8	317.5	205.7	275.5	674.3	294.9
Sept.....	255.5	253.5	255.5	317.3	206.0	274.7	671.7	294.4
Oct.....	257.9	255.2	258.3	318.7	206.4	274.7	672.7	296.4
Nov.....	256.0	251.0	257.6	318.3	207.0	277.3	667.1	296.4
Dec.....	257.8	254.0	258.8	318.4	207.2	278.3	662.1	296.6

See next page for continuation of table.

TABLE B-59.—*Producer price indexes for major commodity groups, 1947-83—Continued*

[1967 = 100]

Year or month	Industrial commodities—Continued								
	Rubber and plastic products	Lumber and wood products	Pulp, paper, and allied products	Metals and metal products	Machinery and equipment	Furniture and household durables	Non-metallic mineral products	Transportation equipment: Motor vehicles and equipment ^a	Miscellaneous products
1947.....	70.5	73.4	72.5	54.9	53.7	77.0	66.3	64.1	73.5
1948.....	72.8	84.0	75.7	62.5	58.2	81.6	71.6	70.8	76.5
1949.....	70.5	77.7	72.4	63.0	61.0	82.9	73.5	75.7	78.0
1950.....	85.9	89.3	74.3	66.3	63.1	84.7	75.4	75.3	79.2
1951.....	105.4	97.2	88.0	73.8	70.5	91.8	80.1	79.4	83.9
1952.....	95.5	94.4	85.7	73.9	70.6	90.1	80.1	84.0	83.4
1953.....	89.1	94.3	85.5	76.3	72.2	91.9	83.3	83.6	85.6
1954.....	90.4	92.6	85.5	76.9	73.4	92.9	85.1	83.8	86.4
1955.....	102.4	97.1	87.8	82.1	75.7	93.3	87.5	86.3	86.5
1956.....	103.8	98.5	93.6	89.2	81.8	95.8	91.3	91.2	87.6
1957.....	103.4	93.5	95.4	91.0	87.6	98.3	94.8	95.1	90.2
1958.....	103.3	92.4	96.4	90.4	89.4	99.1	95.8	98.1	92.0
1959.....	102.9	98.8	97.3	92.3	91.3	99.3	97.0	100.3	92.2
1960.....	103.1	95.3	98.1	92.4	92.0	99.0	97.2	98.8	93.0
1961.....	99.2	91.0	95.2	91.9	91.9	98.4	97.6	98.6	93.3
1962.....	96.3	91.6	96.3	91.2	92.0	97.7	97.6	98.6	93.7
1963.....	96.8	93.5	95.6	91.3	92.2	97.0	97.1	97.8	94.5
1964.....	95.5	95.4	95.4	93.8	92.8	97.4	97.3	98.3	95.2
1965.....	95.9	95.9	96.2	96.4	93.9	96.9	97.5	98.5	95.9
1966.....	97.8	100.2	98.8	98.8	96.8	98.0	98.4	98.6	97.7
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	103.4	113.3	101.1	102.6	103.2	102.8	103.7	102.8	102.2
1969.....	105.3	125.3	104.0	108.5	106.5	104.9	107.7	104.8	105.2
1970.....	108.3	113.6	108.2	116.6	111.4	107.5	112.9	108.7	109.9
1971.....	109.1	127.3	110.1	118.7	115.5	110.0	122.4	114.9	112.9
1972.....	109.3	144.3	113.4	123.5	117.9	111.4	126.1	118.0	114.6
1973.....	112.4	177.2	122.1	132.8	121.7	115.2	130.2	119.2	119.7
1974.....	136.2	183.6	151.7	171.9	139.4	127.9	153.2	129.2	133.1
1975.....	150.2	176.9	170.4	185.6	161.4	139.7	174.0	144.6	147.7
1976.....	159.2	205.6	179.4	195.9	171.0	145.6	186.3	153.8	153.7
1977.....	167.6	236.3	186.4	209.0	181.7	151.5	200.5	163.7	164.3
1978.....	174.8	276.0	195.6	227.1	196.1	160.4	222.8	176.0	184.3
1979.....	194.3	300.4	219.0	259.3	213.9	171.3	248.6	190.5	208.7
1980.....	217.4	288.9	249.2	286.4	239.8	187.7	283.0	208.8	258.8
1981.....	232.6	292.8	273.8	300.4	263.3	198.5	309.5	237.6	265.7
1982.....	241.4	284.7	288.7	301.6	278.8	206.9	320.2	251.3	276.4
1983 ^a	243.4	307.3	297.7	307.1	286.4	213.9	325.3	256.8	289.5
1982:									
Jan.....	237.3	285.5	285.5	304.7	274.1	203.5	315.6	250.8	268.3
Feb.....	239.3	285.2	286.3	304.2	275.4	204.6	319.0	246.8	273.5
Mar.....	240.8	285.3	287.4	302.9	276.2	205.5	319.9	246.8	272.7
Apr.....	241.1	286.5	288.5	303.1	277.6	206.0	320.2	247.2	273.2
May.....	242.1	284.6	289.6	302.8	278.2	206.5	321.2	249.2	272.2
June.....	242.5	289.0	289.5	299.3	278.6	207.0	320.9	251.1	271.5
July.....	242.0	288.6	289.1	299.5	279.6	206.8	321.1	252.0	273.4
Aug.....	242.6	284.2	289.3	299.2	279.9	208.1	320.5	252.8	272.0
Sept.....	242.5	283.0	289.4	301.8	280.2	208.3	321.2	244.6	279.5
Oct.....	242.2	279.4	289.8	301.6	281.1	208.9	321.1	257.8	285.4
Nov.....	241.7	279.9	289.8	300.5	281.8	208.9	321.2	257.8	285.2
Dec.....	242.2	285.6	290.5	299.9	282.4	209.2	320.5	258.1	290.4
1983:									
Jan.....	242.9	293.3	293.6	300.3	283.3	210.7	321.5	257.0	285.7
Feb.....	242.3	303.1	294.2	304.7	284.3	212.5	322.3	256.3	288.8
Mar.....	241.8	305.8	294.8	304.4	284.7	212.3	322.0	255.4	287.4
Apr.....	243.0	307.2	295.4	304.6	285.4	212.8	324.1	255.9	287.4
May.....	243.2	308.0	296.0	306.1	286.0	213.6	324.1	256.2	287.1
June.....	243.1	314.8	297.0	306.3	286.2	214.0	324.5	256.5	288.0
July.....	243.4	314.6	297.8	307.3	287.4	214.8	325.1	256.6	291.5
Aug.....	243.7	313.9	298.8	308.2	287.4	214.9	326.3	256.8	292.0
Sept.....	244.5	306.0	299.1	310.9	287.5	214.9	327.2	248.9	291.3
Oct.....	245.1	306.1	300.4	310.7	287.8	215.1	327.9	261.1	291.2
Nov.....	243.8	306.0	302.0	310.3	288.1	215.4	328.9	260.3	291.4
Dec.....	244.1	308.8	302.7	311.4	288.8	215.3	329.2	260.4	292.5

^a Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month.^b Data have been revised through August 1983 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.^c Index for total transportation equipment is not shown but is available beginning December 1983.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-60.—Changes in producer price indexes for finished goods, 1950-83

[Percent change]

Year or month	Total finished goods		Finished consumer foods		Finished goods excluding consumer foods								Finished energy goods		Finished goods excluding foods and energy	
	Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year	Total		Consumer goods		Capital equipment		Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year
					Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year	Dec. to Dec. ¹	Year to year						
1950.....	10.4	1.8	13.3	1.9			8.2	1.6	10.3	2.4						
1951.....	2.9	9.5	5.3	12.4			.9	7.2	3.4	9.7						
1952.....	-2.2	-6	-5.9	-9			-1.1	-1.3	.8	1.7						
1953.....	.5	-1.0	-2.2	-5.2			1.6	.9	2.3	1.7						
1954.....	-.1	.2	-1.9	-.8			.3	.3	1.1	1.2						
1955.....	1.2	.2	-2.9	-2.5			1.7	.8	5.6	3.0						
1956.....	4.2	2.8	3.6	-.2			2.5	2.4	8.3	7.4						
1957.....	3.2	3.6	5.3	3.5			1.7	2.5	4.3	6.2						
1958.....	.5	2.3	.4	5.8			.2	.1	1.3	2.6						
1959.....	-.4	-.2	-3.7	-4.7			.8	1.3	1.0	1.9						
1960.....	1.8	.8	5.2	2.2			.4	.4	.1	.2						
1961.....	-.5	0	-1.8	-.4			-.3	-.1	.2	.1						
1962.....	.1	.3	.5	.9			-.1	-.2	.3	.4						
1963.....	-.2	-.3	-1.3	-1.2			.1	0	.5	.2						
1964.....	.5	.4	.4	.5			.1	-.1	.9	1.0						
1965.....	3.3	1.7	9.1	3.8			.9	.7	1.5	1.2						
1966.....	2.2	3.2	1.4	6.5			1.7	1.6	3.9	2.5						
1967.....	1.6	1.2	-.4	-1.6			2.1	1.9	3.1	3.3						
1968.....	3.1	2.8	4.8	3.6	2.4	2.6	2.0	2.1	3.0	3.5						
1969.....	4.8	3.7	8.2	6.2	3.4	2.7	2.9	2.4	4.6	3.3						
1970.....	2.2	3.5	-2.5	3.2	4.3	3.5	3.9	3.0	4.9	4.8						
1971.....	3.2	3.1	5.9	1.6	2.1	3.7	2.0	3.4	2.4	4.1						
1972.....	3.8	3.1	8.0	5.6	2.1	2.0	2.0	1.9	2.0	2.5						
1973.....	11.8	9.1	22.5	20.3	6.6	4.1	7.4	4.5	5.3	3.3						
1974.....	18.3	15.3	13.0	14.0	21.2	16.0	20.5	16.9	22.6	14.2						
1975.....	6.6	10.8	5.5	8.4	7.2	12.1	6.7	10.5	8.2	15.2	16.4	17.3			6.1	11.4
1976.....	3.7	4.4	-2.5	-.3	6.2	6.3	6.0	6.2	6.4	6.7	11.5	11.8			5.6	5.6
1977.....	6.9	6.5	6.9	5.3	6.9	7.0	6.7	7.2	7.3	6.5	12.1	15.7			6.3	6.1
1978.....	9.2	7.8	11.7	9.1	8.3	7.3	8.5	7.1	7.9	7.9	8.5	6.4			8.3	7.5
1979.....	12.8	11.1	7.4	9.2	14.8	11.9	17.5	13.3	8.8	8.7	58.0	35.1			9.4	9.0
1980.....	11.8	13.5	7.5	5.9	13.3	16.2	14.2	18.6	11.4	10.8	27.8	49.2			10.7	11.1
1981.....	7.1	9.2	1.4	5.9	8.8	10.3	8.5	10.2	9.2	10.2	14.1	19.1			7.8	8.6
1982.....	3.7	4.0	2.1	2.2	4.1	4.6	4.2	4.1	3.9	5.7	-.1	-1.5			4.9	5.7
1983 ²	.6	1.6	2.2	1.0	.0	1.8	-.8	1.2	2.0	2.8	-9.0	-4.7			1.8	3.0
Percent change from preceding month																
	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed	Unad-justed	Seasonally ad-justed
1982:																
Jan.....	0.9	0.4	1.4	1.1	0.7	0.2	0.7	0.1	0.8	0.5	-0.5	-0.6	1.0	0.3		
Feb.....	0	-.1	.7	.6	-.2	-.1	-.1	-.1	-.4	-.1	-1.2	-1.8	-.0	-.2		
Mar.....	-2	-.3	-.4	-.2	-.2	-.3	-.3	-.6	-.3	-.5	-2.2	-3.7	-.2	-.4		
Apr.....	0	.1	1.1	1.6	-.3	-.3	-.6	-.5	.5	.2	-4.8	-4.0	-.5	-.4		
May.....	.2	0	.9	.3	-.0	-.1	-.2	-.3	.3	.5	-2.2	-2.6	.4	.4		
June.....	.8	1.0	.4	.5	.9	1.2	1.1	1.4	.4	.6	4.2	4.4	.3	.6		
July.....	.6	.5	-1.1	-1.6	1.2	1.1	1.4	1.4	.4	.4	5.7	5.5	.3	.3		
Aug.....	.2	.5	-.3	.1	.4	.6	.5	.6	.2	.6	1.2	1.0	.3	.5		
Sept.....	-.4	.1	.1	-.4	-.6	-.2	-.4	-.4	-.7	-.1	-.1	.4	-.6	-.2		
Oct.....	1.0	.4	.8	-.0	1.6	.5	1.5	.7	1.6	.0	-.4	.4	2.0	.5		
Nov.....	.3	.6	-.1	0	.4	.8	.5	.9	.2	.4	1.7	2.0	.2	.5		
Dec.....	.2	.3	.3	.2	.2	.3	.1	.3	.4	.5	-1.0	-.8	.4	.6		
1983: ²																
Jan.....	-.6	-1.1	.0	-.2	-.8	-1.4	-1.2	-2.0	.1	-.2	-4.1	-4.2	-.2	-.9		
Feb.....	-.1	.2	1.0	1.0	-.2	-.1	-.4	-.3	.1	.4	-2.8	-3.4	.3	.6		
Mar.....	-.2	-.3	.0	.2	-.3	-.4	-.5	-.7	0	-.3	-1.8	-3.1	-.0	.1		
Apr.....	-.1	0	.7	1.1	-.3	-.3	-.6	-.5	.2	-.1	-3.2	-2.5	.2	.0		
May.....	.4	.2	-.1	-.5	.6	.5	.7	.6	.1	.2	2.6	2.2	.2	.2		
June.....	.3	.5	-.5	-.6	.5	.8	.8	1.1	.1	.3	2.9	3.1	.1	.4		
July.....	.2	.1	-.2	-.7	.3	.3	.4	.4	.2	.2	.4	.2	.4	.4		
Aug.....	-.1	.4	.0	.4	.2	.4	.2	.3	.2	.6	.4	.3	.2	.4		
Sept.....	-.3	.2	1.0	.7	-.8	.0	-.7	.1	-.8	-.2	-.1	.4	-.9	-.0		
Oct.....	1.0	.3	.4	1.1	1.2	.0	-.9	-.0	1.9	.3	-1.0	-.1	1.6	.1		
Nov.....	-.4	-.2	-.9	-1.0	-.2	.1	-.3	.1	-.2	0	-.4	-.1	-.0	-.3		
Dec.....	.1	.2	.8	.7	-.1	.1	-.2	.0	.1	.2	-1.2	-1.0	.1	.3		

¹ Changes from December to December are based on unadjusted indexes.² Data have been revised through August 1983 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

MONEY STOCK, CREDIT, AND FINANCE

TABLE B-61.—*Money stock measures and liquid assets, 1959-83*

[Averages of daily figures; billions of dollars, seasonally adjusted]

Year and month	M1	M2	M3	L	Percent change from year or 6 months earlier ⁴		
	Sum of currency, demand deposits, travelers' checks, and other checkable deposits (OCDs) ¹	M1 plus overnight RPs and Eurodollars, MMMF balances (general purpose and broker/dealer), MMDAs, and savings and small time deposits ²	M2 plus large time deposits, term RPs, and institution-only MMMF balances ³	M3 plus other liquid assets	M1	M2	M3
December:							
1959.....	141.0	297.8	299.0	388.5			
1960.....	141.8	312.3	314.3	403.4	0.6	4.9	5.1
1961.....	146.5	335.5	339.4	430.5	3.3	7.4	8.0
1962.....	149.2	362.7	369.7	465.8	1.8	8.1	8.9
1963.....	154.7	393.2	404.0	503.5	3.7	8.4	9.3
1964.....	161.8	424.7	439.9	540.1	4.6	8.0	8.9
1965.....	169.5	459.1	480.3	584.1	4.8	8.1	9.2
1966.....	173.7	480.2	503.2	614.9	2.5	4.6	4.8
1967.....	185.1	524.8	555.7	667.2	6.6	9.3	10.4
1968.....	199.4	566.9	604.3	729.9	7.7	8.0	8.7
1969.....	205.8	590.2	613.2	764.4	3.2	4.1	1.5
1970.....	216.5	627.9	674.5	815.8	5.2	6.4	10.0
1971.....	230.7	712.7	773.0	902.5	6.6	13.5	14.6
1972.....	251.9	805.3	882.0	1,022.8	9.2	13.0	14.1
1973.....	265.8	861.2	979.2	1,141.6	5.5	6.9	11.0
1974.....	277.5	908.6	1,061.4	1,246.8	4.4	5.5	8.4
1975.....	291.1	1,023.0	1,161.7	1,371.9	4.9	12.6	9.4
1976.....	310.4	1,163.5	1,296.3	1,522.4	6.6	13.7	11.6
1977.....	335.5	1,286.4	1,451.8	1,711.0	8.1	10.6	12.0
1978.....	363.2	1,388.5	1,613.5	1,922.9	8.3	7.9	11.1
1979.....	389.0	1,497.5	1,758.4	2,131.8	7.1	7.9	9.0
1980.....	414.1	1,630.3	1,936.7	2,343.6	6.5	8.9	10.1
1981.....	440.6	1,794.9	2,167.9	2,622.0	6.4	10.1	11.9
1982.....	478.2	1,959.5	2,377.6	2,896.7	8.5	9.2	9.7
1983 ^p	521.1	2,184.6	2,599.8		9.0	11.5	9.3
1982:							
Jan.....	447.8	1,810.1	2,181.8	2,644.4	7.4	10.7	11.2
Feb.....	448.0	1,815.8	2,191.6	2,668.1	6.6	8.7	9.3
Mar.....	448.6	1,828.9	2,210.9	2,692.7	7.1	9.0	9.4
Apr.....	449.3	1,835.2	2,224.1	2,710.3	7.5	8.3	9.2
May.....	452.4	1,850.6	2,240.7	2,737.6	7.7	8.0	8.6
June.....	453.4	1,864.5	2,260.2	2,767.0	5.9	7.9	8.7
July.....	454.4	1,880.9	2,283.4	2,798.2	3.0	8.0	9.5
Aug.....	458.3	1,903.6	2,317.9	2,823.6	4.7	9.9	11.9
Sept.....	463.2	1,917.0	2,333.9	2,840.5	6.6	9.9	11.4
Oct.....	468.7	1,929.7	2,352.0	2,866.0	8.8	10.6	11.8
Nov.....	474.0	1,945.0	2,370.2	2,882.5	9.8	10.5	11.9
Dec.....	478.2	1,959.5	2,377.6	2,896.7	11.2	10.5	10.7
1983:							
Jan.....	482.1	2,010.0	2,403.3	2,930.6	12.6	14.2	10.8
Feb.....	491.1	2,050.8	2,430.7	2,960.2	14.8	16.1	10.0
Mar.....	497.6	2,069.9	2,447.1	2,987.5	15.4	16.6	9.9
Apr.....	496.5	2,074.8	2,453.9	3,005.8	12.2	15.6	8.9
May.....	507.4	2,096.2	2,476.2	3,031.3	14.6	16.2	9.1
June.....	511.7	2,114.4	2,498.8	3,058.6	14.5	16.4	10.5
July.....	515.5	2,126.3	2,510.3	3,087.8	14.3	11.9	9.1
Aug.....	516.7	2,136.9	2,528.3	3,115.6	10.7	8.6	8.2
Sept.....	517.1	2,145.4	2,543.8	3,136.9	8.0	7.4	8.1
Oct.....	517.9	2,161.6	2,561.3	3,153.4	8.8	8.5	8.9
Nov.....	518.3	2,174.6	2,586.0		4.3	7.6	8.1
Dec ^p	521.1	2,184.6	2,599.8		3.7	6.8	8.2

¹ Net of demand deposits due to foreign commercial banks and official institutions.

² M2 will differ from the sum of components shown in Table B-62 by a consolidation adjustment that represents the estimated amount of demand deposits and vault cash held by thrift institutions to service time and savings deposits.

³ M3 will differ from the sum of components shown in Table B-62 by a consolidation adjustment that represents the estimated amount of overnight RPs held by institution-only money market mutual funds.

⁴ Monthly percent changes are from 6 months earlier at a compound annual rate.

Note.—See Table B-62 for components, except travelers checks not shown separately.

Source: Board of Governors of the Federal Reserve System.

TABLE B-62.—Components of money stock measures and liquid assets, 1959-83

(Averages of daily figures; billions of dollars, seasonally adjusted, except as noted)

Period	Cur- rency	De- mand de- pos- its ¹	Other check- able depos- its (OCDS)	Over- night repur- chase agree- ments (RPs) net, plus over- night Euro- dollars	Money market mutual fund (MMMF) balances		Money market deposit accounts (MMDAs)	Sav- ings depos- its	Small denom- ination time depos- its ²	Large denom- ination time depos- its ²	Term repur- chase agree- ments (RPs)	Term Euro- dollars (net)	Sav- ings bonds	Short- term Treas- ury secur- ities	Bank's accept- ances	Com- mer- cial paper
					Gen- eral pur- pose and broker- /dealer NSA	Institution only NSA										
December:																
1959	29.0	111.6	0.0	0.0	0.0	0.0	0.0	146.4	11.4	1.2	0.0	0.7	46.1	38.6	0.5	3.6
1960	28.9	112.5	0.0	0.0	0.0	0.0	0.0	159.1	12.5	2.0	0.0	.8	45.7	36.7	.8	5.1
1961	29.5	116.5	0.0	0.0	0.0	0.0	0.0	175.5	14.8	3.9	0.0	1.4	46.5	37.0	1.0	5.2
1962	30.6	118.1	0.0	0.0	0.0	0.0	0.0	194.8	20.1	6.9	0.0	1.6	46.9	39.8	1.0	6.8
1963	32.5	121.7	0.1	0.0	0.0	0.0	0.0	214.4	25.5	10.7	0.0	1.9	48.1	40.7	1.1	7.7
1964	34.3	127.0	0.1	0.0	0.0	0.0	0.0	235.2	29.2	15.2	0.0	2.4	49.0	38.5	1.2	9.1
1965	36.3	132.5	0.1	0.0	0.0	0.0	0.0	256.9	34.4	21.2	0.0	1.7	49.6	40.7	1.5	10.2
1966	38.3	134.6	0.1	0.0	0.0	0.0	0.0	253.1	55.0	23.1	0.0	2.1	50.2	43.2	1.6	14.4
1967	40.4	143.9	0.1	0.0	0.0	0.0	0.0	263.7	77.8	30.9	0.0	2.1	51.2	38.7	1.7	17.8
1968	43.4	155.1	0.1	0.0	0.0	0.0	0.0	268.9	100.5	37.5	0.0	2.9	51.8	40.1	2.2	22.5
1969	46.1	158.8	0.1	2.2	0.0	0.0	0.0	263.7	120.4	20.4	2.6	2.7	51.7	59.5	3.2	34.0
1970	49.1	166.3	0.1	1.3	0.0	0.0	0.0	259.9	152.2	45.0	1.6	2.2	52.0	49.2	3.3	34.5
1971	52.6	176.8	0.2	2.3	0.0	0.0	0.0	291.6	190.5	57.6	2.7	2.7	54.3	36.3	3.5	32.7
1972	56.8	193.6	0.2	2.8	0.0	0.0	0.0	321.2	232.1	73.2	3.5	3.6	57.6	41.1	3.3	35.2
1973	61.5	202.5	0.3	5.3	0.0	0.0	0.0	327.0	266.0	111.2	6.9	5.4	60.4	50.0	4.7	41.9
1974	67.9	207.4	0.4	5.6	1.7	0.2	0.0	338.8	288.0	144.5	8.1	8.0	63.2	53.5	10.6	50.1
1975	73.9	214.1	0.9	5.8	2.7	0.4	0.0	388.8	338.1	129.9	8.4	9.7	67.2	76.8	8.4	48.0
1976	80.6	224.4	2.7	10.6	2.4	0.6	0.0	453.0	391.0	118.2	14.2	13.1	71.7	80.8	8.8	51.7
1977	88.6	239.7	4.2	14.7	2.4	0.9	0.0	491.6	446.0	145.2	19.5	18.4	76.4	89.7	11.8	62.9
1978	97.5	253.8	8.4	20.3	6.4	3.1	0.0	481.2	521.8	194.9	27.1	29.0	80.2	99.3	21.6	79.2
1979	106.3	262.0	17.0	21.2	33.4	9.5	0.0	423.1	635.9	222.2	30.1	41.5	79.5	128.7	26.7	97.0
1980	116.2	266.8	26.9	28.4	61.4	14.9	0.0	400.7	731.7	258.9	34.8	48.0	72.3	156.9	31.6	98.1
1981	123.2	236.4	76.6	36.1	150.9	36.0	0.0	344.4	828.6	302.6	37.2	65.3	67.7	176.3	40.6	104.2
1982	132.8	238.8	101.3	44.3	182.2	47.6	43.2	359.3	859.1	333.8	40.3	80.0	67.9	217.6	44.9	108.8
1983 ^a	146.0	243.1	127.1	56.1	138.0	40.2	372.4	312.3	792.1	329.2	49.3					
1982:																
Jan.	124.0	238.9	80.4	39.7	154.7	35.3	0.0	347.7	826.6	304.4	35.6	68.3	67.8	179.9	41.1	105.5
Feb.	124.7	235.5	83.4	38.0	150.0	33.6	0.0	346.9	833.1	309.9	35.7	72.8	67.8	186.9	40.6	108.4
Mar.	125.2	233.8	85.1	39.1	159.7	34.8	0.0	346.6	840.7	315.8	35.6	74.0	67.7	190.0	39.9	110.3
Apr.	126.3	233.3	85.3	36.8	161.8	34.3	0.0	345.9	847.2	321.2	38.1	77.9	67.7	190.7	40.2	109.7
May	127.4	233.1	87.4	40.1	164.9	35.6	0.0	346.6	852.5	322.1	37.0	83.8	67.7	192.1	41.3	112.1
June	128.2	232.3	88.4	40.3	170.1	36.6	0.0	347.2	859.3	327.4	36.3	84.7	67.7	197.2	41.6	115.7
July	128.8	232.1	89.1	41.8	172.9	40.4	0.0	345.0	872.9	332.1	34.5	83.7	67.6	202.9	42.0	118.7
Aug.	129.6	232.5	91.8	42.4	182.3	47.1	0.0	346.7	879.8	334.9	37.0	80.9	67.5	204.1	41.3	112.0
Sept.	130.5	234.0	94.3	41.5	185.1	48.2	0.0	350.0	883.2	336.1	36.4	80.6	67.5	203.6	41.4	113.7
Oct.	131.3	236.0	97.0	43.9	187.6	49.3	0.0	358.0	878.0	339.6	37.7	81.1	67.6	210.3	42.8	112.3
Nov.	131.9	237.6	100.1	45.2	191.1	49.9	0.0	366.4	874.9	340.4	39.4	79.6	67.8	214.5	43.1	107.3
Dec.	132.8	239.8	101.3	44.3	182.2	47.6	43.2	359.3	859.1	333.8	40.3	80.0	67.9	217.6	44.9	108.8
1983:																
Jan.	134.2	239.4	104.5	47.3	166.7	46.1	189.1	335.1	797.4	310.7	40.6	81.1	68.1	219.3	45.3	113.5
Feb.	135.6	238.7	112.5	48.9	159.6	45.2	277.7	325.7	755.1	297.9	40.8	83.5	68.5	219.3	43.2	115.1
Mar.	137.0	240.1	116.0	48.8	154.0	43.5	320.5	322.7	733.8	296.2	41.7	85.9	68.8	224.5	42.0	119.2
Apr.	138.0	238.9	115.0	50.6	146.7	41.0	341.2	321.5	725.7	300.2	42.7	88.4	69.2	230.5	41.2	122.5
May	139.3	242.5	120.9	55.1	141.1	40.4	356.8	323.1	720.1	299.2	45.3	89.9	69.6	231.4	40.8	123.4
June	140.3	244.0	122.7	56.0	139.7	39.2	367.3	325.0	722.1	304.1	44.5	89.8	69.8	237.2	40.2	122.9
July	140.9	245.8	124.2	52.7	138.8	38.6	368.4	323.5	735.1	305.6	42.8	89.6	70.0	252.1	41.4	124.4
Aug.	141.8	244.5	125.8	52.1	139.1	38.4	366.3	322.1	748.0	311.6	44.8	89.8	70.2	262.9	43.5	121.0
Sept.	143.0	243.4	126.0	53.0	137.6	39.1	366.9	320.6	757.7	317.7	45.1	89.5	70.4	264.5	43.3	125.3
Oct.	144.2	242.9	126.0	56.5	137.8	39.9	367.4	318.8	771.0	319.9	43.7	90.4	70.6	262.1	42.3	126.6
Nov.	145.3	241.6	126.5	55.2	138.7	40.6	369.1	316.4	784.4	324.9	48.7					
Dec.	146.0	243.1	127.1	56.1	138.0	40.2	372.4	312.3	792.1	329.2	49.3					

¹ Demand deposits at all commercial banks other than those due to domestic banks, the U.S. Government, and foreign banks and official institutions less cash items in the process of collection and Federal Reserve float.² 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.
Travelers checks are a component of money stock but are not shown here.
See also Table B-61.

Source: Board of Governors of the Federal Reserve System.

TABLE B-63.—Commercial bank loans and investments, 1939-83

[Billions of dollars]

Year and month	Total loans and investments	Loans		Investments		Loans plus loans sold to bank affiliates
		Total	Commercial and industrial	U.S. Treasury securities	Other securities	
End of month ¹						
1939: Dec	40.7	17.2		16.3	7.1	
1940: Dec	43.9	18.8		17.8	7.4	
1941: Dec	50.7	21.7		21.8	7.2	
1942: Dec	67.4	19.2		41.4	6.8	
1943: Dec	85.1	19.1		59.8	6.1	
1944: Dec	105.5	21.6		77.6	6.3	
1945: Dec	124.0	26.1		90.6	7.3	
1946: Dec	114.0	31.1		74.8	8.1	
1947: Dec	116.3	38.1		69.2	9.0	
1948: Dec	114.3	42.5		62.6	9.2	
Seasonally adjusted						
1948: Dec	113.0	41.5		62.3	9.2	
1949: Dec	118.7	42.0		66.4	10.3	
1950: Dec	124.7	51.1		61.1	12.4	
1951: Dec	130.2	56.5		60.4	13.4	
1952: Dec	139.1	62.8		62.2	14.2	
1953: Dec	143.1	66.2		62.2	14.7	
1954: Dec	153.1	69.1		67.6	16.4	
1955: Dec	157.6	80.6		60.3	16.8	
1956: Dec	161.6	88.1		57.2	16.3	
1957: Dec	166.4	91.5		56.9	17.9	
1958: Dec	181.2	95.6		65.1	20.5	
1959: Dec	188.7	110.5	39.4	57.7	20.5	
1960: Dec	197.4	116.7	42.1	59.9	20.8	
1961: Dec	212.8	123.6	43.9	65.3	23.9	
1962: Dec	231.2	137.3	47.6	64.7	29.2	
1963: Dec	250.2	153.7	52.1	61.5	35.0	
1964: Dec	272.3	172.9	58.4	60.7	38.7	
1965: Dec	300.1	198.2	69.5	57.1	44.8	
1966: Dec	316.1	213.9	78.6	53.5	48.7	
1967: Dec	352.0	231.3	86.2	59.4	61.3	
1968: Dec	390.2	258.2	95.9	60.7	71.3	
1969: Dec	401.7	279.4	105.7	51.2	71.1	283.3
1970: Dec	435.5	292.0	110.0	57.8	85.7	294.7
1971: Dec	485.7	320.9	116.2	60.6	104.2	323.7
1972: Dec	558.0	378.9	130.4	62.6	116.5	381.5
Average for month ²						
1972: Dec	572.6	390.5	137.5	65.8	116.3	393.1
1973: Dec	647.8	460.5	165.4	58.5	128.8	464.8
1974: Dec	713.6	520.1	196.9	53.6	139.9	524.8
1975: Dec	745.2	517.4	189.6	82.2	145.6	521.8
1976: Dec	804.6	555.0	190.9	100.8	148.8	558.7
1977: Dec	891.5	632.5	210.9	99.8	159.3	637.1
1978: Dec	1,013.5	747.0	245.9	93.8	172.8	750.7
1979: Dec	1,135.9	849.9	291.2	94.5	191.5	852.9
1980: Dec	1,239.6	915.1	326.8	110.0	214.4	917.8
1981: Dec	1,316.3	973.9	358.0	111.0	231.4	976.7
1982: Dec	1,412.0	1,042.0	392.3	130.9	239.2	1,044.9
1983: Dec ³	1,566.8	1,131.7	413.1	188.1	247.0	1,134.1
1983:						
Jan	1,428.2	1,045.0	395.2	139.8	243.3	1,048.0
Feb	1,436.3	1,048.7	394.9	144.5	243.1	1,051.6
Mar	1,450.1	1,056.3	396.2	151.0	242.8	1,059.3
Apr	1,460.6	1,059.5	392.9	157.8	243.4	1,062.4
May	1,474.4	1,063.3	392.9	166.1	245.0	1,066.1
June	1,488.0	1,070.6	395.0	171.2	246.2	1,073.3
July	1,499.9	1,080.9	399.2	172.9	246.1	1,083.5
Aug	1,513.2	1,091.0	402.5	174.4	247.8	1,093.5
Sept	1,520.3	1,096.3	402.6	176.9	247.1	1,098.9
Oct	1,532.9	1,104.1	404.7	182.3	246.5	1,106.7
Nov	1,548.9	1,115.7	407.8	186.2	247.1	1,118.2
Dec ³	1,566.8	1,131.7	413.1	188.1	247.0	1,134.1

¹ Data are for December 31 call dates.² Data are prorated averages of Wednesday figures for domestically chartered banks and averages of current and previous month-end data for foreign-related institutions. Lease financing receivables are included in total loans and investments and in total loans.

Note.—Beginning December 1981, levels have been reduced because of shifts from U.S. banking offices to International Banking Facilities (IBFs).

Source: Board of Governors of the Federal Reserve System.

TABLE B-64.—Total funds raised in credit markets by nonfinancial sectors, 1975-83

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Item	1975	1976	1977	1978	1979	1980	1981	1982
Net credit market borrowing by nonfinancial sectors								
Total net borrowing by domestic nonfinancial sectors.....	193.0	243.5	319.4	369.8	386.0	343.2	377.2	395.3
U.S. Government	85.4	69.0	56.8	53.7	37.4	79.2	87.4	161.3
Treasury issues	85.8	69.1	57.6	55.1	38.8	79.8	87.8	162.1
Agency issues and mortgages	-4	-1	-9	-1.4	-1.4	-6	-5	-9
Private domestic nonfinancial sectors.....	107.6	174.5	262.6	316.2	348.6	264.0	289.8	234.1
Debt capital instruments	100.9	123.6	171.1	199.7	211.2	192.0	158.4	152.4
Tax-exempt obligations	16.1	15.7	21.9	28.4	30.3	30.3	21.9	50.5
Corporate bonds	27.2	22.8	22.9	21.1	17.3	26.7	22.1	18.8
Mortgages	57.6	85.1	126.3	150.2	163.6	135.1	114.5	83.0
Home mortgages	42.0	63.9	94.0	112.2	120.0	96.7	75.9	56.6
Multi-family residential	(*)	3.9	7.1	9.2	7.8	8.8	4.3	1.3
Commercial	11.0	11.6	18.1	21.7	23.9	20.2	24.6	20.0
Farm	4.6	5.7	7.1	7.2	11.8	9.3	9.7	5.2
Other debt instruments.....	6.7	50.9	91.6	116.5	137.5	72.0	131.5	81.6
Consumer credit	9.6	25.4	40.2	48.8	45.4	4.9	24.1	18.3
Bank loans n.e.c.	-10.4	4.5	27.1	37.4	51.2	36.7	54.7	54.4
Open-market paper	-2.6	4.0	2.9	5.2	11.1	5.7	19.2	-3.3
Other	10.1	16.9	21.3	25.1	29.7	24.8	33.4	12.2
By borrowing sector: Total	107.6	174.5	262.6	316.2	348.6	264.0	289.8	234.1
State and local governments	13.7	15.2	15.4	19.1	20.5	20.3	9.7	36.3
Households	52.1	89.5	137.3	169.4	176.4	117.5	120.6	86.3
Nonfinancial business	41.8	69.8	110.0	127.6	151.7	126.1	159.6	111.5
Farm	8.5	10.2	12.3	14.6	21.4	14.4	16.3	9.0
Nonfarm noncorporate	12.5	15.4	28.0	32.4	34.4	33.7	39.6	29.8
Corporate	20.9	44.2	69.7	80.6	96.0	78.1	103.7	72.7
Foreign net borrowing in United States	11.3	19.3	13.5	33.8	20.2	27.2	27.2	15.7
Bonds	6.2	8.6	5.1	4.2	3.9	.8	5.4	6.6
Bank loans n.e.c.	2.0	5.6	3.1	19.1	2.3	11.5	3.7	-6.2
Open-market paper	.3	1.9	2.4	6.6	11.2	10.1	13.9	10.7
U.S. Government loans	2.8	3.3	3.0	3.9	2.9	4.7	4.2	4.5
Total domestic plus foreign.....	204.4	262.8	332.9	403.6	406.2	370.4	404.4	411.0
Direct and indirect supply of funds to credit markets								
Total funds supplied to domestic nonfinancial sectors.....	193.0	243.5	319.4	369.8	386.0	343.2	377.2	395.3
Private domestic nonfinancial sectors.....	152.0	178.1	189.1	225.8	270.3	254.4	308.9	279.1
Deposits and currency	101.2	133.4	148.6	152.2	151.4	180.0	221.7	179.4
Checkable deposits and currency	15.6	17.8	25.5	25.5	26.7	15.3	27.6	21.4
Time and savings deposits	83.3	111.7	119.3	110.3	82.2	127.8	83.6	131.8
Money market fund shares	1.3	(*)	.2	6.9	34.4	29.2	107.5	24.7
Security repurchase agreements	.2	2.3	2.2	7.5	6.6	6.5	2.5	3.8
Foreign deposits	.8	1.7	1.3	2.0	1.5	1.1	.5	-2.4
Credit market instruments.....	50.7	44.7	40.6	73.6	118.9	74.4	87.2	99.7
Foreign funds	-2.5	10.6	41.0	44.6	23.0	1.5	7.3	-10.2
At banks	-8.6	-4.5	1.4	6.5	27.6	-21.7	-8.7	-27.7
Credit market instruments	6.1	15.2	39.6	38.0	-4.6	23.2	16.0	17.6
U.S. Government and related loans, net.....	11.9	1.1	4.1	-6.6	11.6	1.8	6.8	11.2
U.S. Government cash balances	-1.7	-1	4.3	6.8	4	-2.6	-1.1	6.1
Private insurance and pension reserves	29.7	34.3	51.4	62.2	49.1	65.4	73.2	85.9
Other sources	3.7	19.5	29.4	37.1	31.6	22.6	-17.9	23.2

See next page for continuation of table.

TABLE B-64.—Total funds raised in credit markets by nonfinancial sectors, 1975-83—Continued

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Item	1982				1983		
	I	II	III	IV	I	II	III
Net credit market borrowing by nonfinancial sectors							
Total net borrowing by domestic nonfinancial sectors	331.8	381.8	442.7	427.0	413.9	576.5	491.6
U.S. Government	95.6	118.3	206.5	224.4	196.3	264.1	157.2
Treasury issues	98.1	118.5	206.8	224.9	196.2	264.4	157.4
Agency issues and mortgages	-2.5	-2	-3	-5	.1	-3	-2
Private domestic nonfinancial sectors	236.2	263.6	236.1	202.5	217.6	312.4	334.4
Debt capital instruments	138.9	140.6	146.9	185.3	184.3	263.2	228.7
Tax-exempt obligations	31.7	51.7	47.4	71.3	38.6	83.1	32.8
Corporate bonds	11.5	10.0	24.8	29.1	18.5	23.3	6.3
Mortgages	95.7	78.9	74.8	84.9	127.2	156.7	189.6
Home mortgages	63.4	48.2	56.6	60.5	97.6	115.9	133.0
Multi-family residential	5.6	2.8	-3.7	.3	5.7	9.9	8.0
Commercial	19.3	23.5	17.3	19.8	24.9	29.4	42.7
Farm	7.3	4.5	4.5	4.4	-1.0	1.5	5.7
Other debt instruments	97.3	123.0	89.2	17.2	33.3	49.2	105.8
Consumer credit	2.6	35.9	11.1	23.6	28.1	49.5	49.1
Bank loans n.e.c.	71.7	68.5	55.7	21.8	8.5	-9	15.6
Open-market paper	9.5	3.6	-2.8	-23.3	-18.5	-14.1	14.9
Other	13.4	15.1	25.2	-4.9	15.2	14.7	26.2
By borrowing sector: Total	236.2	263.6	236.1	202.5	217.6	312.4	334.4
State and local governments	18.1	40.5	30.4	56.2	29.8	72.8	25.5
Households	75.1	100.0	78.4	93.7	117.4	162.1	168.8
Nonfinancial business	142.9	123.0	127.3	52.7	70.4	77.4	140.0
Farm	7.6	10.5	10.8	7.3	-2.9	.8	7.9
Nonfarm noncorporate	31.5	37.8	26.5	23.3	35.3	44.8	68.9
Corporate	103.9	74.8	90.0	22.0	38.0	31.9	63.3
Foreign net borrowing in United States	11.6	13.9	11.9	25.3	15.9	21.5	7.7
Bonds	3.1	1.7	12.8	8.8	3.2	5.5	1.6
Bank loans n.e.c.	-10.4	.2	-11.2	-3.1	24.6	5.3	-8.0
Open-market paper	16.4	8.5	.5	17.4	-16.8	7.6	10.4
U.S. Government loans	2.5	3.5	9.8	2.2	4.8	3.1	3.7
Total domestic plus foreign	343.4	395.8	454.5	452.3	429.7	598.1	499.4
Direct and indirect supply of funds to credit markets							
Total funds supplied to domestic nonfinancial sectors	331.8	381.8	442.7	427.0	413.9	576.5	491.6
Private domestic nonfinancial sectors	217.6	272.2	300.9	328.1	329.0	346.9	332.7
Deposits and currency	185.1	147.3	212.0	172.3	289.1	174.6	253.0
Checkable deposits and currency	28.2	-5.7	21.2	41.6	78.7	61.0	14.0
Time and savings deposits	125.5	107.1	105.3	188.7	282.2	172.9	223.7
Money market fund shares	38.2	40.5	88.1	-68.1	-105.2	-62.7	-6.5
Security repurchase agreements	.3	1.9	1.3	11.9	21.7	.4	18.8
Foreign deposits	-7.1	3.5	-4.0	-1.9	11.7	3.0	3.0
Credit market instruments	32.5	125.0	89.0	155.8	39.9	172.3	79.7
Foreign funds	-7.7	9.7	-46.6	4.1	-12.0	52.0	25.3
At banks	-21.3	-38.9	-59.9	9.1	-43.8	8.7	20.4
Credit market instruments	13.7	48.6	13.2	-5.0	31.8	43.3	5.0
U.S. Government and related loans, net	1.3	4.1	25.4	14.0	-16.3	23.1	52.1
U.S. Government cash balances	12.1	-16.3	24.1	4.1	-10.4	25.1	-10.9
Private insurance and pension reserves	79.8	91.0	86.8	86.1	88.0	90.6	93.1
Other sources	28.6	21.1	52.1	-9.3	35.5	38.8	-6

Source: Board of Governors of the Federal Reserve System.

TABLE B-65.—Federal Reserve Bank credit and reserves of depository institutions, 1929-83

(Averages of daily figures; millions of dollars)

Year and month	Reserve Bank credit outstanding					Reserves of depository institutions ¹		
	Total	U.S. Government and Federal agency securities	Borrowings of depository institutions		Other	Total	Required	Excess
			Total	Seasonal				
1929: Dec.....	1,643	446	801		396	2,395	2,347	48
1933: Dec.....	2,669	2,432	95		142	2,588	*1,822	*766
1939: Dec.....	2,612	2,510	3		99	11,473	6,462	5,011
1940: Dec.....	2,305	2,188	3		114	14,049	7,403	6,646
1941: Dec.....	2,404	2,219	5		180	12,812	9,422	3,390
1942: Dec.....	6,035	5,549	4		482	13,152	10,776	2,376
1943: Dec.....	11,914	11,166	90		658	12,749	11,701	1,048
1944: Dec.....	19,612	18,693	265		654	14,168	12,884	1,284
1945: Dec.....	24,744	23,708	334		702	16,027	14,536	1,491
1946: Dec.....	24,746	23,767	157		822	16,517	15,617	900
1947: Dec.....	22,858	21,905	224		729	17,261	16,275	986
1948: Dec.....	23,978	23,002	134		842	19,990	19,193	797
1949: Dec.....	19,012	18,287	118		607	16,291	15,488	803
1950: Dec.....	21,606	20,345	142		1,119	17,391	16,364	1,027
1951: Dec.....	25,446	23,409	657		1,380	20,310	19,484	826
1952: Dec.....	27,299	24,400	1,593		1,306	21,180	20,457	723
1953: Dec.....	27,107	25,639	441		1,027	19,920	19,227	693
1954: Dec.....	26,317	24,917	246		1,154	19,279	18,576	703
1955: Dec.....	26,853	24,602	839		1,412	19,240	18,646	594
1956: Dec.....	27,156	24,765	688		1,703	19,535	18,883	652
1957: Dec.....	26,186	23,982	710		1,494	19,420	18,843	577
1958: Dec.....	28,412	26,312	557		1,543	18,899	18,383	516
1959: Dec.....	29,435	27,036	906		1,493	18,932	18,450	482
1960: Dec.....	29,060	27,248	87		1,725	19,283	18,514	769
1961: Dec.....	31,217	29,098	149		1,970	20,118	19,550	568
1962: Dec.....	33,218	30,546	304		2,368	20,040	19,468	572
1963: Dec.....	36,610	33,729	327		2,554	20,740	20,210	536
1964: Dec.....	39,873	37,126	243		2,504	21,609	21,198	411
1965: Dec.....	43,853	40,885	454		2,514	22,719	22,267	452
1966: Dec.....	46,864	43,760	557		2,547	23,830	23,438	392
1967: Dec.....	51,268	48,891	238		2,139	25,660	24,915	345
1968: Dec.....	56,610	52,829	765		3,316	27,221	26,766	455
1969: Dec.....	64,100	57,500	1,086		5,514	28,031	27,774	257
1970: Dec.....	66,708	61,688	321		4,699	29,265	28,993	272
1971: Dec.....	74,255	69,158	107		4,990	31,329	31,164	165
1972: Dec.....	76,851	71,094	1,049		4,708	31,353	31,134	219
1973: Dec.....	85,642	79,701	1,298		4,643	35,068	34,806	262
1974: Dec.....	93,967	86,679	703	41	6,585	36,941	36,602	339
1975: Dec.....	99,651	92,108	127	13	7,416	34,989	34,727	262
1976: Dec.....	107,632	100,328	62	12	7,242	35,136	34,964	172
1977: Dec.....	116,382	107,948	558	54	7,876	36,471	36,297	174
1978: Dec.....	129,330	117,344	874	134	11,112	41,572	41,447	125
1979: Dec.....	139,896	126,276	1,473	82	12,147	43,972	43,578	394
1980: Dec.....	143,250	127,895	1,617	116	13,738	* 40,097	40,067	* 30
1981: Dec.....	151,920	137,796	642	53	13,482	41,918	41,606	312
1982: Dec.....	159,659	146,358	697	33	12,604	41,853	41,353	500
1983: Dec P.....	171,531	160,352	748	96	10,431	40,124	39,179	945
1983: Jan.....	157,519	144,305	500	33	12,714	41,862	41,316	546
Feb.....	155,365	143,324	557	39	11,484	39,797	39,362	435
Mar.....	155,883	144,130	852	53	10,901	38,039	37,602	437
Apr.....	159,250	146,808	993	82	11,449	38,650	38,174	476
May.....	160,130	148,397	902	98	10,831	38,282	37,833	449
June.....	162,133	150,406	1,714	121	10,013	38,415	37,935	480
July.....	164,799	152,921	1,382	172	10,496	38,947	38,440	507
Aug.....	163,698	153,670	1,573	198	8,455	38,660	38,214	446
Sept.....	168,182	157,545	1,441	191	9,196	37,916	37,418	498
Oct.....	169,202	158,236	837	142	10,129	38,137	37,632	505
Nov.....	167,773	156,767	912	119	10,094	38,144	37,615	529
Dec P.....	171,531	160,352	748	96	10,431	40,124	39,179	945

¹ Beginning December 1959, part of currency and cash held by member banks allowed as reserves; beginning November 1960 all such currency and cash allowed.

Beginning November 1972, includes reserve deficiencies on which Federal Reserve Banks were allowed to waive penalties for a transition period in connection with bank adaptation to Regulation J as amended effective November 9, 1972. Transition period ended after second quarter 1974.

Effective November 1975, includes reserve deficiencies on which penalties are waived over a 24-month period when a nonmember bank merges into an existing member bank, or when a nonmember bank joins the Federal Reserve System.

² Data are for licensed banks only.

³ Includes all reserve balances of depository institutions plus vault cash at institutions with required reserve balances plus vault cash equal to required reserves at other institutions.

⁴ Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements less required reserves. (This measure of excess reserves is comparable to the old excess reserves concept published historically.)

Source: Board of Governors of the Federal Reserve System.

TABLE B-66.—Aggregate reserves of depository institutions and monetary base, 1959-83

(Averages of daily figures; billions of dollars)

Year and month	Adjusted for changes in reserve requirements ¹							
	Seasonally adjusted				Not seasonally adjusted			
	Reserves of depository institutions			Monetary base ²	Reserves of depository institutions			Monetary base ³
	Total ²	Nonborrowed	Required		Total ²	Nonborrowed	Required	
1959: Dec.....	14.04	13.10	13.54	43.4	14.32	13.37	13.81	44.3
1960: Dec.....	14.22	14.15	13.48	43.6	14.49	14.42	13.75	44.5
1961: Dec.....	14.68	14.55	14.10	44.7	14.96	14.82	14.37	45.6
1962: Dec.....	14.98	14.72	14.41	46.0	15.24	14.98	14.67	47.0
1963: Dec.....	15.32	14.99	14.83	48.3	15.56	15.23	15.07	49.3
1964: Dec.....	15.84	15.57	15.43	50.7	16.09	15.82	15.68	51.7
1965: Dec.....	16.43	15.99	16.01	53.3	16.71	16.27	16.29	54.5
1966: Dec.....	16.45	15.91	16.11	55.4	16.76	16.23	16.42	56.6
1967: Dec.....	17.94	17.71	17.56	59.0	18.23	18.01	17.86	60.1
1968: Dec.....	18.91	18.16	18.48	63.1	19.00	18.25	18.57	64.1
1969: Dec.....	19.16	18.04	18.87	66.0	19.35	18.23	19.07	67.2
1970: Dec.....	20.15	19.82	19.90	70.1	20.27	19.93	20.02	71.2
1971: Dec.....	21.50	21.38	21.32	75.1	21.51	21.38	21.33	76.0
1972: Dec.....	23.70	22.65	23.41	81.5	23.92	22.87	23.64	82.9
1973: Dec.....	24.85	23.56	24.55	87.5	25.11	23.81	24.81	89.0
1974: Dec.....	26.25	25.52	25.99	95.4	26.51	25.78	26.25	96.9
1975: Dec.....	26.38	26.25	26.11	101.7	26.68	26.55	26.41	103.3
1976: Dec.....	26.80	26.74	26.52	109.0	27.27	27.21	26.99	111.1
1977: Dec.....	28.00	27.43	27.81	118.3	28.46	27.89	28.27	120.5
1978: Dec.....	29.44	28.57	29.21	128.8	29.91	29.04	29.68	131.3
1979: Dec.....	30.71	29.24	30.38	139.3	31.26	29.79	30.93	141.7
1980: Dec.....	32.46	30.77	31.94	151.1	33.41	31.72	32.89	154.4
1981: Dec.....	33.75	33.11	33.43	158.8	34.61	33.98	34.29	161.9
1982: Dec.....	36.23	35.60	35.73	171.1	36.96	36.33	36.46	174.4
1983: Dec ⁴	37.59	36.81	37.03	186.5	38.37	37.59	37.81	190.0
1982:								
Jan.....	34.00	32.48	33.58	159.8	35.92	34.40	35.50	161.3
Feb.....	34.05	32.26	33.74	160.8	33.99	32.20	33.69	159.0
Mar.....	34.22	32.67	33.96	161.5	33.63	32.07	33.26	159.3
Apr.....	34.34	32.77	34.07	162.5	34.12	32.55	33.85	161.6
May.....	34.42	33.30	34.06	163.8	33.97	32.85	33.61	163.0
June.....	34.55	33.34	34.24	164.9	33.81	32.61	33.50	164.2
July.....	34.55	33.86	34.24	165.4	34.13	33.44	33.81	166.0
Aug.....	34.70	34.18	34.39	166.4	34.14	33.63	33.83	166.2
Sept.....	35.11	34.17	34.72	167.7	34.82	33.88	34.43	167.3
Oct.....	35.37	34.89	34.96	168.8	35.42	34.95	35.02	168.7
Nov.....	35.83	35.21	35.43	169.8	36.09	35.47	35.69	171.0
Dec.....	36.23	35.60	35.73	171.1	36.96	36.33	36.46	174.4
1983:								
Jan.....	35.63	35.10	35.09	171.9	37.61	37.08	37.06	173.2
Feb.....	36.10	35.52	35.66	173.8	35.97	35.39	35.54	171.8
Mar.....	36.80	36.01	36.37	176.1	36.06	35.26	35.62	173.6
Apr.....	37.15	36.14	36.68	177.3	36.91	35.90	36.44	176.3
May.....	37.13	36.18	36.68	178.8	36.64	35.69	36.19	177.8
June.....	37.61	35.98	37.13	180.3	36.79	35.15	36.31	179.6
July.....	37.80	36.35	37.29	181.1	37.34	35.89	36.83	181.7
Aug.....	37.69	36.15	37.25	182.1	37.06	35.52	36.62	181.8
Sept.....	37.72	36.28	37.22	183.4	37.39	35.95	36.89	182.9
Oct.....	37.62	36.78	37.12	184.6	37.68	36.84	37.18	184.4
Nov.....	37.41	36.50	36.88	185.5	37.69	36.79	37.17	186.7
Dec ⁴	37.59	36.81	37.03	186.5	38.37	37.59	37.81	190.0

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.

² 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 institutions.

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.

Source: Board of Governors of the Federal Reserve System.

TABLE B-67.—Bond yields and interest rates, 1929-83

(Percent per annum)

Year	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) ³	Commercial paper, 6 months ⁴	Prime rate charged by banks ⁵	Discount rate, Federal Reserve Bank of New York ⁵	Federal funds rate ⁶
	Bills (new issues) ¹		Constant maturities ²		Aaa	Baa						
	3-month	6-month	3 years	10 years								
1929					4.73	5.90	4.27		5.85	5.50-6.00	5.16	
1933	0.515				4.49	7.76	4.71		1.73	1.50-4.00	2.56	
1939	.023				3.01	4.96	2.76		.59	1.50	1.00	
1940	.014				2.84	4.75	2.50		.56	1.50	1.00	
1941	.103				2.77	4.33	2.10		.53	1.50	1.00	
1942	.326				2.83	4.28	2.36		.66	1.50	* 1.00	
1943	.373				2.73	3.91	2.06		.69	1.50	* 1.00	
1944	.375				2.72	3.61	1.86		.73	1.50	* 1.00	
1945	.375				2.62	3.29	1.67		.75	1.50	* 1.00	
1946	.375				2.53	3.05	1.64		.81	1.50	* 1.00	
1947	.594				2.61	3.24	2.01		1.03	1.50-1.75	1.00	
1948	1.040				2.82	3.47	2.40		1.44	1.75-2.00	1.34	
1949	1.102				2.66	3.42	2.21		1.49	2.00	1.50	
1950	1.218				2.62	3.24	1.98		1.45	2.07	1.59	
1951	1.552				2.86	3.41	2.00		2.16	2.56	1.75	
1952	1.766				2.96	3.52	2.19		2.33	3.00	1.75	
1953	1.931		2.47	2.85	3.20	3.74	2.72		2.52	3.17	1.99	
1954	.953		1.63	2.40	2.90	3.51	2.37		1.58	3.05	1.60	
1955	1.753		2.47	2.82	3.06	3.53	2.53		2.18	3.16	1.89	1.78
1956	2.658		3.19	3.18	3.36	3.88	2.93		3.31	3.77	2.77	2.73
1957	3.267		3.98	3.65	3.89	4.71	3.60		3.81	4.20	3.12	3.11
1958	1.839		2.84	3.32	3.79	4.73	3.56		2.46	3.83	2.15	1.57
1959	3.405	3.832	4.46	4.33	4.38	5.05	3.95		3.97	4.48	3.36	3.30
1960	2.928	3.247	3.98	4.12	4.41	5.19	3.73		3.85	4.82	3.53	3.22
1961	2.378	2.605	3.54	3.88	4.35	5.08	3.46		2.97	4.50	3.00	1.96
1962	2.778	2.908	3.47	3.95	4.33	5.02	3.18		3.26	4.50	3.00	2.68
1963	3.157	3.253	3.67	4.00	4.26	4.86	3.23	5.89	3.55	4.50	3.23	3.18
1964	3.549	3.686	4.03	4.19	4.40	4.83	3.22	5.82	3.97	4.50	3.55	3.50
1965	3.954	4.055	4.22	4.28	4.49	4.87	3.27	5.81	4.38	4.54	4.04	4.07
1966	4.881	5.082	5.23	4.92	5.13	5.67	3.82	6.25	5.55	5.63	4.50	5.11
1967	4.321	4.630	5.03	5.07	5.51	6.23	3.98	6.46	5.10	5.61	4.19	4.22
1968	5.339	5.470	5.68	5.65	6.18	6.94	4.51	6.97	5.90	6.30	5.16	5.66
1969	6.677	6.853	7.02	6.67	7.03	7.81	5.81	7.80	7.83	7.96	5.87	8.20
1970	6.458	6.562	7.29	7.35	8.04	9.11	6.51	8.45	7.71	7.91	5.95	7.18
1971	4.348	4.511	5.65	6.16	7.39	8.56	5.70	7.74	5.11	5.72	4.88	4.66
1972	4.071	4.466	5.72	6.21	7.21	8.16	5.27	7.60	4.73	5.25	4.50	4.43
1973	7.041	7.178	6.95	6.84	7.44	8.24	5.18	7.96	8.15	8.03	6.44	8.73
1974	7.886	7.926	7.82	7.56	8.57	9.50	6.09	8.92	9.84	10.81	7.83	10.50
1975	5.838	6.122	7.49	7.99	8.83	10.61	6.89	9.00	6.32	7.86	6.25	5.82
1976	4.989	5.266	6.77	7.61	8.43	9.75	6.49	9.00	5.34	6.84	5.50	5.04
1977	5.265	5.510	6.69	7.42	8.02	8.97	5.56	9.02	5.61	6.83	5.46	5.54
1978	7.221	7.572	8.29	8.41	8.73	9.49	5.90	9.56	7.99	9.06	7.46	7.93
1979	10.041	10.017	9.71	9.44	9.63	10.69	6.39	10.78	10.91	12.67	10.28	11.19
1980	11.506	11.374	11.55	11.46	11.94	13.67	8.51	12.66	12.29	15.27	11.77	13.36
1981	14.029	13.776	14.44	13.91	14.17	16.04	11.23	14.70	14.76	18.87	13.42	16.38
1982	10.686	11.084	12.92	13.00	13.79	16.11	11.57	15.14	11.89	14.86	11.02	12.26
1983	8.63	8.75	10.45	11.10	12.04	13.55	9.47	12.57	8.89	10.79	8.50	9.09

See next page for continuation of table.

TABLE B-67.—Bond yields and interest rates, 1929-83—Continued

(Percent per annum)

Year and month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) ³	Commercial paper, 6 months ⁴	Prime rate charged by banks (high-low) ⁵	Discount rate Federal Reserve Bank of New York (high-low) ⁶	Federal funds rate ⁶
	Bills (new issues) ¹		Constant maturities ²									
	3-month	6-month	3 years	10 years	Aaa	Baa						
1980:												
Jan	12.036	11.851	10.88	10.80	11.09	12.42	7.21	11.87	12.66	15.25-15.25	12.00-12.00	13.82
Feb	12.814	12.721	12.84	12.41	12.38	13.57	8.04	11.93	13.60	16.75-15.25	13.00-12.00	14.13
Mar	15.526	15.100	14.05	12.75	12.96	14.45	9.09	12.62	16.50	19.50-16.75	13.00-13.00	17.19
Apr	14.003	13.618	12.02	11.47	12.04	14.19	8.40	13.03	14.93	20.00-19.50	13.00-13.00	17.61
May	9.150	9.149	9.44	10.18	10.99	13.17	7.37	13.68	9.29	19.00-14.00	13.00-12.00	10.98
June	6.995	7.218	8.91	9.78	10.58	12.71	7.60	12.66	8.03	14.00-12.00	12.00-11.00	9.47
July	8.126	8.101	9.27	10.25	11.07	12.65	8.08	12.48	8.29	12.00-11.00	11.00-11.00	9.03
Aug	9.259	9.443	10.63	11.10	11.64	13.15	8.62	12.25	9.61	11.50-11.00	10.00-10.00	9.61
Sept	10.321	10.546	11.57	11.51	12.02	13.70	8.95	12.35	11.04	13.00-11.50	11.00-10.00	10.87
Oct	11.580	11.566	12.01	11.75	12.31	14.23	9.11	12.61	12.32	14.50-13.50	11.00-11.00	12.81
Nov	13.888	13.612	13.31	12.68	12.97	14.64	9.55	13.04	14.73	17.75-14.50	12.00-11.00	15.85
Dec	15.661	14.770	13.65	12.84	13.21	15.14	10.09	13.28	16.49	21.50-17.75	13.00-12.00	18.90
1981:												
Jan	14.724	13.883	13.01	12.57	12.81	15.03	9.65	13.27	15.10	21.50-20.00	13.00-13.00	19.08
Feb	14.905	14.134	13.65	13.19	13.35	15.37	10.03	13.54	14.87	20.00-19.00	13.00-13.00	15.93
Mar	13.478	12.983	13.51	13.12	13.33	15.34	10.12	14.02	13.59	19.00-17.50	13.00-13.00	14.70
Apr	13.635	13.434	14.09	13.68	13.88	15.56	10.55	14.15	14.17	18.00-17.00	13.00-13.00	15.72
May	16.295	15.334	15.08	14.10	14.32	15.95	10.73	14.10	16.66	20.50-18.00	14.00-13.00	18.52
June	14.557	13.947	14.29	13.47	13.75	15.80	10.56	14.67	15.22	20.50-20.00	14.00-14.00	19.10
July	14.699	14.402	15.15	14.28	14.38	16.17	11.03	14.72	16.09	20.50-20.00	14.00-14.00	19.04
Aug	15.612	15.548	16.00	14.94	14.89	16.34	12.13	15.27	16.62	20.50-20.50	14.00-14.00	17.82
Sept	14.951	15.057	16.22	15.32	15.49	16.92	12.86	15.29	15.93	20.50-19.50	14.00-14.00	15.87
Oct	13.873	14.013	15.50	15.15	15.40	17.11	12.67	15.65	14.72	19.50-18.00	14.00-14.00	15.08
Nov	11.269	11.530	13.11	13.39	14.22	16.39	11.71	16.38	11.96	18.00-16.00	14.00-13.00	13.31
Dec	10.926	11.471	13.66	13.72	14.23	16.55	12.77	15.87	12.14	15.75-15.75	13.00-12.00	12.37
1982:												
Jan	12.412	12.930	14.64	14.59	15.18	17.10	13.16	15.25	13.35	15.75-15.75	12.00-12.00	13.22
Feb	13.780	13.709	14.73	14.43	15.27	17.18	12.81	15.12	14.27	17.00-15.75	12.00-12.00	14.78
Mar	12.493	12.621	14.13	13.86	14.58	16.82	12.72	15.67	13.47	16.50-16.50	12.00-12.00	14.68
Apr	12.821	12.861	14.18	13.87	14.46	16.78	12.45	15.84	13.64	16.50-16.50	12.00-12.00	14.94
May	12.148	12.220	13.77	13.62	14.26	16.64	11.99	15.89	13.02	16.50-16.50	12.00-12.00	14.45
June	12.108	12.310	14.48	14.30	14.81	16.92	12.42	15.40	13.79	16.50-16.50	12.00-12.00	14.15
July	11.914	12.236	14.00	13.95	14.61	16.80	12.11	15.70	13.00	16.50-15.50	12.00-11.50	12.59
Aug	9.006	10.105	12.62	13.06	13.71	16.32	11.12	15.68	10.80	15.50-13.50	11.50-11.00	10.12
Sept	8.196	9.539	12.03	12.34	12.94	15.63	10.61	14.98	10.86	13.50-13.50	10.00-10.00	10.31
Oct	7.750	8.299	10.62	10.91	12.12	14.73	9.59	14.41	9.21	13.50-12.00	10.00-9.50	9.71
Nov	8.042	8.319	9.98	10.55	11.68	14.30	9.97	13.81	8.72	12.00-11.50	9.50-9.00	9.20
Dec	8.013	8.225	9.88	10.54	11.83	14.14	9.91	13.69	8.50	11.50-11.50	9.00-8.50	8.95
1983:												
Jan	7.810	7.898	9.64	10.46	11.79	13.94	9.45	13.49	8.15	11.50-11.00	8.50-8.50	8.68
Feb	8.130	8.233	9.91	10.72	12.01	13.95	9.48	13.16	8.39	11.00-10.50	8.50-8.50	8.51
Mar	8.304	8.325	9.84	10.51	11.73	13.61	9.16	13.41	8.48	10.50-10.50	8.50-8.50	8.77
Apr	8.252	8.343	9.76	10.40	11.51	13.29	8.96	12.42	8.48	10.50-10.50	8.50-8.50	8.80
May	8.19	8.20	9.66	10.38	11.46	13.09	9.03	12.67	8.31	10.50-10.50	8.50-8.50	8.63
June	8.82	8.89	10.32	10.85	11.74	13.37	9.51	12.36	9.03	10.50-10.50	8.50-8.50	8.98
July	9.12	9.29	10.90	11.38	12.15	13.39	9.46	12.50	9.36	10.50-10.50	8.50-8.50	9.37
Aug	9.39	9.53	11.30	11.85	12.51	13.64	9.72	12.38	9.68	11.00-10.50	8.50-8.50	9.56
Sept	9.05	9.19	11.07	11.65	12.37	13.55	9.57	12.54	9.28	11.00-11.00	8.50-8.50	9.45
Oct	8.71	8.90	10.87	11.54	12.25	13.46	9.64	12.25	8.98	11.00-11.00	8.50-8.50	9.48
Nov	8.71	8.89	10.96	11.69	12.41	13.61	9.79	12.34	9.09	11.00-11.00	8.50-8.50	9.34
Dec	8.96	9.14	11.13	11.83	12.57	13.75	9.90	12.42	9.50	11.00-11.00	8.50-8.50	9.47

¹ Rate on new issues within period; bank-discount basis.² Yields on the more actively traded issues adjusted to constant maturities by the Treasury Department.³ Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assuming, on the average, repayment at end of 10 years. Rates beginning January 1973 not strictly comparable with prior rates.⁴ Bank discount basis; prior to November 1979, data are for 4-6 months paper.⁵ 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.⁶ 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.⁷ From October 30, 1942, to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing in 1 year or less.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Home Loan Bank Board (FHLBB), Moody's Investors Service, and Standard & Poor's Corporation.

TABLE B-68.—Consumer credit outstanding, 1950-83

[Amount outstanding (end of month); millions of dollars, seasonally adjusted]

Year and month	Total consumer credit	Installment credit ¹					Noninstallment credit ⁴
		Total	Automobile	Revolving ²	Mobile home ³	Other	
December:							
1950.....	24,956	15,166	6,035			9,131	9,790
1951.....	26,496	15,859	5,981			9,878	10,637
1952.....	31,727	20,121	7,651			12,470	11,606
1953.....	35,795	23,870	9,702			14,168	11,925
1954.....	37,133	24,470	9,755			14,715	12,663
1955.....	44,123	29,809	13,485			16,324	14,314
1956.....	47,984	32,660	14,499			18,161	15,324
1957.....	50,841	34,914	15,493			19,421	15,927
1958.....	51,284	34,736	14,267			20,469	16,548
1959.....	59,075	40,421	16,641			23,780	18,654
1960.....	63,525	44,335	18,108			26,227	19,190
1961.....	66,134	45,438	17,656			27,782	20,696
1962.....	72,351	50,375	20,001			30,374	21,976
1963.....	81,055	57,056	22,891			34,165	23,999
1964.....	90,713	64,674	25,865			38,809	26,039
1965.....	101,063	72,814	29,378			43,436	28,249
1966.....	107,413	78,162	31,024			47,138	29,251
1967.....	112,676	81,783	31,136			50,647	30,893
1968.....	123,790	90,112	34,352	2,022		53,738	33,678
1969.....	134,129	99,381	36,946	3,563		58,872	34,748
1970.....	139,355	103,905	36,348	4,900	2,433	60,224	35,450
1971.....	155,537	116,434	40,522	8,252	7,171	60,489	39,103
1972.....	175,286	131,258	47,835	9,391	9,468	64,564	44,028
1973.....	200,894	152,910	53,740	11,318	13,505	74,347	47,984
1974.....	210,634	162,203	54,241	13,232	14,582	80,148	48,431
1975.....	219,772	169,387	57,279	14,467	14,382	83,259	50,385
1976.....	244,932	190,725	67,798	16,505	14,530	91,892	54,207
1977.....	284,599	226,646	82,890	36,427	14,897	92,432	57,953
1978.....	332,849	269,392	101,863	45,004	15,199	107,326	63,457
1979.....	377,486	307,115	116,523	53,174	16,843	120,575	70,371
1980.....	381,689	308,137	116,808	54,650	17,302	119,377	73,552
1981.....	405,654	326,274	125,323	58,722	18,280	123,949	79,380
1982.....	423,852	339,316	130,235	62,830	18,912	127,339	84,536
1982:							
Jan.....	408,610	328,059	125,956	58,858	18,368	124,877	80,551
Feb.....	408,861	328,781	126,102	58,997	18,394	125,288	80,880
Mar.....	407,891	328,999	125,783	59,457	18,359	125,400	78,892
Apr.....	411,377	330,634	126,258	60,144	18,447	125,785	80,743
May.....	413,562	332,142	126,970	60,784	18,536	125,852	81,420
June.....	416,313	333,884	127,727	61,458	18,631	126,068	82,429
July.....	417,209	334,276	127,628	61,867	18,744	126,037	82,933
Aug.....	417,134	334,343	127,271	62,007	18,910	126,155	82,791
Sept.....	418,089	335,180	127,473	62,120	18,932	126,655	82,909
Oct.....	418,885	335,593	127,694	62,302	18,932	126,665	83,292
Nov.....	420,333	336,897	128,824	62,326	18,920	126,827	83,436
Dec.....	423,852	339,316	130,235	62,830	18,912	127,339	84,536
1983:							
Jan.....	427,975	342,041	130,860	62,898	19,332	128,951	85,934
Feb.....	427,887	342,776	130,627	62,763	19,536	129,850	85,111
Mar.....	430,867	345,358	131,848	63,940	19,475	130,095	85,509
Apr.....	434,101	347,629	132,537	64,857	19,497	130,738	86,472
May.....	437,670	350,325	133,850	65,371	19,514	131,590	87,345
June.....	443,245	354,731	135,823	66,581	19,665	132,662	88,514
July.....	448,618	359,571	138,244	67,402	19,806	134,119	89,047
Aug.....	452,202	362,959	140,765	67,715	19,876	134,603	89,243
Sept.....	455,519	365,334	141,050	68,194	20,026	136,064	90,185
Oct.....	460,993	370,219	142,822	69,339	20,128	137,930	90,774
Nov.....	467,084	374,890	144,060	70,639	20,235	139,956	92,194

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 open-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.

Source: Board of Governors of the Federal Reserve System.

TABLE B-69.—*Net change in consumer credit outstanding, 1950-83*

[Change from preceding period; millions of dollars, seasonally adjusted]

Year and month	Total consumer credit	Installment credit ¹					Noninstallment credit ⁴
		Total	Auto-mobile	Revolving ²	Mobile home ³	Other	
December:							
1950.....	4,710	3,220	1,539			1,681	1,490
1951.....	1,540	693	- 54			747	847
1952.....	5,231	4,262	1,670			2,592	969
1953.....	4,068	3,749	2,051			1,698	319
1954.....	1,338	600	53			547	738
1955.....	6,990	5,339	3,730			1,609	1,651
1956.....	3,861	2,851	1,014			1,837	1,010
1957.....	2,857	2,254	994			1,260	603
1958.....	443	-178	-1,226			1,048	621
1959.....	7,791	5,685	2,374			3,311	2,106
1960.....	4,450	3,914	1,467			2,447	536
1961.....	2,609	1,103	- 452			1,555	1,506
1962.....	6,217	4,937	2,345			2,592	1,280
1963.....	8,704	6,681	2,890			3,791	2,023
1964.....	9,658	7,618	2,974			4,644	2,040
1965.....	10,350	8,140	3,513			4,627	2,210
1966.....	6,350	5,348	1,646			3,702	1,002
1967.....	5,263	3,621	112			3,509	1,642
1968.....	11,114	8,329	3,216	2,022		3,091	2,785
1969.....	10,339	9,269	2,594	1,541		5,134	1,070
1970.....	5,226	4,524	- 598	1,337	2,433	1,352	702
1971.....	16,182	12,529	4,174	3,352	4,738	265	3,653
1972.....	19,749	14,824	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	501	1,914	1,077	5,801	447
1975.....	9,138	7,184	3,038	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	42,746	18,973	8,577	302	14,894	5,504
1979.....	44,637	37,723	14,660	8,170	1,644	13,249	6,914
1980.....	4,203	1,022	285	1,476	459	-1,198	3,181
1981.....	23,965	18,137	8,515	4,072	978	4,572	5,828
1982.....	18,198	13,042	4,912	4,108	632	3,390	5,156
1982:							
Jan.....	2,956	1,785	633	136	88	928	1,171
Feb.....	251	722	146	139	26	411	-471
Mar.....	-970	218	-319	460	-35	112	-1,188
Apr.....	3,486	1,635	475	687	88	385	1,851
May.....	2,185	1,508	712	640	89	67	677
June.....	2,751	1,742	757	674	95	216	1,009
July.....	896	392	-99	409	113	-31	504
Aug.....	-75	67	-357	140	166	118	-142
Sept.....	955	837	202	113	22	500	118
Oct.....	796	413	221	182	0	10	383
Nov.....	1,448	1,304	1,130	24	-12	162	144
Dec.....	3,519	2,419	1,411	504	-8	512	1,100
1983:							
Jan.....	4,123	2,725	625	68	420	1,612	1,398
Feb.....	-88	735	-233	-135	204	899	-823
Mar.....	2,980	2,582	1,221	1,177	-61	245	398
Apr.....	3,234	2,271	689	917	22	643	963
May.....	3,569	2,696	1,313	514	17	852	873
June.....	5,575	4,406	1,973	1,210	151	1,072	1,169
July.....	5,373	4,840	2,421	821	141	1,457	533
Aug.....	3,584	3,388	2,521	313	70	484	196
Sept.....	3,317	2,375	285	479	150	1,461	942
Oct.....	5,474	4,885	1,772	1,145	102	1,866	589
Nov.....	6,091	4,671	1,238	1,300	107	2,026	1,420

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 1968, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes open-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.

Note.—See also Table B-68.

Source: Board of Governors of the Federal Reserve System.

TABLE B-70.—Mortgage debt outstanding by type of property and of financing, 1939-83

[Billions of dollars]

End of year or quarter	All prop- er- ties	Farm prop- er- ties	Nonfarm properties				Nonfarm properties by type of mortgage					
			Total	1- to 4- family houses	Multi- family prop- er- ties	Com- mer- cial prop- er- ties ¹	Government underwritten			Conventional ²		
							Total ²	1- to 4-family houses		Total	1- to 4- family houses	
								Total	FHA insured			VA guar- anteed
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	50.9	33.3	7.5	10.2	13.6	12.5	5.3	7.2	37.3	20.8
1949	62.7	5.6	57.1	37.6	8.6	10.8	17.1	15.0	6.9	8.1	40.0	22.6
1950	72.8	6.1	66.7	45.2	10.1	11.5	22.1	18.8	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
1966	356.5	23.1	333.4	232.9	40.3	60.1	84.1	76.1	44.8	31.3	249.3	156.9
1967	381.2	25.1	356.1	247.3	43.9	64.8	88.2	79.9	47.4	32.5	267.9	167.4
1968	410.9	27.4	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
1969	441.4	29.2	412.2	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	1,022.6	63.6	958.9	657.8	111.5	189.6	161.7	141.6	68.0	73.6	797.2	516.2
1978	1,173.6	70.8	1,102.8	770.6	120.7	211.4	176.4	153.4	71.4	82.0	926.4	617.3
1979	1,337.7	82.7	1,255.1	891.1	128.4	235.6	199.0	172.9	81.0	92.0	1,056.1	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	791.8
1981	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	857.7
1982	1,655.2	106.8	1,548.4	1,114.2	140.3	293.9	248.9	217.9	108.0	109.9	1,299.5	896.3
1981: I	1,497.6	94.5	1,403.2	1,004.1	138.1	261.0	229.1	198.8	95.7	103.1	1,174.0	805.2
1981: II	1,533.3	97.5	1,435.8	1,028.4	139.3	268.1	233.6	202.7	98.1	104.6	1,202.2	825.7
1981: III	1,561.7	100.0	1,461.7	1,047.8	140.2	273.7	237.0	205.9	100.0	105.9	1,224.8	841.9
1981: IV	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	857.7
1982: I	1,602.9	103.9	1,498.9	1,076.9	137.7	284.3	240.5	209.0	102.0	107.0	1,258.4	868.0
1982: II	1,624.3	105.5	1,518.8	1,089.5	138.3	291.0	241.6	209.8	102.7	107.1	1,277.2	879.7
1982: III	1,632.2	106.4	1,525.8	1,096.2	138.4	291.2	246.8	214.8	106.2	108.6	1,278.9	881.4
1982: IV	1,655.2	106.8	1,548.4	1,114.2	140.3	293.9	248.9	217.9	108.0	109.9	1,299.5	896.3
1983: I	1,682.6	106.9	1,575.7	1,133.3	142.2	300.2	252.5	222.1	110.8	111.3	1,323.2	911.2
1983: II	1,724.1	107.7	1,616.4	1,161.8	145.4	309.2	261.1	230.0	115.8	114.3	1,355.3	931.8
1983: III	1,774.2	108.8	1,665.3	1,198.4	147.7	319.3						

¹ Includes negligible amount of farm loans held by savings and loan associations.² Includes FHA insured multifamily properties, not shown separately.³ 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-71.—Mortgage debt outstanding by holder, 1939-83

[Billions of dollars]

End of year or quarter	Total	Major financial institutions					Other holders	
		Total	Savings and loan associations	Mutual savings banks	Commercial banks ¹	Life insurance companies	Federal and related agencies ²	Individuals and others
1939.....	35.5	18.6	3.8	4.8	4.3	5.7	5.0	11.9
1940.....	36.5	19.5	4.1	4.9	4.6	6.0	4.9	12.0
1941.....	37.6	20.7	4.6	4.8	4.9	6.4	4.7	12.2
1942.....	36.7	20.7	4.6	4.6	4.7	6.7	4.3	11.7
1943.....	35.3	20.2	4.6	4.4	4.5	6.7	3.6	11.5
1944.....	34.7	20.2	4.8	4.3	4.4	6.7	3.0	11.5
1945.....	35.5	21.0	5.4	4.2	4.8	6.6	2.4	12.1
1946.....	41.8	26.0	7.1	4.4	7.2	7.2	2.0	13.8
1947.....	48.9	31.8	8.9	4.9	9.4	8.7	1.8	15.3
1948.....	56.2	37.8	10.3	5.8	10.9	10.8	1.8	16.6
1949.....	62.7	42.9	11.6	6.7	11.6	12.9	2.3	17.5
1950.....	72.8	51.7	13.7	8.3	13.7	16.1	2.8	18.4
1951.....	82.3	59.5	15.6	9.9	14.7	19.3	3.5	19.3
1952.....	91.4	66.9	18.4	11.4	15.9	21.3	4.1	20.4
1953.....	101.3	75.1	22.0	12.9	16.9	23.3	4.6	21.7
1954.....	113.7	85.7	26.1	15.0	18.6	26.0	4.8	23.2
1955.....	129.9	99.3	31.4	17.5	21.0	29.4	5.3	25.3
1956.....	144.5	111.2	35.7	19.7	22.7	33.0	6.2	27.1
1957.....	156.5	119.7	40.0	21.2	23.3	35.2	7.7	29.1
1958.....	171.8	131.5	45.6	23.3	25.5	37.1	8.0	32.3
1959.....	190.8	145.5	53.1	25.0	28.1	39.2	10.2	35.1
1960.....	207.5	157.6	60.1	26.9	28.8	41.8	11.5	38.4
1961.....	228.0	172.6	68.8	29.1	30.4	44.2	12.2	43.1
1962.....	251.4	192.5	78.8	32.3	34.5	46.9	12.6	46.3
1963.....	278.5	217.1	90.9	36.2	39.4	50.5	11.8	49.5
1964.....	305.9	241.0	101.3	40.6	44.0	55.2	12.2	52.7
1965.....	333.3	264.6	110.3	44.6	49.7	60.0	13.5	55.2
1966.....	356.5	280.8	114.4	47.3	54.4	64.6	17.5	58.2
1967.....	381.2	298.8	121.8	50.5	59.0	67.5	20.9	61.4
1968.....	410.9	319.9	130.8	53.5	65.7	70.0	25.1	65.9
1969.....	441.4	339.1	140.2	56.1	70.7	72.0	31.1	71.2
1970.....	474.2	355.9	150.3	57.9	73.3	74.4	38.3	79.9
1971.....	526.5	394.2	174.3	62.0	82.5	75.5	46.4	85.9
1972.....	603.4	450.0	206.2	67.6	99.3	76.9	54.6	98.9
1973.....	681.6	505.4	231.7	73.2	119.1	81.4	64.8	111.4
1974.....	744.3	542.6	249.3	74.9	132.1	86.2	82.1	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.....	1,022.6	745.0	381.2	88.1	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.....	1,337.7	938.6	475.7	98.9	245.2	118.8	215.7	183.4
1980.....	1,471.8	997.2	503.2	99.9	263.0	131.1	256.6	218.1
1981.....	1,583.3	1,040.8	518.5	100.0	284.5	137.7	289.1	253.3
1982.....	1,655.2	1,023.7	482.2	97.8	301.7	141.9	354.8	276.6
1981: I.....	1,497.6	1,007.0	507.6	99.7	266.7	132.9	263.5	227.2
1981: II.....	1,533.3	1,023.3	515.4	100.0	273.2	134.7	271.4	238.6
1981: III.....	1,561.7	1,034.0	519.0	100.0	279.0	136.0	279.9	247.8
1981: IV.....	1,583.3	1,040.8	518.5	100.0	284.5	137.7	289.1	253.3
1982: I.....	1,602.9	1,041.7	516.1	97.5	289.4	138.8	301.0	260.2
1982: II.....	1,624.3	1,042.9	513.0	96.3	294.0	139.5	315.1	266.3
1982: III.....	1,632.2	1,027.0	493.9	94.4	298.3	140.4	332.8	272.3
1982: IV.....	1,655.2	1,023.7	482.2	97.8	301.7	141.9	354.8	276.6
1983: I.....	1,682.6	1,029.8	475.7	105.4	305.7	143.0	374.6	278.2
1983: II.....	1,724.1	1,049.8	473.1	119.2	312.7	144.7	394.8	279.6
1983: III.....	1,774.2	1,080.3	481.3	128.1	324.1	146.9	412.9	280.9

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, Veterans Administration, Public Housing Administration, Farmers Home Administration, and in earlier years Reconstruction Finance Corporation, Homeowners Loan Corporation, and Federal Farm Mortgage Corporation. Also includes GNMA Pools and U.S.-sponsored agencies such as new FNMA, Federal Land Banks, and Federal Home Loan Mortgage Corporation. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

GOVERNMENT FINANCE

TABLE B-72.—Federal budget receipts, outlays, and debt, fiscal years 1974-85

(Millions of dollars; fiscal years)

Description	Actual				
	1975	1976	1977	1978	1979
BUDGET RECEIPTS AND OUTLAYS:					
Total receipts	279,090	298,060	355,559	399,561	463,302
Federal funds	187,505	201,099	241,312	270,490	316,366
Trust funds	116,683	131,750	150,560	165,568	186,988
Interfund transactions	-25,098	-34,789	-36,313	-36,498	-40,052
Total outlays	324,245	364,473	400,506	448,368	490,997
Federal funds	240,081	269,921	295,756	331,991	362,396
Trust funds	109,261	129,341	141,063	152,874	168,653
Interfund transactions	-25,098	-34,789	-36,313	-36,498	-40,052
Total surplus or deficit (-)	-45,154	-66,413	-44,948	-48,807	-27,694
Federal funds	-52,576	-68,822	-54,444	-61,501	-40,030
Trust funds	7,422	2,409	9,496	12,694	18,335
OUTSTANDING DEBT, END OF PERIOD:					
Gross Federal debt	544,131	631,866	709,138	780,425	833,751
Held by Government agencies	147,225	151,566	157,295	169,477	189,162
Held by the public	396,906	480,300	551,843	610,948	644,589
Federal Reserve System	84,993	94,714	105,004	115,480	115,594
Other	311,913	385,586	446,839	495,468	528,996
BUDGET RECEIPTS					
Individual income taxes	122,386	131,603	157,626	180,988	217,841
Corporation income taxes	40,621	41,409	54,892	59,952	65,677
Social insurance taxes and contributions	84,534	90,769	106,485	120,967	138,939
Excise taxes	16,551	16,963	17,548	18,376	18,745
Estate and gift taxes	4,611	5,216	7,327	5,285	5,411
Customs duties	3,676	4,074	5,150	6,573	7,439
Miscellaneous receipts:					
Deposits of earnings by Federal Reserve System	5,777	5,451	5,908	6,641	8,327
All other	935	2,576	623	778	925
BUDGET OUTLAYS	324,245	364,473	400,506	448,368	490,997
National defense ¹	86,509	89,619	97,241	104,495	116,342
International affairs	7,073	5,740	4,991	6,111	6,263
General science, space, and technology	3,991	4,373	4,679	4,746	5,051
Energy	2,185	3,131	4,154	5,837	6,863
Natural resources and environment	7,343	8,181	10,027	10,980	12,133
Agriculture	1,661	2,495	5,537	7,717	6,191
Commerce and housing credit	5,612	3,796	102	3,337	2,579
Transportation	10,390	13,438	14,640	15,445	17,468
Community and regional development	3,741	4,767	6,348	11,072	9,544
Education, training, employment, and social services	15,882	18,749	20,999	26,475	29,693
Health	12,870	15,677	17,246	18,485	20,477
Social security and medicare ²	77,532	89,736	104,414	116,629	130,567
Social security	64,658	73,903	85,068	93,861	104,073
Medicare	12,874	15,834	19,345	22,768	26,495
Income security	50,160	60,784	61,047	61,485	66,359
Veterans benefits and services	16,599	18,433	18,038	18,978	19,931
Administration of justice	2,951	3,324	3,602	3,810	4,169
General government	2,913	2,668	2,941	3,442	3,855
General purpose fiscal assistance	7,187	7,235	9,499	9,601	8,372
Net interest	23,245	26,711	29,878	35,441	42,615
Allowances					
Undistributed offsetting receipts ¹	-13,602	-14,386	-14,879	-15,720	-17,476
Composition of undistributed offsetting receipts:					
Employer share, employee retirement ¹	-11,174	-11,724	-12,505	-13,461	-14,209
Rents and royalties on the Outer Continental Shelf	-2,428	-2,662	-2,374	-2,259	-3,267

¹ Starting in 1985 military retired pay will be financed from a trust fund in the income security function. The national defense function will include accrual charges to pay for retirement benefits earned by currently active duty personnel, and these will be offset in the undistributed offsetting receipts (employer share, employee retirement). The data for the earlier years have been adjusted to be comparable to this new usage.

² The Social Security Amendments of 1983 require that social security and medicare show in the budget as a separate function. In previous budgets social security was in the income security function and medicare was in the health function. The data in this table have been reconstructed to be comparable for all years shown.

See next page for continuation of table.

TABLE B-72.—Federal budget receipts, outlays, and debt, fiscal years 1974-85—Continued

(Millions of dollars; fiscal years)

Description	Actual				Estimates	
	1980	1981	1982	1983	1984	1985
BUDGET RECEIPTS AND OUTLAYS:						
Total receipts	517,112	599,272	617,766	600,562	670,071	745,127
Federal funds.....	350,856	410,422	409,253	382,432	420,009	464,246
Trust funds.....	210,930	239,413	268,407	317,368	331,511	393,460
Interfund transactions	-44,674	-50,563	-59,894	-99,238	-81,449	-112,578
Total outlays	576,675	657,204	728,375	795,969	853,760	925,492
Federal funds.....	419,220	475,171	526,113	600,920	628,789	687,221
Trust funds.....	202,129	232,596	262,155	294,287	306,420	350,850
Interfund transactions	-44,674	-50,563	-59,894	-99,238	-81,449	-112,578
Total surplus or deficit (—)	-59,563	-57,932	-110,609	-195,407	-183,689	-180,365
Federal funds.....	-68,364	-64,749	-116,860	-218,488	-208,780	-222,975
Trust funds.....	8,801	6,817	6,252	23,081	25,091	42,610
OUTSTANDING DEBT, END OF PERIOD:						
Gross Federal debt	914,317	1,003,941	1,146,987	1,381,886	1,591,573	1,828,388
Held by Government agencies.....	199,212	209,507	217,560	240,116	266,803	310,618
Held by the public.....	715,105	794,434	929,427	1,141,770	1,324,770	1,517,770
Federal Reserve System	120,846	124,466	134,497	155,527		
Other	594,259	669,968	794,929	986,243		
BUDGET RECEIPTS.....	517,112	599,272	617,766	600,562	670,071	745,127
Individual income taxes	244,069	285,917	297,744	288,938	293,260	328,410
Corporation income taxes	64,600	61,137	49,207	37,022	66,606	76,540
Social insurance taxes and contributions.....	157,803	182,720	201,498	208,994	239,494	270,683
Excise taxes	24,329	40,839	36,311	35,300	38,195	38,443
Estate and gift taxes	6,389	6,787	7,991	6,053	5,922	5,645
Customs duties	7,174	8,083	8,854	8,655	9,064	9,370
Miscellaneous receipts:						
Deposits of earnings by Federal Reserve System.....	11,767	12,834	15,186	14,492	14,352	14,799
All other	981	956	975	1,109	3,179	1,238
BUDGET OUTLAYS	576,675	657,204	728,375	795,969	853,760	925,492
National defense	133,995	157,513	185,308	209,901	237,546	272,040
International affairs	10,882	11,250	10,105	8,995	13,502	17,492
General science, space, and technology.....	5,726	6,358	7,080	7,745	8,291	8,818
Energy.....	6,312	10,277	4,681	3,999	3,463	3,144
Natural resources and environment	13,856	13,565	12,995	12,669	12,302	11,346
Agriculture.....	4,857	5,533	14,889	22,206	10,693	14,319
Commerce and housing credit	7,788	3,953	3,867	4,422	3,805	1,127
Transportation.....	21,132	23,395	20,570	21,385	26,123	27,061
Community and regional development.....	10,072	9,395	7,166	6,936	7,594	7,586
Education, training, employment, and social services.....	30,795	31,424	26,329	26,606	28,683	27,893
Health.....	23,148	26,858	27,435	28,655	30,665	32,916
Social security and medicare ²	150,648	178,733	202,531	223,311	240,225	260,321
Social security.....	118,559	139,584	155,964	170,724	179,161	190,639
Medicare.....	32,089	39,149	46,567	52,588	61,064	69,683
Income security.....	86,411	99,243	107,022	122,156	112,462	114,360
Veterans benefits and services.....	21,185	22,991	23,958	24,846	25,799	26,723
Administration of justice	4,582	4,762	4,703	5,099	6,021	6,140
General government	4,133	4,405	4,448	4,784	5,652	5,744
General purpose fiscal assistance	8,584	6,856	6,393	6,454	6,741	6,658
Net interest.....	52,511	68,734	84,995	89,774	108,239	116,138
Allowances.....						938
Undistributed offsetting receipts ¹	-19,942	-28,041	-26,099	-33,976	-34,047	-35,273
Composition of undistributed offsetting receipts:						
Employer share, employee retirement ¹	-15,842	-17,903	-19,849	-23,484	-25,347	-27,873
Rents and royalties on the Outer Continental Shelf	-4,101	-10,138	-6,250	-10,491	-8,700	-7,400

Note.—Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis. Beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1985" for additional information.

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

TABLE B-73.—Federal budget receipts and outlays, off-budget outlays, and debt, fiscal years 1929-85

[Billions of dollars]

Fiscal year	Budget			Off-budget outlays	Budget and off-budget surplus or deficit (—)	Gross Federal debt (end of period)	
	Receipts	Outlays	Surplus or deficit (—)			Total	Held by the public
1929.....	3.9	3.1	0.7			¹ 16.9	
1933.....	2.0	4.6	-2.6			¹ 22.5	
1939.....	5.0	8.8	-3.9			48.2	41.4
1940.....	6.4	9.5	-3.1			50.7	42.8
1941.....	8.6	13.6	-5.0			57.5	48.2
1942.....	14.4	35.1	-20.8			79.2	67.8
1943.....	23.6	78.5	-54.9			142.6	127.8
1944.....	44.3	91.3	-47.0			204.1	184.8
1945.....	45.2	92.7	-47.5			260.1	235.2
1946.....	39.3	55.2	-15.9			271.0	241.9
1947.....	38.4	34.5	3.9			257.1	224.3
1948.....	41.8	29.8	12.0			252.0	216.3
1949.....	39.4	38.8	.6			252.6	214.3
1950.....	39.5	42.6	-3.1			256.9	219.0
1951.....	51.6	45.5	6.1			255.3	214.3
1952.....	66.2	67.7	-1.5			259.1	214.8
1953.....	69.6	76.1	-6.5			266.0	218.4
1954.....	69.7	70.9	-1.2			270.8	224.5
1955.....	65.5	68.5	-3.0			274.4	226.6
1956.....	74.5	70.5	4.1			272.8	222.2
1957.....	80.0	76.7	3.2			272.4	219.4
1958.....	79.6	82.6	-2.9			279.7	226.4
1959.....	79.2	92.1	-12.9			287.8	235.0
1960.....	92.5	92.2	.3			290.9	237.2
1961.....	94.4	97.8	-3.4			292.9	238.6
1962.....	99.7	106.8	-7.1			303.3	248.4
1963.....	106.6	111.3	-4.8			310.8	254.5
1964.....	112.7	118.6	-5.9			316.8	257.6
1965.....	116.8	118.4	-1.6			323.2	261.6
1966.....	130.9	134.7	-3.8			329.5	264.7
1967.....	148.9	157.6	-8.7			341.3	267.5
1968.....	153.0	178.1	-25.2			369.8	290.6
1969.....	186.9	183.6	3.2			367.1	279.5
1970.....	192.8	195.7	-2.8			382.6	284.9
1971.....	187.1	210.2	-23.0			409.5	304.3
1972.....	207.3	230.7	-23.4			437.3	323.8
1973.....	230.8	245.6	-14.8	0.1	-14.9	468.4	343.0
1974.....	263.2	267.9	-4.7	1.4	-6.1	486.2	346.1
1975.....	279.1	324.2	-45.2	8.1	-53.2	544.1	396.9
1976.....	298.1	364.5	-66.4	7.3	-73.7	631.9	480.3
Transition quarter.....	81.2	94.2	-13.0	1.8	-14.7	646.4	498.3
1977.....	355.6	400.5	-44.9	8.7	-53.6	709.1	551.8
1978.....	399.6	448.4	-48.8	10.4	-59.2	780.4	610.9
1979.....	463.3	491.0	-27.7	12.5	-40.2	833.8	644.6
1980.....	517.1	576.7	-59.6	14.2	-73.8	914.3	715.1
1981.....	599.3	657.2	-57.9	21.0	-78.9	1,003.9	794.4
1982.....	617.8	728.4	-110.6	17.3	-127.9	1,147.0	929.4
1983.....	600.6	796.0	-195.4	12.4	-207.8	1,381.9	1,141.8
1984 ²	670.1	853.8	-183.7	16.2	-199.9	1,591.6	1,324.8
1985.....	745.1	925.5	-180.4	14.8	-195.2	1,828.4	1,517.8

¹ Not strictly comparable with later data.

² Estimates.

Note.—Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Data for 1929-39 are according to the administrative budget and those beginning 1940 according to the unified budget. Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1985" for additional information.

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

TABLE B-74.—*Relation of Federal Government receipts and expenditures in the national income and product accounts to the unified budget, fiscal years 1983-85*

[Billions of dollars; fiscal years]

Receipts and expenditures	1983	Estimate	
		1984	1985
RECEIPTS			
Total budget receipts.....	600.6	670.1	745.1
Government contribution for employee retirement (grossing).....	12.2	13.0	14.4
Other netting and grossing	9.4	12.1	13.5
Adjustment to accruals.....	9.7	-2.2	8.3
Geographic exclusions	-1.4	-1.7	-1.9
Other	.2		.2
Federal sector, national income and product accounts, receipts.....	630.7	691.3	779.2
EXPENDITURES			
Total budget outlays.....	796.0	853.8	925.5
Lending and financial transactions.....	-5.7	-7.0	-4.8
Government contribution for employee retirement (grossing).....	12.2	13.0	14.4
Other netting and grossing	9.4	12.1	13.5
Defense timing adjustment.....	1.0	.6	-1.9
Bonuses on Outer Continental Shelf land leases	7.4	5.1	4.0
Geographic exclusions.....	-4.9	-5.1	-5.3
Other	1.0	3.0	2.4
Federal sector, national income and product accounts, expenditures	816.4	875.5	947.8

Note.—See Note, Table B-73.

See Special Analysis B, "Special Analyses, Budget of the United States Government, Fiscal Year 1985" 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-75.—Government receipts and expenditures, national income and product accounts, 1929-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Total government			Federal Government			State and local government		
	Receipts	Expenditures	Surplus or deficit (-), national income and product accounts	Receipts	Expenditures	Surplus or deficit (-), national income and product accounts	Receipts	Expenditures	Surplus or deficit (-), national income and product accounts
1929.....	11.3	10.3	1.0	3.8	2.6	1.2	7.6	7.8	-0.2
1933.....	9.3	10.7	-1.4	2.7	4.0	-1.3	7.2	7.2	-.1
1939.....	15.4	17.6	-2.2	6.7	8.9	-2.2	9.6	9.6	.0
1940.....	17.7	18.4	-.7	8.6	10.0	-1.3	10.0	9.3	.6
1941.....	25.0	28.8	-3.8	15.4	20.5	-5.1	10.4	9.1	1.3
1942.....	32.6	64.0	-31.4	22.9	56.1	-33.1	10.6	8.8	1.8
1943.....	49.2	93.3	-44.1	39.3	85.8	-46.6	10.9	8.4	2.5
1944.....	51.2	103.0	-51.8	41.0	95.5	-54.5	11.1	8.5	2.7
1945.....	53.2	92.7	-39.5	42.5	84.6	-42.1	11.6	9.0	2.6
1946.....	51.0	45.6	5.4	39.1	35.6	3.5	13.0	11.1	1.9
1947.....	56.9	42.5	14.4	43.2	29.8	13.4	15.4	14.4	1.0
1948.....	58.9	50.5	8.4	43.2	34.9	8.3	17.7	17.6	.1
1949.....	55.9	59.3	-3.4	38.7	41.3	-2.6	19.5	20.2	-.7
1950.....	69.0	61.0	8.0	50.0	40.8	9.2	21.3	22.5	-1.2
1951.....	85.2	79.2	6.1	64.3	57.8	6.5	23.4	23.9	-.4
1952.....	90.1	93.9	-3.8	67.3	71.1	-3.7	25.4	25.5	-.0
1953.....	94.6	101.6	-6.9	70.0	77.1	-7.1	27.4	27.3	.1
1954.....	89.9	97.0	-7.1	63.7	69.8	-6.0	29.0	30.2	-1.1
1955.....	101.1	98.0	3.1	72.6	68.1	4.4	31.7	32.9	-1.3
1956.....	109.7	104.5	5.2	78.0	71.9	6.1	35.0	35.9	-.9
1957.....	116.2	115.2	.9	81.9	79.6	2.3	38.5	39.8	-1.4
1958.....	115.0	127.6	-12.6	78.7	88.9	-10.3	42.0	44.3	-2.4
1959.....	129.4	131.0	-1.6	89.8	91.0	-1.1	46.4	46.9	-.4
1960.....	139.5	136.4	3.1	96.1	93.1	3.0	49.9	49.8	.1
1961.....	144.8	149.1	-4.3	98.1	101.9	-3.9	54.0	54.4	-.4
1962.....	156.7	160.5	-3.8	106.2	110.4	-4.2	58.5	58.0	.5
1963.....	168.5	167.8	.7	114.4	114.2	.3	63.2	62.8	.5
1964.....	174.0	176.3	-2.3	114.9	118.2	-3.3	69.5	68.5	1.0
1965.....	188.3	187.8	.5	124.3	123.8	.5	75.1	75.1	-.0
1966.....	212.3	213.6	-1.3	141.8	143.6	-1.8	84.8	84.3	.5
1967.....	228.2	242.4	-14.2	150.5	163.7	-13.2	93.6	94.7	-1.1
1968.....	263.1	269.1	-6.0	174.4	180.5	-6.0	107.3	107.2	.1
1969.....	296.7	286.8	9.9	196.9	188.4	8.4	120.2	118.7	1.5
1970.....	302.8	313.4	-10.6	191.9	204.3	-12.4	135.4	133.5	1.9
1971.....	322.6	342.0	-19.4	198.6	220.6	-22.0	153.0	150.4	2.6
1972.....	368.3	371.6	-3.3	227.5	244.3	-16.8	178.3	164.8	13.5
1973.....	413.1	405.3	7.8	258.6	264.2	-5.6	195.0	181.6	13.4
1974.....	455.2	460.0	-4.7	287.8	299.3	-11.5	211.4	204.6	6.8
1975.....	470.5	534.3	-63.8	287.3	356.6	-69.3	237.7	232.2	5.5
1976.....	538.4	574.9	-36.5	331.8	384.8	-53.1	267.8	251.2	16.6
1977.....	605.4	623.3	-17.8	375.2	421.1	-45.9	297.7	269.7	28.0
1978.....	681.9	681.1	.8	431.6	461.0	-29.5	327.6	297.3	30.3
1979.....	765.1	750.8	14.3	493.6	509.7	-16.1	352.0	321.5	30.4
1980.....	838.3	869.0	-30.7	540.9	602.1	-61.2	386.1	355.5	30.6
1981.....	957.2	984.1	-26.9	627.0	689.2	-62.2	418.1	382.7	35.3
1982.....	972.5	1,088.3	-115.8	617.4	764.4	-147.1	439.1	407.8	31.3
1983 P.....	1,040.1	1,171.9	-131.8	643.3	826.2	-182.9	483.3	432.3	51.0
1981:									
I.....	938.2	946.3	-.8	617.4	660.8	-43.4	411.3	376.0	35.3
II.....	948.1	958.7	-10.6	622.6	669.9	-47.3	415.9	379.2	36.7
III.....	974.0	999.1	-25.2	638.8	701.2	-62.4	421.6	384.3	37.3
IV.....	968.4	1,032.2	-63.7	629.2	725.0	-95.8	423.4	391.4	32.0
1982:									
I.....	962.9	1,042.7	-79.7	619.5	728.0	-108.5	425.9	397.2	28.8
II.....	973.9	1,055.1	-81.2	622.2	735.4	-113.2	436.8	404.8	32.0
III.....	975.0	1,101.9	-127.0	615.2	773.5	-158.3	442.8	411.4	31.3
IV.....	978.3	1,153.7	-175.3	612.6	820.9	-208.2	450.7	417.8	32.9
1983:									
I.....	999.2	1,142.1	-142.9	623.3	806.6	-183.3	461.7	421.3	40.4
II.....	1,044.6	1,159.0	-114.4	652.6	818.7	-166.1	478.7	427.0	51.7
III.....	1,050.6	1,182.4	-131.8	645.2	832.5	-187.3	492.7	437.1	55.5
IV P.....	1,204.0	1,204.0	0.0	847.0	847.0	0.0	443.5	443.5	0.0

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-76.—Federal Government receipts and expenditures, national income and product accounts, 1959-85

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Expenditures								Surplus or deficit (-), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total ¹	Purchases of goods and services	Transfer payments		Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises		
								To persons	To foreigners					
Fiscal year: ²														
1959	85.4	38.2	21.4	12.0	13.9	91.2	54.8	19.9	1.8	6.2	5.6	2.5	-5.8	
1960	94.8	42.5	22.3	13.2	16.7	91.3	52.9	20.6	1.8	6.9	6.8	2.4	-3.4	
1961	95.0	43.6	20.0	13.3	18.1	98.1	55.8	23.6	2.1	6.9	6.8	3.3	-3.1	
1962	104.0	47.3	22.7	14.2	19.9	106.2	61.0	25.1	2.1	7.6	6.4	4.1	-2.2	
1963	110.0	49.6	23.3	15.0	22.1	111.7	63.7	26.5	2.1	8.3	7.1	4.0	-1.7	
1964	115.6	50.7	25.7	15.6	23.6	117.2	65.9	27.4	2.2	9.8	7.7	4.1	-1.5	
1965	120.0	51.4	27.1	16.9	24.5	118.5	64.6	28.4	2.2	10.9	8.2	4.3	-1.4	
1966	132.7	57.5	30.8	15.5	28.9	132.7	72.4	31.8	2.3	12.7	8.7	4.8	-0.5	
1967	146.0	64.4	30.3	15.8	35.5	154.9	86.0	37.2	2.2	14.8	9.6	5.2	-8.9	
1968	159.9	71.4	33.1	17.1	38.3	172.2	95.0	42.7	2.1	17.8	10.4	4.1	-12.3	
1969	189.8	90.2	36.8	18.6	44.2	184.6	98.0	48.7	2.2	19.2	11.9	4.7	-5.2	
1970	194.8	94.0	32.9	19.2	48.8	195.5	97.1	55.0	2.0	22.6	13.5	5.5	-7.7	
1971	192.4	87.9	31.9	20.0	52.6	212.9	94.9	67.7	2.3	26.8	14.0	7.0	-20.5	
1972	213.4	100.5	34.2	19.9	58.9	232.7	100.6	76.1	2.8	32.6	14.0	6.5	-19.2	
1973	240.7	107.4	41.2	20.7	71.5	255.7	101.1	87.2	2.7	40.4	15.7	9.2	-14.9	
1974	271.6	122.7	43.4	21.4	84.2	278.2	104.5	101.8	3.0	41.6	19.6	7.6	-6.6	
1975	283.4	127.5	41.8	22.2	91.9	328.8	117.9	131.4	3.1	48.4	21.7	6.0	-45.4	
1976	314.9	137.2	52.5	24.3	101.0	370.7	125.1	153.8	3.0	57.5	25.2	6.2	-55.8	
1977	365.9	166.4	58.9	24.5	116.2	411.2	139.8	166.6	3.2	66.3	28.4	6.9	-45.3	
1978	414.3	186.5	67.3	27.2	133.3	450.4	150.4	178.7	3.5	74.7	33.5	9.7	-36.1	
1979	480.8	222.6	76.1	29.1	153.1	495.6	164.1	197.8	4.1	79.1	40.6	9.9	-14.8	
1980	525.9	250.4	69.9	35.5	170.0	576.5	189.3	234.6	4.8	86.7	50.7	10.4	-50.7	
1981	610.3	289.3	70.5	53.6	196.9	668.1	218.5	273.5	5.8	90.1	67.7	12.5	-57.8	
1982	627.8	310.4	51.3	50.3	215.7	740.0	251.0	304.1	6.1	83.4	82.2	13.2	-112.2	
1983	630.7	295.3	54.3	50.7	230.4	816.4	274.7	338.5	6.2	85.7	90.6	20.3	-185.7	
1984 ^a	691.3	302.1	74.8	56.6	257.8	875.5	292.6	347.0	7.4	91.8	108.6	28.1	-184.2	
1985 ^a	779.2	340.8	93.5	55.4	289.5	947.8	340.0	367.8	8.5	95.6	117.1	18.8	-168.6	
Calendar year:														
1959	89.8	39.9	22.5	12.5	14.9	91.0	53.9	20.1	1.8	6.8	6.2	2.1	-1.1	
1960	96.1	43.6	21.4	13.4	17.6	93.1	53.7	21.6	1.9	6.5	6.8	2.6	-3.0	
1961	98.1	44.7	21.5	13.6	18.3	101.9	57.4	25.0	2.1	7.2	6.2	4.0	-3.9	
1962	106.2	48.6	22.5	14.6	20.5	110.4	63.7	25.6	2.2	8.0	6.8	4.2	-4.2	
1963	114.4	51.5	24.6	15.3	23.1	114.2	64.6	27.0	2.2	9.1	7.3	3.9	-3.3	
1964	114.9	48.6	26.1	16.2	24.0	118.2	65.2	27.9	2.2	10.4	8.0	4.5	-3.3	
1965	124.3	53.9	28.9	16.5	25.0	123.8	67.3	30.3	2.2	11.1	8.4	4.6	-1.5	
1966	141.8	61.7	31.4	15.6	33.1	143.6	78.8	33.5	2.3	14.4	9.2	5.5	-1.8	
1967	150.5	67.5	30.0	16.3	36.7	163.7	90.9	40.1	2.2	15.9	9.8	4.7	-13.2	
1968	174.4	79.7	36.1	18.0	40.7	180.5	98.0	46.0	2.1	18.6	11.3	4.5	-6.0	
1969	196.9	95.1	36.1	19.0	46.7	188.4	97.6	50.6	2.1	20.3	12.7	5.2	-8.4	
1970	191.9	92.6	30.6	19.3	49.3	204.3	95.7	61.3	2.2	24.4	14.1	6.5	-12.4	
1971	198.6	90.3	33.5	20.4	54.4	220.6	96.2	72.7	2.6	29.0	13.8	6.3	-22.0	
1972	227.5	108.2	36.6	20.0	62.7	244.3	101.7	80.5	2.7	37.5	14.4	7.9	-16.8	
1973	258.6	114.7	43.3	21.2	79.5	264.2	102.0	93.3	2.6	40.6	18.0	7.8	-5.6	
1974	287.8	131.3	45.1	21.7	89.8	299.3	111.0	114.5	3.2	43.9	20.7	5.5	-11.5	
1975	287.3	125.8	43.6	23.9	94.1	356.6	122.7	146.3	3.1	54.6	23.1	6.9	-69.3	
1976	331.8	147.3	54.6	23.4	106.5	384.8	129.2	158.8	3.2	61.1	26.8	5.8	-53.1	
1977	375.2	170.1	61.6	25.0	118.5	421.1	143.4	169.6	3.3	67.5	29.1	8.2	-45.9	
1978	431.6	194.9	71.3	28.1	137.2	461.0	153.6	181.8	3.8	77.3	35.2	9.5	-29.5	
1979	493.6	230.6	74.2	29.4	159.5	509.7	168.3	205.0	4.2	80.5	42.4	9.2	-16.1	
1980	540.9	257.7	70.3	39.0	173.9	602.1	197.0	246.2	5.3	88.7	53.4	11.5	-61.2	
1981	627.0	298.6	67.5	56.4	204.5	689.2	229.2	280.9	5.7	87.9	73.2	12.4	-62.2	
1982	617.4	304.7	46.5	48.3	217.9	764.4	258.7	314.8	6.3	83.9	84.9	15.8	-147.1	
1983 ^a	643.3	295.8	59.3	53.9	234.4	826.2	275.2	338.7	5.8	86.5	96.7	22.8	-182.9	
1982:														
I	619.5	306.5	47.6	49.5	215.8	728.0	249.7	296.5	6.0	82.5	79.7	13.4	-108.5	
II	622.2	308.5	48.4	47.7	217.6	735.4	244.1	305.3	5.9	85.1	82.3	12.7	-113.2	
III	615.2	300.6	47.8	47.9	218.9	773.5	261.7	320.1	5.8	83.0	88.6	14.2	-158.3	
IV	612.6	303.0	42.1	48.3	219.3	820.9	279.2	337.2	7.6	85.0	89.1	22.8	-208.2	
1983:														
I	623.3	297.7	48.6	48.6	228.5	806.6	273.5	335.3	5.0	85.8	88.4	18.6	-183.3	
II	652.6	304.2	59.8	56.0	232.6	818.7	273.7	341.0	6.0	86.7	91.8	18.2	-166.1	
III	645.2	286.9	66.6	55.5	236.2	832.5	278.1	337.5	6.0	87.2	101.0	22.3	-187.3	
IV ^a	294.3			55.3	240.2	847.0	275.6	340.9	6.4	86.5	105.7	31.9		

¹ Includes an item for the difference between wage accruals and disbursements, not shown separately.

² Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

^a 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, 1946-83

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Calendar year or quarter	Receipts						Expenditures					Surplus or deficit (-), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Federal grants-in-aid	Total ¹	Purchases of goods and services	Transfer payments to persons	Net interest paid less dividends received	Subsidies less current surplus of government enterprises	
1946	13.0	1.5	0.5	9.3	0.6	1.1	11.1	9.9	1.7	0.2	-0.7	1.9
1947	15.4	1.7	.6	10.7	.7	1.7	14.4	12.8	2.3	.1	-.8	1.0
1948	17.7	2.1	.7	12.2	.8	2.0	17.6	15.3	3.0	.1	-.8	.1
1949	19.5	2.4	.6	13.3	.9	2.2	20.2	18.0	3.0	.1	-.9	-.7
1950	21.3	2.5	.8	14.6	1.1	2.3	22.5	19.8	3.6	.1	-.9	-1.2
1951	23.4	2.8	.9	15.9	1.4	2.5	23.9	21.8	3.1	.0	-1.0	-.4
1952	25.4	3.0	.8	17.4	1.6	2.6	25.5	23.2	3.3	.0	-1.1	-.0
1953	27.4	3.2	.8	18.8	1.7	2.8	27.3	25.0	3.5	.0	-1.2	.1
1954	29.0	3.5	.8	19.9	2.0	2.9	30.2	27.8	3.6	.1	-1.3	-1.1
1955	31.7	3.9	1.0	21.6	2.1	3.1	32.9	30.6	3.8	.1	-1.5	-1.3
1956	35.0	4.5	1.0	23.8	2.3	3.3	35.9	33.5	3.9	.1	-1.6	-.9
1957	38.5	5.0	1.0	25.7	2.6	4.2	39.8	37.1	4.3	.1	-1.7	-1.4
1958	42.0	5.4	1.0	27.2	2.8	5.6	44.3	41.1	4.8	.1	-1.7	-2.4
1959	46.4	6.1	1.2	29.3	3.1	6.8	46.9	43.7	5.1	.1	-2.0	-.4
1960	49.9	6.7	1.2	32.0	3.4	6.5	49.8	46.5	5.4	.1	-2.2	.1
1961	54.0	7.4	1.3	34.4	3.7	7.2	54.4	50.8	5.8	.1	-2.3	-.4
1962	58.5	8.2	1.5	37.0	3.9	8.0	58.0	54.3	6.0	.1	-2.5	.5
1963	63.2	8.8	1.7	39.4	4.2	9.1	62.8	59.0	6.4	.1	-2.8	.5
1964	69.5	10.0	1.8	42.6	4.7	10.4	68.5	64.6	6.9	-.1	-2.8	1.0
1965	75.1	10.9	2.0	46.1	5.0	11.1	75.1	71.1	7.3	-.3	-3.0	-.0
1966	84.8	12.8	2.2	49.7	5.7	14.4	84.3	79.8	8.1	-.7	-3.0	.5
1967	93.6	14.6	2.5	54.0	6.7	15.9	94.7	89.3	9.4	-.9	-3.1	-1.1
1968	107.3	17.5	3.1	60.9	7.2	18.6	107.2	101.0	10.5	-1.1	-3.2	.1
1969	120.2	20.6	3.4	67.6	8.3	20.3	118.7	111.2	12.2	-1.4	-3.3	1.5
1970	135.4	23.2	3.5	75.0	9.2	24.4	133.5	124.4	14.7	-2.0	-3.6	1.9
1971	153.0	26.4	4.1	83.3	10.2	29.0	150.4	138.7	17.3	-1.7	-3.7	2.6
1972	178.3	32.8	5.0	91.5	11.5	37.5	164.8	151.4	19.3	-1.9	-4.2	13.5
1973	195.0	36.0	5.8	99.7	13.0	40.6	181.6	168.5	20.7	-3.3	-4.3	13.4
1974	211.4	39.0	6.5	107.4	14.6	43.9	204.6	193.1	20.9	-5.0	-4.4	6.8
1975	237.7	43.1	7.1	116.2	16.8	54.6	232.2	217.2	24.6	-5.1	-4.5	5.5
1976	267.8	49.6	9.3	128.3	19.5	61.1	251.2	232.9	27.6	-4.5	-4.8	16.6
1977	297.7	56.3	11.1	140.7	22.1	67.5	269.7	250.4	29.7	-5.3	-5.1	28.0
1978	327.6	63.8	11.9	150.0	24.7	77.3	297.3	278.3	32.8	-7.9	-5.7	30.3
1979	352.0	70.4	13.4	160.2	27.4	80.5	321.5	306.0	35.0	-13.8	-5.9	30.4
1980	386.1	78.8	14.5	174.4	29.7	88.7	355.5	340.8	39.7	-18.9	-6.1	30.6
1981	418.1	88.7	15.3	193.5	32.6	87.9	382.7	366.5	43.3	-21.1	-6.0	35.3
1982	439.1	97.4	12.7	210.0	35.1	83.9	407.8	390.5	45.6	-22.1	-6.3	31.3
1983 ^p	483.3	110.5	16.4	232.0	37.9	86.5	432.3	415.0	49.3	-25.5	-6.5	51.0
1981:												
I	411.3	85.0	16.7	187.3	31.7	90.5	376.0	360.5	42.5	-21.0	-6.0	35.3
II	415.9	87.4	14.9	190.9	32.3	90.4	379.2	363.2	43.2	-21.3	-5.9	36.7
III	421.6	90.3	15.5	196.6	32.8	86.4	384.3	367.9	43.7	-21.3	-5.9	37.3
IV	423.4	92.3	14.2	199.3	33.4	84.2	391.4	374.3	44.0	-21.0	-6.0	32.0
1982:												
I	425.9	93.7	12.7	203.0	34.0	82.5	397.2	380.0	44.4	-21.0	-6.2	28.8
II	436.8	95.6	13.1	208.3	34.7	85.1	404.8	387.5	45.0	-21.4	-6.3	32.0
III	442.8	99.3	13.0	212.0	35.4	83.0	411.4	394.0	46.0	-22.3	-6.3	31.3
IV	450.7	101.2	11.9	216.6	36.1	85.0	417.8	400.5	47.1	-23.6	-6.2	32.9
1983:												
I	461.7	104.1	12.9	222.0	36.9	85.8	421.3	404.0	48.3	-24.6	-6.3	40.4
II	478.7	108.4	16.2	229.9	37.5	86.7	427.0	409.7	49.0	-25.2	-6.4	51.7
III	492.7	113.3	18.4	235.6	38.2	87.2	437.1	420.2	49.4	-25.8	-6.5	55.5
IV ^p		116.4		240.4	38.9	86.5	443.5	426.1	50.5	-26.4	-6.7	

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, 1927-82

[Millions of dollars]

Fiscal year ¹	General revenues by source ²							General expenditures by function ²				
	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corporation net income taxes	Revenue from Federal Government	All other ³	Total	Education	Highways	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	9,609	4,430	1,982	224	156	945	1,872	9,229	2,638	1,573	1,156	3,862
1942	10,418	4,537	2,351	276	272	858	2,123	9,190	2,586	1,490	1,225	3,889
1944	10,908	4,604	2,289	342	451	954	2,269	8,863	2,793	1,200	1,133	3,737
1946	12,356	4,986	2,986	422	447	855	2,661	11,028	3,356	1,672	1,409	4,591
1948	17,250	6,126	4,442	543	592	1,861	3,685	17,684	5,379	3,036	2,099	7,170
1950	20,911	7,349	5,154	788	593	2,486	4,541	22,787	7,177	3,803	2,940	8,867
1952	25,181	8,652	6,357	998	846	2,566	5,763	26,098	8,318	4,650	2,788	10,342
1953	27,307	9,375	6,927	1,065	817	2,870	6,252	27,910	9,390	4,987	2,914	10,619
1954	29,012	9,967	7,276	1,127	778	2,966	6,897	30,701	10,557	5,527	3,060	11,557
1955	31,073	10,735	7,643	1,237	744	3,131	7,584	33,724	11,907	6,452	3,168	12,197
1956	34,667	11,749	8,691	1,538	890	3,335	8,465	36,711	13,220	6,953	3,139	13,399
1957	38,164	12,864	9,467	1,754	984	3,843	9,252	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	50,505	16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,325
1961	54,037	18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,063
1962	58,252	19,054	13,494	3,037	1,308	7,871	13,489	60,206	22,216	10,357	5,084	22,549
1963	62,890	20,089	14,566	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	83,036	24,670	19,085	4,760	2,038	13,214	19,269	82,843	33,287	12,770	6,757	30,029
1966-67	91,197	26,047	20,530	5,825	2,227	15,370	21,197	93,350	37,919	13,932	8,218	33,281
1967-68	101,264	27,747	22,911	7,308	2,518	17,181	23,598	102,411	41,158	14,481	9,857	36,915
1968-69	114,550	30,673	26,519	8,908	3,180	19,153	26,118	116,728	47,238	15,417	12,110	41,963
1969-70	130,756	34,054	30,322	10,812	3,738	21,857	29,971	131,332	52,718	16,427	14,679	47,508
1970-71	144,927	37,852	33,233	11,900	3,424	26,146	32,374	150,674	59,413	18,095	18,226	54,940
1971-72	167,541	42,877	37,518	15,227	4,416	31,342	36,162	168,550	65,814	19,021	21,117	62,597
1972-73	190,214	45,283	42,047	17,994	5,425	39,256	40,210	181,357	69,714	18,615	23,582	69,446
1973-74	207,670	47,705	46,098	19,491	6,015	41,820	46,541	198,959	75,833	19,946	25,085	78,096
1974-75	228,171	51,491	49,815	21,454	6,642	47,034	51,735	230,721	87,858	22,528	28,155	92,180
1975-76	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	423,404	74,969	85,971	46,426	14,143	90,294	111,599	407,449	145,784	34,603	54,121	172,941
1981-82	456,182	81,918	93,636	50,785	15,033	86,945	127,864	435,323	154,573	34,545	58,050	188,155

¹ 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, housing and urban renewal, 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 1981-82 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 for 1963 and earlier years include data for government fiscal years ending during that particular calendar year.

Data are not available for intervening years.

Source: Department of Commerce, Bureau of the Census.

TABLE B-79.—Interest-bearing public debt securities by kind of obligation, 1967-83

(Millions of dollars)

End of year or month	Total interest-bearing public debt securities	Marketable				Nonmarketable				
		Total	Treasury bills	Treasury notes	Treasury bonds ¹	Total	U.S. savings bonds	Foreign government and public series ²	Government account series	Other ³
Fiscal year:										
1967.....	322,286	4210,672	58,535	49,108	97,418	111,614	51,213	1,514	56,155	2,731
1968.....	344,401	226,592	64,440	71,073	91,079	117,808	51,712	3,741	59,526	2,828
1969.....	351,729	226,107	68,356	78,946	78,805	125,623	51,711	4,070	66,790	3,051
1970.....	369,026	232,599	76,154	93,489	62,956	136,426	51,281	4,755	76,323	4,068
1971.....	396,285	245,473	86,677	104,807	53,989	150,816	53,003	9,270	82,784	5,759
1972.....	425,360	257,202	94,648	113,419	49,135	168,158	55,921	18,985	89,598	3,654
1973.....	456,353	262,971	100,061	117,840	45,071	193,382	59,418	28,524	101,738	3,701
1974.....	473,238	266,575	105,019	128,419	33,137	206,663	61,921	25,011	115,442	4,289
1975.....	532,122	315,606	128,569	150,257	36,779	216,516	65,482	23,216	124,173	3,644
1976.....	619,254	352,581	161,198	191,758	39,626	226,673	69,733	21,500	130,557	4,883
1977.....	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,797
1978.....	766,971	485,155	160,936	267,865	56,355	281,816	79,798	21,680	153,721	27,067
1979.....	819,007	506,693	161,378	274,242	71,073	312,314	80,440	28,115	176,360	27,400
1980.....	906,402	594,506	199,832	310,903	83,772	311,896	72,727	25,158	189,848	24,164
1981.....	996,495	683,209	223,388	363,643	96,178	313,286	68,017	20,499	201,052	23,718
1982.....	1,140,883	824,422	277,900	442,890	103,631	316,461	67,274	14,641	210,462	24,085
1983.....	1,375,751	1,024,000	340,733	557,525	125,742	351,751	70,024	11,450	234,684	35,593
1982:										
Jan.....	1,032,678	726,542	250,562	374,357	101,623	306,136	67,581	18,920	196,393	23,243
Feb.....	1,042,198	737,532	254,037	382,070	101,426	304,666	67,378	18,384	195,722	23,182
Mar.....	1,059,815	752,620	256,212	395,042	101,366	307,195	67,163	19,641	196,707	23,684
Apr.....	1,064,538	755,833	254,880	399,700	101,253	308,705	67,034	19,446	198,538	23,687
May.....	1,066,410	755,688	256,114	398,408	101,166	310,722	67,082	18,395	201,290	23,955
June.....	1,078,431	763,995	256,007	406,925	101,063	314,436	67,122	17,457	205,954	23,902
July.....	1,083,296	774,077	262,009	411,070	100,998	309,218	67,132	16,643	201,502	23,941
Aug.....	1,108,131	801,427	273,066	427,426	100,935	306,704	67,148	15,606	199,896	24,054
Sept.....	1,140,883	824,422	277,900	442,890	103,631	316,461	67,274	14,641	210,462	24,085
Oct.....	1,136,826	824,662	283,923	438,068	102,672	312,164	67,514	14,627	205,717	24,305
Nov.....	1,160,489	852,463	293,531	454,229	104,702	308,026	67,801	14,863	199,903	25,459
Dec.....	1,195,496	881,476	311,820	465,030	104,627	314,020	67,719	14,691	205,427	26,183
1983:										
Jan.....	1,199,599	888,659	308,099	472,986	107,574	310,940	67,814	14,018	203,031	26,077
Feb.....	1,213,742	907,652	314,882	481,300	111,471	306,090	68,042	12,685	199,125	26,239
Mar.....	1,242,993	937,751	331,884	494,431	111,436	305,243	68,241	12,392	196,970	27,640
Apr.....	1,242,067	935,478	325,939	494,904	114,635	306,589	68,533	11,963	197,593	28,500
May.....	1,289,897	957,347	325,213	513,626	118,508	332,550	68,919	11,144	222,446	30,041
June.....	1,318,111	978,929	334,299	527,142	117,488	339,182	69,140	11,405	225,041	33,596
July.....	1,320,671	985,709	337,581	527,183	120,946	334,961	69,466	11,193	220,607	33,696
Aug.....	1,346,915	1,010,371	340,413	544,158	125,800	336,544	69,747	11,052	221,357	34,389
Sept.....	1,375,751	1,024,000	340,733	557,525	125,742	351,751	70,024	11,450	234,684	35,593
Oct.....	1,383,265	1,035,330	339,969	566,159	129,202	347,935	70,351	11,500	230,324	35,760
Nov.....	1,387,860	1,044,313	335,310	575,252	133,751	343,547	70,619	10,512	226,214	36,202
Dec.....	1,400,906	1,050,892	343,815	573,376	133,701	350,015	70,466	10,448	231,887	37,214

¹ Includes Treasury bonds and minor amounts of Panama Canal and postal savings bonds.² Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency denominated issues.³ 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.⁴ Includes \$5,610 million in certificates not shown separately.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis.

Source: Department of the Treasury.

TABLE B-80.—*Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1967-83*

End of year or month	Amount out-standing, privately held	Maturity class					Average length	
		Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over		
		Millions of dollars					Years	Months
Fiscal year:								
1967.....	150,321	56,561	53,584	21,057	6,153	12,968	5	1
1968.....	159,671	66,746	52,295	21,850	6,110	12,670	4	5
1969.....	156,008	69,311	50,182	18,078	6,097	12,337	4	2
1970.....	157,910	76,443	57,035	8,286	7,876	8,272	3	8
1971.....	161,863	74,803	58,557	14,503	6,357	7,645	3	6
1972.....	165,978	79,509	57,157	16,033	6,358	6,922	3	3
1973.....	167,869	84,041	54,139	16,385	8,741	4,564	3	1
1974.....	164,862	87,150	50,103	14,197	9,930	3,481	2	11
1975.....	210,382	115,677	65,852	15,385	8,857	4,611	2	8
1976.....	279,782	151,723	89,151	24,169	8,087	6,652	2	7
1977.....	326,674	161,329	113,319	33,067	8,428	10,531	2	11
1978.....	356,501	163,819	132,993	33,500	11,383	14,805	3	3
1979.....	380,530	181,883	127,574	32,279	18,489	20,304	3	7
1980.....	463,717	220,084	156,244	38,809	25,901	22,679	3	9
1981.....	549,863	256,187	182,237	48,743	32,569	30,127	4	0
1982.....	682,043	314,436	221,783	75,749	33,017	37,058	3	11
1983.....	862,631	379,579	294,955	99,174	40,826	48,097	4	1
1982:								
Jan.....	590,139	284,171	183,843	54,370	34,069	33,686	4	0
Feb.....	604,671	290,697	194,457	49,120	35,819	34,578	4	1
Mar.....	619,030	295,476	200,544	52,612	35,822	34,576	4	0
Apr.....	613,576	289,000	199,278	55,329	35,565	34,404	4	0
May.....	618,699	290,476	203,612	54,361	35,701	34,549	4	1
June.....	628,997	293,266	207,106	58,425	35,651	34,549	4	0
July.....	634,556	295,118	206,380	63,022	35,583	34,453	4	0
Aug.....	660,583	309,446	217,258	66,347	33,097	34,435	3	11
Sept.....	682,043	314,436	221,783	75,749	33,017	37,058	3	11
Oct.....	685,969	321,081	218,673	75,944	33,065	37,206	3	10
Nov.....	708,769	327,565	235,443	72,644	35,750	37,367	3	11
Dec.....	736,148	346,321	239,263	77,569	35,677	37,318	3	10
1983:								
Jan.....	750,274	348,444	245,990	79,758	35,708	40,374	4	0
Feb.....	766,075	351,150	256,133	81,077	36,846	40,869	4	0
Mar.....	795,087	367,383	262,985	87,013	36,837	40,869	3	10
Apr.....	789,629	360,536	259,420	88,958	36,797	43,918	3	11
May.....	810,150	363,465	276,825	85,314	39,975	44,571	4	1
June.....	831,309	373,669	282,444	90,979	39,949	44,268	4	0
July.....	835,893	375,845	279,730	92,420	39,850	48,048	4	0
Aug.....	857,935	380,424	294,000	93,974	41,086	48,451	4	1
Sept.....	862,631	379,579	294,955	99,174	40,826	48,097	4	1
Oct.....	883,287	384,406	303,810	101,941	41,073	52,057	4	1
Nov.....	888,932	383,761	309,516	99,893	43,082	52,680	4	3
Dec.....	893,991	394,088	298,262	106,043	43,058	52,540	4	3

Note.—All issues classified to final maturity.
Through fiscal year 1976, the fiscal year was on a July 1—June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1—September 30 basis.

Source: Department of the Treasury.

TABLE B-81.—Estimated ownership of public debt securities, 1976-83

[Par values; ¹ billions of dollars]

End of month	Total public debt securities	Held by Government accounts	Held by Federal Reserve Banks	Held by private investors											
				Total	Com-mercial banks ²	Nonbank investors									
						Total	Individuals ³			Insurance com-panies	Money mar-ket funds	Corpora-tions ⁵	State and local govern-ments ⁶	Foreign and international ⁷	Other investors ⁸
							Total	Sav-ings bonds ⁴	Other securities						
1976:															
June	620.4	149.6	94.4	376.4	91.4	285.0	96.1	69.6	26.5	14.4	0.8	23.3	33.3	69.8	47.2
Dec	653.5	147.1	97.0	409.5	103.5	306.0	101.6	72.0	29.6	16.2	1.1	23.5	39.2	78.1	46.3
1977:															
June	674.4	151.2	102.2	421.0	102.7	318.3	104.9	74.4	30.5	18.1	.8	22.1	45.8	87.9	38.7
Dec	718.9	154.8	102.8	461.3	98.9	362.4	107.8	76.7	31.1	19.9	.9	18.2	50.9	109.6	55.1
1978:															
June	749.0	161.1	110.1	477.8	97.8	380.0	109.0	79.1	29.9	19.7	1.3	17.3	58.1	119.5	55.1
Dec	789.2	170.0	110.6	508.6	95.0	413.6	114.0	80.7	33.3	20.0	1.5	17.3	62.8	137.8	60.2
1979:															
June	804.9	178.5	109.7	516.6	86.1	430.5	115.5	80.6	34.9	20.9	3.8	18.6	68.9	119.7	83.1
Dec	845.1	187.1	117.5	540.5	88.1	452.4	118.0	79.9	38.1	21.4	5.6	17.0	71.8	123.7	94.9
1980:															
June	877.6	194.9	124.5	558.2	97.4	460.8	116.5	73.4	43.1	22.3	5.3	14.0	75.9	122.8	104.0
Dec	930.2	192.5	121.3	616.4	112.1	504.3	117.1	72.5	44.6	24.0	3.5	19.3	84.4	134.3	121.7
1981:															
Mar	964.5	190.9	119.0	654.6	117.0	537.6	105.2	70.4	34.8	25.6	14.5	17.0	88.5	142.9	143.9
June	971.2	199.9	120.0	651.2	119.7	531.5	107.4	69.2	38.2	26.4	9.0	19.9	93.3	141.4	134.1
Sept	997.9	208.1	124.3	665.4	112.7	552.7	109.7	68.3	41.4	27.6	11.4	18.0	⁹ 95.7	135.5	⁹ 154.8
Dec	1,028.7	203.3	131.0	694.5	111.4	583.1	110.8	68.1	42.7	29.0	21.5	17.9	⁹ 99.5	141.4	⁹ 163.0
1982:															
Mar	1,061.3	202.5	125.6	733.3	116.1	617.2	112.5	67.5	45.0	32.1	25.7	16.9	⁹ 102.9	140.8	⁹ 186.3
June	1,079.6	211.7	127.0	740.9	116.1	624.8	114.1	67.4	46.7	32.5	22.4	17.6	⁹ 107.3	141.9	⁹ 189.0
Sept	1,142.0	216.4	134.4	791.2	117.8	673.4	115.6	67.6	48.0	34.8	38.6	21.6	⁹ 112.1	141.6	⁹ 209.1
Dec	1,197.1	209.4	139.3	848.4	131.4	717.0	116.5	68.3	48.2	39.1	42.6	24.5	⁹ 113.4	149.4	⁹ 231.5
1983:															
Mar	1,244.5	201.2	136.7	906.6	153.2	753.4	116.7	68.8	47.9	⁹ 42.4	44.8	27.2	.....	156.1	.....
June	1,319.6	229.3	141.7	948.6	171.6	777.0	121.3	69.7	51.6	⁹ 44.8	28.3	32.8	.....	160.0	.....
Sept	1,377.2	239.0	155.4	982.7	176.3	806.4	⁹ 128.5	⁹ 70.6	⁹ 57.9	.....	24.0	⁹ 35.5	.....	⁹ 160.8	.....

¹ 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 1, 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 loan associations, credit unions, nonprofit institutions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain Government deposit accounts, and Government-sponsored agencies.

Source: Department of the Treasury.

CORPORATE PROFITS AND FINANCE

TABLE B-82.—Corporate profits with inventory valuation and capital consumption adjustments, 1929-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation and capital consumption adjustments	Corporate profits tax liability	Corporate profits after tax with inventory valuation and capital consumption adjustments		
			Total	Dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1929.....	9.0	1.4	7.7	5.8	1.9
1933.....	-1.7	.5	-2.3	2.0	-4.3
1939.....	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
1944.....	23.6	12.9	10.7	4.6	6.1
1945.....	19.0	10.7	8.4	4.6	3.8
1946.....	16.6	9.1	7.5	5.6	1.9
1947.....	22.3	11.3	11.0	6.3	4.7
1948.....	29.4	12.4	17.0	7.0	10.0
1949.....	27.1	10.2	16.9	7.2	9.7
1950.....	33.9	17.9	16.0	8.8	7.2
1951.....	38.7	22.6	16.1	8.5	7.6
1952.....	36.1	19.4	16.7	8.5	8.2
1953.....	36.3	20.3	16.0	8.8	7.2
1954.....	35.2	17.6	17.5	9.1	8.4
1955.....	45.5	22.0	23.4	10.3	13.1
1956.....	43.7	22.0	21.8	11.1	10.7
1957.....	43.3	21.4	21.8	11.5	10.3
1958.....	38.5	19.0	19.5	11.3	8.2
1959.....	49.6	23.6	26.0	12.2	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
1966.....	85.1	33.7	51.4	19.4	32.0
1967.....	82.4	32.5	49.9	20.2	29.7
1968.....	89.1	39.2	50.0	22.0	27.9
1969.....	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
1974.....	94.9	51.6	43.3	29.9	13.4
1975.....	110.5	50.6	59.9	30.8	29.1
1976.....	138.1	63.8	74.3	37.4	36.9
1977.....	167.3	72.7	94.6	40.8	53.7
1978.....	192.4	83.2	109.1	47.0	62.2
1979.....	194.8	87.6	107.2	52.7	54.5
1980.....	175.4	84.8	90.6	58.6	32.1
1981.....	192.3	82.8	109.5	64.7	44.8
1982.....	164.8	59.2	105.6	68.7	37.0
1983.....	226.3	75.7	150.6	73.3	77.4
1981:					
I.....	194.7	91.7	103.1	61.3	41.8
II.....	185.0	80.4	104.6	63.7	40.9
III.....	197.6	83.7	113.8	66.4	47.5
IV.....	192.0	75.6	116.5	67.3	49.2
1982:					
I.....	162.0	60.3	101.7	67.7	34.0
II.....	166.8	61.4	105.3	67.8	37.5
III.....	168.5	60.8	107.6	68.8	38.9
IV.....	161.9	54.0	107.9	70.4	37.5
1983:					
I.....	181.8	61.5	120.3	71.4	48.9
II.....	218.2	76.0	142.2	72.0	70.1
III.....	248.4	84.9	163.4	73.7	89.7

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-83.—Corporate profits by industry, 1929-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment										Rest of the world
	Total	Domestic industries									
		Total	Financial ¹			Nonfinancial					
			Total	Federal Re-serve banks	Other	Total	Manufac-turing ²	Trans-portion and public utilities	Whole-sale and retail trade	Other	
1929.....	10.5	10.2	1.3	0.0	1.3	8.9	5.2	1.8	1.0	0.9	0.2
1933.....	-1.2	-1.2	.3	.0	.3	-1.5	-.4	.0	-.5	-.7	.0
1939.....	6.5	6.1	.8	.0	.8	5.3	3.3	1.0	.7	.3	.3
1940.....	9.8	9.6	1.0	.0	.9	8.6	5.5	1.3	1.2	.6	.3
1941.....	15.4	15.0	1.1	.0	1.0	14.0	9.5	2.0	1.4	1.1	.4
1942.....	20.5	20.1	1.2	.0	1.2	18.9	11.8	3.4	2.2	1.5	.4
1943.....	24.5	24.1	1.3	.0	1.3	22.8	13.8	4.4	3.0	1.6	.4
1944.....	24.0	23.5	1.6	.1	1.6	21.9	13.2	3.9	3.2	1.6	.4
1945.....	19.3	18.9	1.7	.1	1.6	17.3	9.7	2.7	3.3	1.5	.3
1946.....	19.6	18.9	2.1	.1	2.0	16.8	9.0	1.8	3.8	2.1	.7
1947.....	25.9	24.9	1.7	.1	1.6	23.2	13.6	2.2	4.6	2.9	1.0
1948.....	33.4	32.2	2.6	.2	2.3	29.6	17.6	3.0	5.5	3.6	1.3
1949.....	31.1	29.9	3.1	.2	2.9	26.8	16.2	3.0	4.5	3.1	1.1
1950.....	37.9	36.7	3.1	.2	3.0	33.5	20.9	4.0	5.0	3.6	1.3
1951.....	43.3	41.5	3.6	.3	3.3	37.9	24.6	4.6	5.0	3.7	1.7
1952.....	40.6	38.7	4.0	.4	3.7	34.7	21.7	4.9	4.8	3.3	1.9
1953.....	40.2	38.4	4.5	.4	4.1	33.9	22.0	5.0	3.8	3.1	1.8
1954.....	38.4	36.4	4.6	.3	4.3	31.8	19.9	4.7	3.8	3.4	2.0
1955.....	47.5	45.1	4.8	.3	4.5	40.3	26.0	5.6	5.0	3.6	2.4
1956.....	46.9	44.1	5.0	.5	4.5	39.1	24.7	5.9	4.5	4.1	2.8
1957.....	46.6	43.5	5.2	.6	4.6	38.3	24.0	5.8	4.4	4.0	3.1
1958.....	41.6	39.1	5.7	.6	5.1	33.5	19.4	5.9	4.6	3.6	2.5
1959.....	52.3	49.6	6.8	.7	6.0	42.9	26.4	7.0	5.9	3.6	2.7
1960.....	49.7	46.7	7.2	1.0	6.2	39.5	23.6	7.4	4.9	3.6	3.0
1961.....	50.0	46.8	7.0	.8	6.3	39.8	23.3	7.8	5.0	3.7	3.2
1962.....	55.1	51.5	7.3	.9	6.4	44.2	26.0	8.4	5.8	3.9	3.6
1963.....	59.7	55.8	6.8	1.0	5.8	49.0	29.3	9.3	5.9	4.4	3.9
1964.....	66.0	61.8	6.9	1.1	5.8	54.9	32.3	10.0	7.5	5.1	4.2
1965.....	76.0	71.5	7.5	1.4	6.2	64.0	39.3	11.0	8.1	5.6	4.5
1966.....	80.9	76.7	8.5	1.7	6.8	68.2	41.9	11.8	8.2	6.3	4.2
1967.....	78.1	73.7	9.0	2.0	7.0	64.8	38.5	10.7	9.1	6.5	4.4
1968.....	84.9	79.7	10.4	2.5	7.9	69.3	41.2	10.8	10.4	6.9	5.2
1969.....	80.8	74.6	11.1	3.1	8.0	63.5	36.6	10.3	10.5	6.1	6.1
1970.....	68.9	62.4	12.1	3.6	8.6	50.2	26.6	8.2	9.5	5.9	6.5
1971.....	82.0	74.9	14.1	3.3	10.7	60.8	34.1	8.5	11.7	6.5	7.1
1972.....	94.0	85.3	15.3	3.4	11.9	70.0	40.7	9.0	13.4	6.9	8.6
1973.....	105.6	92.0	15.9	4.5	11.4	76.0	45.5	8.7	13.9	8.0	13.7
1974.....	96.7	80.4	15.0	5.7	9.3	65.4	39.0	6.1	12.5	7.9	16.3
1975.....	120.6	107.6	11.8	5.7	6.2	95.8	52.6	10.0	21.3	11.9	13.0
1976.....	151.6	137.4	17.1	6.0	11.1	120.3	69.2	14.5	22.4	14.2	14.3
1977.....	178.5	163.4	23.1	6.2	16.9	140.3	78.3	17.8	26.6	17.6	15.1
1978.....	205.1	185.4	31.0	7.7	23.3	154.4	86.9	20.6	26.9	20.0	19.7
1979.....	209.6	179.0	30.3	9.6	20.7	148.6	85.6	15.9	27.1	20.1	30.6
1980.....	191.7	161.9	26.9	11.9	15.0	134.9	72.9	17.1	23.6	21.3	29.9
1981.....	203.3	179.7	20.3	14.5	5.8	159.4	86.7	18.7	32.8	21.1	23.7
1982.....	165.9	144.1	20.9	15.4	5.5	123.2	59.0	17.5	27.6	19.1	21.8
1983 ^p	195.5	173.5	31.4	14.9	16.5	142.1	69.4	20.6	34.2	17.8	22.0
1981:											
I.....	207.1	182.5	23.9	13.3	10.6	158.6	88.5	20.1	29.0	21.0	24.6
II.....	196.4	175.0	20.4	14.1	6.4	154.6	88.0	15.7	31.3	19.7	21.4
III.....	208.3	186.5	18.8	15.2	3.7	167.7	93.3	19.1	33.3	21.9	21.8
IV.....	201.5	174.7	18.1	15.6	2.5	156.5	76.9	19.8	37.8	22.0	26.9
1982:											
I.....	167.7	147.0	15.5	15.3	.3	131.5	60.9	18.0	30.2	22.4	20.7
II.....	170.3	148.5	20.4	15.9	4.6	128.1	61.4	19.8	27.4	19.5	21.7
III.....	168.3	147.6	22.2	15.7	6.5	125.4	65.5	17.3	25.2	17.4	20.7
IV.....	157.2	133.1	25.5	14.9	10.6	107.6	48.3	14.9	27.5	16.9	24.1
1983:											
I.....	168.0	147.8	29.8	14.4	15.4	118.0	53.7	17.4	27.8	19.2	20.2
II.....	192.7	172.2	33.8	14.6	19.2	138.4	68.1	20.4	33.9	16.0	20.5
III.....	210.8	187.4	31.9	15.2	16.8	155.5	78.2	22.5	36.7	18.1	23.4

¹ 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.

² 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, 1929-83

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment												
	Total manufacturing	Durable goods							Nondurable goods				
		Total	Primary metal industries	Fabricated metal products	Machinery, except electrical	Electric and electronic equipment	Motor vehicles and equipment	Other	Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other
1929	5.2	2.6							2.6				
1933	—4	—4							.0				
1939	3.3	1.7							1.7				
1940	5.5	3.1							2.4				
1941	9.5	6.4							3.1				
1942	11.8	7.2							4.6				
1943	13.8	8.1							5.7				
1944	13.2	7.4							5.9				
1945	9.7	4.5							5.2				
1946	9.0	2.4							6.6				
1947	13.6	5.8							7.8				
1948	17.6	7.5	1.6	.8	1.2	.7	1.4	1.8	10.0	1.9	1.7	2.8	3.7
1949	16.2	8.1	1.5	.7	1.3	.8	2.1	1.7	8.1	1.6	1.8	1.9	2.8
1950	20.9	12.0	2.3	1.1	1.6	1.2	3.1	2.6	8.9	1.6	2.3	2.3	2.7
1951	24.6	13.2	3.1	1.3	2.3	1.3	2.4	2.8	11.4	1.4	2.8	2.7	4.4
1952	21.7	11.7	1.9	1.0	2.3	1.5	2.4	2.6	9.9	1.7	2.3	2.3	3.6
1953	22.0	11.9	2.5	1.0	1.9	1.4	2.6	2.6	10.1	1.8	2.2	2.8	3.3
1954	19.9	10.5	1.7	.9	1.7	1.2	2.1	2.9	9.4	1.6	2.2	2.7	2.9
1955	26.0	14.3	2.9	1.0	1.7	1.1	4.1	3.5	11.8	2.2	3.0	3.0	3.6
1956	24.7	12.8	3.0	1.1	2.1	1.2	2.2	3.2	11.9	1.8	2.8	3.3	4.1
1957	24.0	13.3	3.0	1.1	2.0	1.5	2.6	3.1	10.7	1.8	2.8	2.6	3.6
1958	19.4	9.3	1.9	.9	1.4	1.3	.9	2.9	10.0	2.1	2.5	2.1	3.3
1959	26.4	13.7	2.3	1.1	2.1	1.7	3.0	3.5	12.7	2.4	3.5	2.5	4.3
1960	23.6	11.6	2.0	.8	1.8	1.3	3.0	2.7	12.0	2.2	3.1	2.5	4.2
1961	23.3	11.4	1.6	1.0	1.9	1.3	2.5	3.1	11.9	2.3	3.2	2.2	4.1
1962	26.0	14.0	1.6	1.1	2.3	1.5	4.0	3.5	12.0	2.3	3.2	2.2	4.3
1963	29.3	16.3	2.0	1.3	2.5	1.6	4.7	4.0	13.1	2.7	3.6	2.1	4.6
1964	32.3	17.9	2.5	1.4	3.3	1.7	4.7	4.4	14.4	2.7	4.0	2.4	5.3
1965	39.3	23.0	3.1	2.0	4.9	2.7	6.2	5.1	16.3	2.8	4.6	2.9	6.0
1966	41.9	23.8	3.6	2.4	4.5	3.0	5.1	5.2	18.1	3.2	4.9	3.2	6.8
1967	38.5	20.9	2.7	2.4	4.1	2.9	3.9	4.9	17.6	3.2	4.3	3.9	6.3
1968	41.2	22.2	1.9	2.3	4.1	2.8	5.5	5.7	19.1	3.2	5.2	3.7	7.0
1969	36.6	18.9	1.4	2.0	3.7	2.3	4.7	4.9	17.7	3.0	4.5	3.2	6.9
1970	26.6	10.2	.8	1.1	2.9	1.2	1.2	2.9	16.5	3.2	3.9	3.5	5.9
1971	34.1	16.3	.7	1.5	2.9	1.9	5.0	4.3	17.8	3.5	4.4	3.5	6.4
1972	40.7	22.4	1.6	2.1	4.3	2.8	5.9	5.7	18.3	2.9	5.2	3.0	7.2
1973	45.5	24.3	2.2	2.5	4.6	3.0	5.7	6.2	21.2	2.4	6.0	5.0	7.8
1974	39.0	13.2	5.4	1.6	2.9	.4	.1	2.9	25.8	2.8	5.6	10.5	6.8
1975	52.6	18.9	2.9	3.0	4.7	2.1	1.9	4.3	33.6	8.6	6.5	9.6	8.9
1976	69.2	30.4	2.1	3.8	6.3	3.4	7.2	7.6	38.8	6.9	8.3	12.6	11.0
1977	78.3	38.1	1.1	4.4	8.8	5.6	9.4	8.8	40.2	6.8	7.9	11.6	13.8
1978	86.9	44.3	3.5	4.9	9.4	6.5	8.9	11.0	42.6	6.0	8.3	13.8	14.5
1979	85.6	37.1	3.5	5.2	8.9	5.1	4.7	9.8	48.4	5.7	7.1	20.7	14.8
1980	72.9	20.4	2.7	4.2	7.4	5.2	—3.8	4.7	52.5	6.0	6.0	28.2	12.3
1981	86.7	28.6	3.8	4.6	9.7	6.4	—6	4.9	58.0	8.9	7.2	27.8	14.1
1982	59.0	9.8	—5.4	3.2	4.8	4.3	.4	2.5	49.2	7.3	4.9	24.8	12.2
1983 P	69.4	17.8	—9	3.6	2.1	3.1	6.9	3.0	51.6	6.7	6.0	21.2	17.7
1981:													
I	88.5	30.7	6.6	4.2	8.9	7.3	—2.0	5.6	57.9	10.0	8.2	25.1	14.5
II	88.0	34.8	4.5	5.8	9.7	6.0	3.0	5.9	53.1	8.3	6.6	23.7	14.5
III	93.3	27.7	3.8	5.0	9.8	6.1	—2.2	5.2	65.6	9.1	6.9	36.3	13.3
IV	76.9	21.3	.3	3.4	10.2	5.9	—1.3	2.7	55.6	8.3	7.2	26.0	14.1
1982:													
I	60.9	10.4	—3.3	4.0	8.7	4.4	—3.8	.3	50.5	6.7	6.2	27.2	10.4
II	61.4	14.5	—6.7	3.4	5.0	5.3	3.4	4.1	46.9	7.3	5.7	21.9	11.9
III	65.5	12.9	—3.6	3.1	3.5	5.1	3.3	3.5	52.6	8.0	4.6	26.8	13.2
IV	48.3	1.2	—6.0	2.1	1.8	2.4	—1.2	2.2	47.1	7.2	3.0	23.5	13.4
1983:													
I	53.7	10.0	—1.6	2.8	1.1	3.5	3.0	1.2	43.6	6.9	4.8	15.9	16.0
II	68.1	18.3	—1.1	4.0	2.9	3.0	5.6	3.9	49.9	6.9	5.5	20.0	17.4
III	78.2	21.3	—6	3.9	2.3	2.7	10.2	2.8	56.9	6.3	6.8	24.7	19.1

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, 1950-83

(Billions of dollars)

Year or quarter	All manufacturing corporations				Durable goods industries				Nondurable goods industries			
	Sales (net)	Profits		Stockholders' equity ²	Sales (net)	Profits		Stockholders' equity ²	Sales (net)	Profits		Stockholders' equity ²
		Before income taxes ¹	After income taxes			Before income taxes ¹	After income taxes			Before income taxes ¹	After income taxes	
1950.....	181.9	23.2	12.9	83.3	86.8	12.9	6.7	39.9	95.1	10.3	6.1	43.5
1951.....	245.0	27.4	11.9	98.3	116.8	15.4	6.1	47.2	128.1	12.1	5.7	51.1
1952.....	250.2	22.9	10.7	103.7	122.0	12.9	5.5	49.8	128.0	10.0	5.2	53.9
1953.....	265.9	24.4	11.3	108.2	137.9	14.0	5.8	52.4	128.0	10.4	5.5	55.7
1954.....	248.5	20.9	11.2	113.1	122.8	11.4	5.6	54.9	125.7	9.6	5.6	58.2
1955.....	278.4	28.6	15.1	120.1	142.1	16.5	8.1	58.8	136.3	12.1	7.0	61.3
1956.....	307.3	29.8	16.2	131.6	159.5	16.5	8.3	65.2	147.8	13.2	7.8	66.4
1957.....	320.0	28.2	15.4	141.1	166.0	15.8	7.9	70.5	154.1	12.4	7.5	70.6
1958.....	305.3	22.7	12.7	147.4	148.6	11.4	5.8	72.8	156.7	11.3	6.9	74.6
1959.....	338.0	29.7	16.3	157.1	169.4	15.8	8.1	77.9	168.5	13.9	8.3	79.2
1960.....	345.7	27.5	15.2	165.4	173.9	14.0	7.0	82.3	171.8	13.5	8.2	83.1
1961.....	356.4	27.5	15.3	172.6	175.2	13.6	6.9	84.9	181.2	13.9	8.5	87.7
1962.....	389.4	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
1980:												
I.....	465.7	39.5	24.8	643.9	219.8	15.8	9.7	308.0	245.9	23.7	15.1	335.9
II.....	466.3	35.9	22.4	658.1	218.7	13.5	8.2	312.6	247.6	22.4	14.2	345.5
III.....	464.2	33.2	21.0	670.5	212.6	11.9	7.2	317.2	251.6	21.3	13.7	353.3
IV.....	516.6	37.2	24.4	699.7	238.0	16.2	10.4	332.8	278.6	21.0	14.0	366.9
1981:												
I.....	520.8	39.0	24.4	718.4	234.1	16.7	10.1	339.4	286.7	22.3	14.2	379.1
II.....	549.6	45.6	28.9	739.4	257.2	20.7	12.7	349.7	292.4	24.9	16.2	389.7
III.....	539.9	40.0	25.2	753.5	245.1	16.4	10.3	354.2	294.8	23.5	14.9	399.4
IV.....	534.4	34.0	22.9	762.3	243.0	13.4	8.5	358.3	291.3	20.6	14.3	404.0
1982:												
I.....	502.9	29.0	19.0	757.5	225.3	10.7	6.8	351.2	277.6	18.3	12.3	406.3
II.....	521.9	30.9	20.0	765.0	239.4	12.6	8.1	354.5	282.6	18.3	11.9	410.5
III.....	508.0	27.8	17.8	775.2	224.4	8.5	5.3	358.3	283.6	19.4	12.5	416.8
IV.....	506.6	20.5	14.1	783.0	224.0	2.9	1.5	358.1	282.6	17.6	12.6	425.0
1983:												
I.....	493.4	24.4	15.7	787.0	222.8	7.9	4.8	359.9	270.6	16.6	10.9	427.2
II.....	529.4	34.7	22.2	802.3	245.8	13.5	8.4	368.3	283.6	21.2	13.7	434.0
III.....	537.2	36.3	23.3	819.3	246.1	12.9	8.2	376.5	291.1	23.4	15.1	442.8

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.

Source: Department of Commerce, Bureau of the Census.

TABLE B-86.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947-83*

Year or quarter	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent ¹			Profits after income taxes per dollar of sales—cents		
	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1947.....	15.6	14.4	16.6	6.7	6.7	6.7
1948.....	16.0	15.7	16.2	7.0	7.1	6.8
1949.....	11.6	12.1	11.2	5.8	6.4	5.4
1950.....	15.4	16.9	14.1	7.1	7.7	6.5
1951.....	12.1	13.0	11.2	4.9	5.3	4.5
1952.....	10.3	11.1	9.7	4.3	4.5	4.1
1953.....	10.5	11.1	9.9	4.3	4.2	4.3
1954.....	9.9	10.3	9.6	4.5	4.6	4.4
1955.....	12.6	13.8	11.4	5.4	5.7	5.1
1956.....	12.3	12.8	11.8	5.3	5.2	5.3
1957.....	10.9	11.3	10.6	4.8	4.8	4.9
1958.....	8.6	8.0	9.2	4.2	3.9	4.4
1959.....	10.4	10.4	10.4	4.8	4.8	4.9
1960.....	9.2	8.5	9.8	4.4	4.0	4.8
1961.....	8.9	8.1	9.6	4.3	3.9	4.7
1962.....	9.8	9.6	9.9	4.5	4.4	4.7
1963.....	10.3	10.1	10.4	4.7	4.5	4.9
1964.....	11.6	11.7	11.5	5.2	5.1	5.4
1965.....	13.0	13.8	12.2	5.6	5.7	5.5
1966.....	13.4	14.2	12.7	5.6	5.6	5.6
1967.....	11.7	11.7	11.8	5.0	4.8	5.3
1968.....	12.1	12.2	11.9	5.1	4.9	5.2
1969.....	11.5	11.4	11.5	4.8	4.6	5.0
1970.....	9.3	8.3	10.3	4.0	3.5	4.5
1971.....	9.7	9.0	10.3	4.1	3.8	4.5
1972.....	10.6	10.8	10.5	4.3	4.2	4.4
1973.....	12.8	13.1	12.6	4.7	4.7	4.8
1973: IV.....	13.4	12.9	14.0	4.7	4.5	5.0
New series:						
1973: IV.....	14.3	13.3	15.3	5.6	5.0	6.1
1974.....	14.9	12.6	17.1	5.5	4.7	6.4
1975.....	11.6	10.3	12.9	4.6	4.1	5.1
1976.....	13.9	13.7	14.2	5.4	5.2	5.5
1977.....	14.2	14.5	13.8	5.3	5.3	5.3
1978.....	15.0	16.0	14.2	5.4	5.5	5.3
1979.....	16.4	15.4	17.4	5.7	5.2	6.1
1980.....	13.9	11.2	16.3	4.8	4.0	5.6
1981.....	13.6	11.9	15.2	4.7	4.2	5.1
1982.....	9.2	6.1	11.9	3.5	2.4	4.4
1980:						
I.....	15.4	12.6	18.0	5.3	4.4	6.1
II.....	13.6	10.6	16.4	4.8	3.8	5.7
III.....	12.5	9.1	15.6	4.5	3.4	5.5
IV.....	14.0	12.6	15.2	4.7	4.4	5.0
1981:						
I.....	13.6	12.0	15.0	4.7	4.3	5.0
II.....	15.6	14.6	16.6	5.3	4.9	5.5
III.....	13.4	11.6	14.9	4.7	4.2	5.1
IV.....	12.0	9.5	14.2	4.3	3.5	4.9
1982:						
I.....	10.1	7.7	12.1	3.8	3.0	4.4
II.....	10.5	9.2	11.6	3.8	3.4	4.2
III.....	9.2	5.9	12.0	3.5	2.4	4.4
IV.....	7.2	1.7	11.9	2.8	.7	4.5
1983:						
I.....	8.0	5.3	10.3	3.2	2.1	4.0
II.....	11.1	9.2	12.7	4.2	3.4	4.8
III.....	11.4	8.7	13.6	4.3	3.3	5.2

¹ 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, 1946-83

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Sources							Uses			Discrepancy (sources less uses)
	Total	Internal ¹	External					Total	Capital expenditures ²	Increase in financial assets	
			Total	Credit market funds			Other ²				
				Total	Securities and mortgages	Loans and short-term paper					
1946	18.7	8.1	10.6	6.9	3.6	3.3	3.7	16.8	18.1	-1.4	1.9
1947	27.0	12.9	14.1	8.4	5.4	3.0	5.8	25.6	17.3	8.4	1.4
1948	28.9	19.1	9.7	6.5	6.7	-2	3.3	25.3	20.3	5.0	3.6
1949	19.9	19.5	.4	3.1	4.9	-1.8	-2.7	18.3	14.8	3.5	1.6
1950	42.1	18.0	24.0	8.1	4.2	3.9	15.9	40.4	24.0	16.4	1.7
1951	36.4	20.2	16.2	10.5	6.4	4.1	5.7	37.6	30.2	7.4	-1.2
1952	29.9	21.9	8.0	9.5	8.0	1.4	-1.5	29.2	24.6	4.6	.6
1953	27.8	21.7	6.1	5.7	6.0	-4	.5	28.0	25.7	2.3	-1
1954	29.6	23.9	5.7	6.5	6.7	-2	-8	27.8	22.9	4.9	1.8
1955	52.7	29.5	23.2	10.2	6.4	3.7	13.1	49.1	32.6	16.5	3.5
1956	44.9	29.5	15.4	12.8	7.5	5.3	2.5	40.8	36.8	4.0	4.1
1957	43.4	31.5	11.9	12.3	10.4	1.9	-4	39.1	34.9	4.2	4.3
1958	41.9	30.3	11.7	10.5	10.5	-0	1.2	38.5	27.7	10.8	3.4
1959	56.3	36.0	20.2	12.3	8.1	4.2	7.9	51.2	37.0	14.2	5.0
1960	48.6	35.4	13.2	12.1	7.5	4.6	1.2	41.4	37.5	3.9	7.2
1961	56.3	36.5	19.8	12.9	10.7	2.2	6.9	51.0	36.7	14.2	5.3
1962	60.1	42.8	17.3	12.8	9.4	3.4	4.6	55.5	43.2	12.3	4.6
1963	68.4	46.5	22.0	12.5	8.4	4.0	9.5	60.4	44.7	15.7	8.0
1964	73.9	51.8	22.1	14.1	7.8	6.2	8.0	64.9	50.1	14.8	9.0
1965	91.8	58.5	33.3	18.5	7.6	11.0	14.8	82.7	61.0	21.8	9.1
1966	97.6	62.6	35.0	23.8	14.3	9.5	11.2	91.3	74.7	16.6	6.4
1967	94.7	63.6	31.1	27.8	19.1	8.7	3.3	88.5	72.2	16.3	6.2
1968	113.5	65.0	48.5	27.7	15.0	12.6	20.9	106.0	75.4	30.6	7.5
1969	115.5	64.4	51.1	32.3	14.6	17.7	18.8	115.3	83.7	31.6	.2
1970	102.3	61.8	40.5	35.3	26.3	9.0	5.3	98.7	80.0	18.7	3.6
1971	125.3	73.5	51.8	37.2	32.8	4.4	14.6	122.7	86.0	36.7	2.6
1972	151.6	85.0	66.6	43.4	26.4	16.9	23.2	149.1	99.0	50.1	2.4
1973	192.5	91.7	100.7	56.7	20.7	36.0	44.0	191.9	121.5	70.5	.5
1974	190.3	85.6	104.7	70.2	26.3	43.9	34.5	190.1	137.9	52.2	.2
1975	157.0	119.7	37.3	30.8	38.7	-7.9	6.5	150.9	109.7	41.2	6.0
1976	211.0	134.2	76.8	54.7	38.2	16.5	22.1	201.8	148.3	53.5	9.2
1977	254.1	157.4	96.7	72.4	35.8	36.6	24.3	237.6	175.1	62.5	16.5
1978	317.5	175.7	141.8	80.5	32.8	47.7	61.3	293.6	201.6	92.0	23.8
1979	345.7	188.8	156.9	88.2	20.9	67.3	68.8	346.7	219.4	127.3	-1.0
1980	333.2	189.5	143.7	90.9	52.4	38.5	52.7	320.1	221.2	98.9	13.1
1981	365.8	230.6	135.2	92.2	22.6	69.7	43.0	324.3	261.6	62.7	41.6
1982	308.6	240.5	68.1	84.1	45.2	38.9	-15.9	251.0	231.2	19.7	57.7
1981:											
I	348.8	217.3	131.5	73.0	42.8	30.2	58.6	348.4	231.6	116.8	.5
II	386.4	223.5	163.0	120.4	40.2	80.3	42.6	343.4	253.9	89.5	43.1
III	353.0	237.2	115.8	93.1	3.0	90.1	22.8	301.3	289.4	11.9	51.7
IV	375.1	244.7	130.4	82.4	4.4	78.0	48.0	304.1	271.5	32.6	71.1
1982											
I	302.8	233.5	69.3	102.8	24.8	78.0	-33.4	232.1	242.4	-10.3	70.8
II	329.9	240.2	89.7	89.9	38.6	51.3	-2	279.3	242.2	37.1	50.5
III	327.4	244.0	83.4	89.0	39.6	49.4	-5.6	270.5	240.1	30.3	56.9
IV	274.5	244.3	30.2	54.6	77.8	-23.2	-24.4	222.0	200.2	21.8	52.5
1983:											
I	323.4	250.7	72.7	69.2	64.7	4.5	3.5	276.2	202.4	73.8	47.2
II	396.3	270.3	126.0	77.1	84.1	-6.9	48.8	338.7	252.9	85.8	57.6
III	387.7	291.1	96.6	80.1	33.3	46.7	16.5	338.4	281.5	56.9	49.3

¹ Undistributed profits (after inventory valuation and capital consumption adjustments), capital consumption allowances, and foreign branch profits, dividends, and subsidiaries' earnings retained abroad.² Consists of tax liabilities, trade debt, and direct foreign investment in the United States.³ Plant and equipment, residential structures, inventory investment, and mineral rights from U.S. Government.

Source: Board of Governors of the Federal Reserve System.

TABLE B-88.—Current assets and liabilities of U.S. corporations, 1940-83

(Billions of dollars, except as noted)

End of period	Current assets						Current liabilities			Net working capital	Current ratio ³
	Total	Cash ¹	U.S. Government securities ²	Notes and accounts receivable	Inventories	Other current assets	Total	Notes and accounts payable	Other current liabilities		
All corporations ⁴											
SEC series: ⁵											
1940.....	60.3	13.1	2.0	24.0	19.8	1.5	32.8	23.2	9.6	27.5	1.838
1941.....	72.9	13.9	4.0	28.0	25.6	1.4	40.7	26.4	14.3	32.3	1.791
1942.....	83.6	17.6	10.1	27.3	27.3	1.3	47.3	26.0	21.3	36.3	1.767
1943.....	93.8	21.6	16.4	26.9	27.6	1.3	51.6	26.3	25.3	42.1	1.818
1944.....	97.2	21.6	20.9	26.5	26.8	1.4	51.7	26.8	24.9	45.6	1.880
1945.....	97.4	21.7	21.1	25.9	26.3	2.4	45.8	25.7	20.1	51.6	2.127
1946.....	108.1	22.8	15.3	30.7	37.6	1.7	51.9	31.6	20.3	56.2	2.083
1947.....	123.6	25.0	14.1	38.3	44.6	1.6	61.5	37.6	23.9	62.1	2.010
1948.....	133.0	25.3	14.8	42.4	48.9	1.6	64.4	39.3	25.0	68.6	2.065
1949.....	133.1	26.5	16.8	43.0	45.3	1.4	60.7	37.5	23.3	72.4	2.193
1950.....	161.5	28.1	19.7	56.8	55.1	1.7	79.8	48.3	31.6	81.6	2.024
1951.....	179.1	30.0	20.7	61.5	64.9	2.1	92.6	54.9	37.8	86.5	1.934
1952.....	186.2	30.8	19.9	67.4	65.8	2.4	96.1	59.3	36.8	90.1	1.938
1953.....	190.6	31.1	21.5	68.5	67.2	2.4	98.9	59.5	39.4	91.8	1.927
1954.....	194.6	33.4	19.2	73.6	65.3	3.1	99.7	61.7	38.0	94.9	1.952
1955.....	224.0	34.6	23.5	88.9	72.8	4.2	121.0	76.1	45.0	103.0	1.851
1956.....	237.9	34.8	19.1	97.7	80.4	5.9	130.5	83.9	46.6	107.4	1.823
1957.....	244.7	34.9	18.6	102.2	82.2	6.7	133.1	86.6	46.5	111.6	1.838
1958.....	255.3	37.4	18.8	109.7	81.9	7.5	136.6	90.4	46.2	118.7	1.869
1959.....	277.3	36.3	22.8	120.6	88.4	9.1	153.1	101.0	52.0	124.2	1.811
1960.....	289.0	37.2	20.1	129.2	91.8	10.6	160.4	106.8	53.6	128.6	1.802
1961.....	306.8	41.1	20.0	139.2	95.2	11.4	171.2	114.6	56.6	135.6	1.792
Nonfinancial corporations ⁶											
SEC series: ⁵											
1961.....	254.7	34.8	16.5	97.9	95.0	10.5	123.7	84.4	39.3	131.0	2.059
1962.....	269.7	37.1	16.8	103.2	100.5	12.1	132.4	88.7	43.7	137.3	2.037
1963.....	288.2	39.8	16.7	110.5	106.8	14.4	145.5	97.0	48.5	142.7	1.981
1964.....	305.6	40.5	15.8	119.9	113.1	16.3	156.6	104.9	51.7	149.0	1.951
1965.....	336.0	42.8	14.4	134.1	126.6	18.1	178.8	121.5	57.3	157.2	1.879
1966.....	364.0	41.9	13.0	146.6	142.8	19.7	199.4	137.5	61.9	164.6	1.825
1967.....	386.2	45.5	10.3	155.3	153.1	22.0	211.3	147.1	64.2	174.9	1.828
1968.....	426.5	48.2	11.5	173.9	166.0	26.9	244.1	168.8	75.3	182.4	1.747
1969.....	473.6	47.9	10.6	197.0	186.4	31.6	287.8	199.2	88.6	185.7	1.646
1970.....	492.3	50.2	7.7	206.1	193.3	35.0	304.9	211.3	93.6	187.4	1.615
1971.....	529.6	53.3	11.0	221.1	200.4	43.8	326.0	220.5	105.5	203.6	1.625
1972.....	599.3	59.0	10.6	248.2	225.7	55.8	375.6	282.9	92.7	223.7	1.595
1973.....	697.8	66.3	12.8	288.5	263.9	66.4	450.9	340.3	110.7	246.9	1.548
1974.....	790.7	71.1	12.3	322.1	313.6	71.7	530.4	402.3	128.1	260.3	1.491
QFR-FRB series: ⁷											
1974.....	735.4	73.2	11.1	265.8	319.5	65.9	453.4	269.8	183.6	282.0	1.622
1975.....	759.0	82.1	19.0	272.1	315.9	69.9	451.6	264.2	187.4	307.4	1.681
1976.....	827.4	88.2	23.5	292.9	342.5	80.3	495.1	282.1	213.0	332.4	1.671
1977.....	912.7	97.2	18.2	330.3	376.9	90.1	557.1	317.6	239.6	355.5	1.638
1978.....	1,043.7	105.5	17.2	388.0	431.8	101.1	669.5	383.0	286.5	374.3	1.559
1979.....	1,214.8	118.0	16.7	459.0	505.1	116.0	807.3	460.8	346.5	407.5	1.505
1980.....	1,327.0	126.9	18.7	506.8	542.8	131.8	889.3	513.6	375.7	437.8	1.492
1981.....	1,419.3	131.8	17.4	530.3	585.1	154.6	976.3	558.8	417.5	442.9	1.454
1982.....	1,425.4	144.0	22.4	511.0	575.2	172.6	977.8	552.8	425.0	447.6	1.458
1982:											
I.....	1,418.0	121.8	16.5	533.4	591.6	154.7	987.0	552.9	434.0	431.0	1.437
II.....	1,417.2	124.1	16.5	531.2	587.6	157.9	988.7	554.9	433.8	428.5	1.433
III.....	1,441.8	126.9	18.9	534.2	596.5	165.3	1,007.6	562.7	444.9	434.2	1.431
IV.....	1,425.4	144.0	22.4	511.0	575.2	172.6	977.8	552.8	425.0	447.6	1.458
1983:											
I.....	1,436.5	139.7	25.8	517.9	573.2	179.9	986.3	543.2	443.1	450.2	1.456
II.....	1,464.2	145.7	27.5	534.3	570.5	186.2	997.7	551.6	446.1	466.5	1.468

¹ Includes time certificates of deposit.² Includes Federal agency issues.³ Total current assets divided by total current liabilities.⁴ Excludes banks, savings and loan associations, and insurance companies.⁵ Based on data from "Statistics of Income," Department of the Treasury.⁶ 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.⁷ 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.

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, 1934-83

[Millions of dollars]

Year or quarter	State and municipal securities offered for cash (principal amounts)	Business securities offered for cash ¹								
		Total offerings	Type of security			Industry of issuer				
			Common stock ²	Preferred stock	Bonds and notes	Manufacturing ³	Electric, gas, and water ⁴	Transportation ⁵	Communication	Other
1934	939	397	19	6	372	67	133	176		21
1939	1,128	2,164	87	98	1,979	604	1,271	186		103
1940	1,238	2,677	108	183	2,386	992	1,203	324		159
1941	956	2,667	110	167	2,389	848	1,357	366		96
1942	524	1,062	34	112	917	539	472	48		4
1943	435	1,170	56	124	990	510	477	161		21
1944	661	3,202	163	369	2,670	1,061	1,422	609		109
1945	795	6,011	397	758	4,855	2,026	2,319	1,454		211
1946	1,157	6,900	891	1,127	4,882	3,701	2,158	711		329
1947	2,324	6,577	779	762	5,036	2,742	3,257	286		293
1948	2,690	7,078	614	492	5,973	2,226	2,187	755	902	1,008
1949	2,907	6,052	736	425	4,890	1,414	2,320	800	571	946
1950	3,532	6,362	811	631	4,920	1,200	2,649	813	399	1,300
1951	3,189	7,741	1,212	838	5,691	3,122	2,455	494	612	1,058
1952	4,401	9,534	1,369	564	7,601	4,039	2,675	992	760	1,068
1953	5,558	8,898	1,326	489	7,083	2,254	3,029	595	882	2,138
1954	6,969	9,516	1,213	816	7,488	2,268	3,713	778	720	2,037
1955	5,977	10,240	2,185	635	7,420	2,994	2,464	893	1,132	2,757
1956	5,446	10,939	2,301	636	8,002	3,647	2,529	724	1,419	2,619
1957	6,958	12,884	2,516	411	9,957	4,234	3,938	824	1,462	2,426
1958	7,449	11,558	1,334	571	9,653	3,515	3,804	824	1,424	1,991
1959	7,681	9,748	2,027	531	7,190	2,073	3,258	967	717	2,733
1960	7,230	10,154	1,664	409	8,081	2,152	2,851	718	1,050	3,383
1961	8,360	13,165	3,294	450	9,420	4,077	3,032	694	1,834	3,527
1962	8,558	10,705	1,314	422	8,969	3,249	2,825	567	1,303	2,761
1963	10,107	12,211	1,011	343	10,856	3,514	2,677	957	1,105	3,957
1964	10,544	13,957	2,679	412	10,865	3,046	2,760	982	2,189	4,980
1965	11,148	14,782	1,473	724	12,585	5,414	2,934	702	945	4,787
1966	11,089	17,385	1,901	580	14,904	7,056	3,666	1,494	2,003	3,167
1967	14,288	24,014	1,927	881	21,206	11,069	4,935	1,639	1,975	4,396
1968	16,374	21,261	3,885	636	16,740	6,958	5,293	1,564	1,775	5,671
1969	11,460	25,997	7,640	691	17,666	6,346	6,715	1,779	2,172	8,985
1970	17,762	37,451	7,037	1,390	29,023	10,647	11,009	1,253	5,291	9,252
1971	24,370	43,229	9,485	3,683	30,061	11,651	11,721	1,148	5,840	12,867
1972	22,941	39,705	10,707	3,371	25,628	6,398	11,314	860	4,836	16,298
1973	22,953	31,680	7,642	3,341	20,700	4,832	10,269	811	4,872	10,897
1974	22,824	37,820	4,050	2,273	31,497	10,511	12,836	1,005	3,932	9,632
1975	29,326	53,632	7,414	3,459	42,759	18,652	15,893	3,637	4,466	10,983
1976	33,845	53,314	8,305	2,803	42,206	15,496	14,418	4,649	3,562	15,194
1977	45,060	54,229	8,047	3,916	42,266	13,757	13,704	3,218	4,443	19,113
1978 ⁶	46,215	29,949	7,724	1,757	20,468	4,483	9,138	1,251	2,959	12,120
1979	42,261	37,248	8,816	1,964	26,468	6,643	9,937	1,640	4,482	14,547
1980	47,133	67,126	19,282	3,194	44,650	20,857	13,746	2,306	6,865	23,356
1981	46,134	65,888	25,226	1,696	38,966	15,287	13,245	1,883	5,867	29,608
1982	77,179	72,152	23,197	4,948	44,007	13,239	16,408	2,093	3,895	36,520
1983: First three quarters	61,427	81,673	34,725	6,523	40,429	19,751	9,711	3,040	5,428	43,742
1982:										
I	12,770	12,781	4,343	582	7,855	1,797	3,242	366	116	7,261
II	17,627	14,629	6,021	1,091	7,518	1,336	3,932	253	619	8,490
III	18,892	18,428	4,568	1,683	12,178	3,735	4,059	594	1,120	8,921
IV	27,890	26,314	8,265	1,592	16,456	6,371	5,175	880	2,040	11,848
1983:										
I	17,239	28,178	11,745	3,545	12,891	6,216	3,620	1,283	2,088	14,970
II	27,257	33,277	13,255	1,717	18,305	8,974	3,907	862	1,872	17,662
III	16,931	20,218	9,725	1,261	9,233	4,561	2,184	895	1,468	11,110

¹ Business securities offered include securities offered by corporate and non-corporate business enterprises such as limited partnerships. Beginning 1978 excludes private placements.

² 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.

³ Prior to 1948, also includes extractive, radio broadcasting, airline companies, commercial, and miscellaneous company issues.

⁴ Prior to 1948, includes telephone, street railway, and bus company issues.

⁵ Prior to 1948, includes railroad issues only.

⁶ Beginning 1978, business security offerings exclude private placements.

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 1 year; excludes notes issued exclusively to commercial banks, intercorporate transactions, and issues to be sold over an extended period, such as employee-purchase plans. Closed-end investment company issues are included beginning 1973.

Sources: Securities and Exchange Commission, "The Commercial and Financial Chronicle," and "The Bond Buyer."

TABLE B-90.—Common stock prices and yields, 1949-83

Year or month	Common stock prices ¹						Common stock yields (percent) ⁵	
	New York Stock Exchange indexes (Dec. 31, 1965=50) ²					Standard & Poor's composite index (1941-43=10) ⁴	Dividend-price ratio ⁶	Earnings-price ratio ⁷
	Composite	Industrial	Transportation	Utility	Finance			
1949.....	9.02					179.48	15.23	6.59
1950.....	10.87					216.31	18.40	6.57
1951.....	13.08					257.64	22.34	6.13
1952.....	13.81					270.76	24.50	5.80
1953.....	13.67					275.97	24.73	5.80
1954.....	16.19					333.94	29.69	4.95
1955.....	21.54					442.72	40.49	4.08
1956.....	24.40					493.01	46.62	4.09
1957.....	23.67					475.71	44.38	4.35
1958.....	24.56					491.66	46.24	3.97
1959.....	30.73					632.12	57.38	3.23
1960.....	30.01					618.04	55.85	3.47
1961.....	35.37					691.55	66.27	2.98
1962.....	33.49					639.76	62.38	3.37
1963.....	37.51					714.81	69.87	3.17
1964.....	43.76					834.05	81.37	3.01
1965.....	47.39					910.88	88.17	3.00
1966.....	46.15	46.18	50.26	45.41	44.45	873.60	85.26	3.40
1967.....	50.77	51.97	53.51	45.43	49.82	879.12	91.93	3.20
1968.....	55.37	58.00	50.58	44.19	65.85	906.00	98.70	3.07
1969.....	54.67	57.44	46.96	42.80	70.49	876.72	97.84	3.24
1970.....	45.72	48.03	32.14	37.24	60.00	753.19	83.22	3.83
1971.....	54.22	57.92	44.35	39.53	70.38	884.76	98.29	3.14
1972.....	60.29	65.73	50.17	38.48	78.35	950.71	109.20	2.84
1973.....	57.42	63.08	37.74	37.69	70.12	923.88	107.43	3.06
1974.....	43.84	48.08	31.89	29.79	49.67	759.37	82.85	4.47
1975.....	45.73	50.52	31.10	31.50	47.14	802.49	86.16	4.31
1976.....	54.46	60.44	39.57	36.97	52.94	974.92	102.01	3.77
1977.....	53.69	57.86	41.09	40.92	55.25	894.63	98.20	4.62
1978.....	53.70	58.23	43.50	39.22	56.65	820.23	96.02	5.28
1979.....	58.32	64.76	47.34	38.20	61.42	844.40	103.01	5.47
1980.....	68.10	78.70	60.61	37.35	64.25	891.41	118.78	5.26
1981.....	74.02	85.44	72.61	38.91	73.52	932.92	128.05	5.20
1982.....	68.93	78.18	60.41	39.75	71.99	884.36	119.71	5.81
1983.....	92.63	107.45	89.36	47.00	95.34	1,190.34	160.41	4.40
1982:								
Jan.....	67.91	76.85	62.04	39.30	70.99	853.41	117.28	5.95
Feb.....	66.16	74.78	59.09	38.32	70.50	833.15	114.50	6.06
Mar.....	63.86	71.51	55.19	38.57	69.08	812.33	110.84	6.28
Apr.....	66.97	75.59	57.91	39.20	71.44	844.96	116.31	5.99
May.....	67.07	75.97	56.84	39.40	69.16	846.72	116.35	5.97
June.....	63.10	71.59	53.07	37.34	63.19	804.37	109.70	6.28
July.....	62.82	71.37	53.40	37.20	61.59	818.41	109.38	6.31
Aug.....	62.91	70.98	53.98	38.19	62.84	832.11	109.65	6.32
Sept.....	70.21	80.08	61.39	40.36	69.66	917.27	122.43	5.63
Oct.....	76.10	86.67	66.64	42.67	80.59	988.71	132.66	5.12
Nov.....	79.75	90.76	71.92	43.46	88.66	1,027.76	138.10	4.92
Dec.....	80.30	92.00	73.40	42.93	86.22	1,033.08	139.37	4.93
1983:								
Jan.....	83.25	95.37	75.65	45.59	85.66	1,064.29	144.27	4.79
Feb.....	84.74	97.26	79.44	45.92	86.57	1,087.43	146.80	4.74
Mar.....	87.50	100.61	83.28	45.89	93.22	1,129.58	151.88	4.59
Apr.....	90.61	104.46	85.26	46.22	99.07	1,168.43	157.71	4.44
May.....	94.61	109.43	89.07	47.62	102.45	1,212.86	164.10	4.27
June.....	96.43	112.52	92.22	46.76	101.22	1,221.47	166.39	4.26
July.....	96.74	113.21	92.91	46.61	99.60	1,213.93	166.96	4.21
Aug.....	93.96	109.50	88.06	46.94	95.76	1,189.21	162.42	4.35
Sept.....	96.70	112.76	94.56	48.16	97.00	1,237.04	167.16	4.24
Oct.....	96.78	112.87	95.41	48.73	94.79	1,252.20	167.65	4.25
Nov.....	95.36	110.77	97.68	48.50	94.48	1,250.01	165.23	4.31
Dec.....	94.92	110.65	98.79	47.00	94.25	1,257.64	164.36	4.32

¹ Averages of daily closing prices, except New York Stock Exchange data through May 1964 are averages of weekly closing prices.² Includes all the stocks (more than 1,500) listed on the New York Stock Exchange.³ Includes 30 stocks.⁴ Includes 500 stocks.⁵ Standard & Poor's series, based on 500 stocks in the composite index.⁶ Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures; annual data are averages of monthly figures.⁷ 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.

Note.—All data relate to stocks listed on the New York Stock Exchange.

Sources: New York Stock Exchange, Dow Jones & Co., Inc., and Standard & Poor's Corporation.

TABLE B-91.—Business formation and business failures, 1940-83

Year or month	Index of net business formation (1967 = 100)	New business incorporations (number)	Business failures ¹						
			Business failure rate ²	Number of failures			Amount of current liabilities (millions of dollars)		
				Total	Liability size class		Total	Liability size class	
					Under \$100,000	\$100,000 and over		Under \$100,000	\$100,000 and over
1940.....			63.0	13,619	13,400	219	166.7	119.9	46.8
1941.....			54.4	11,848	11,685	163	136.1	100.7	35.4
1942.....			44.6	9,405	9,282	123	100.8	80.3	20.5
1943.....			16.4	3,221	3,155	66	45.3	30.2	15.1
1944.....			6.5	1,222	1,176	46	31.7	14.5	17.1
1945.....			4.2	809	759	50	30.2	11.4	18.8
1946.....		132,916	5.2	1,129	1,003	126	67.3	15.7	51.6
1947.....		112,897	14.3	3,474	3,103	371	204.6	63.7	140.9
1948.....	101.9	96,346	20.4	5,250	4,853	397	234.6	93.9	140.7
1949.....	86.4	85,640	34.4	9,246	8,708	538	308.1	161.4	146.7
1950.....	90.6	93,092	34.3	9,162	8,746	416	248.3	151.2	97.1
1951.....	89.5	83,778	30.7	8,058	7,626	432	259.5	131.6	128.0
1952.....	93.3	92,946	28.7	7,611	7,081	530	283.3	131.9	151.4
1953.....	91.7	102,706	33.2	8,862	8,075	787	394.2	167.5	226.6
1954.....	91.0	117,411	42.0	11,086	10,226	860	462.6	211.4	251.2
1955.....	98.4	139,915	41.6	10,969	10,113	856	449.4	206.4	243.0
1956.....	96.6	141,163	48.0	12,686	11,615	1,071	562.7	239.8	322.9
1957.....	92.4	137,112	51.7	13,739	12,547	1,192	615.3	267.1	348.2
1958.....	92.2	150,781	55.9	14,964	13,499	1,465	728.3	297.6	430.7
1959.....	98.7	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9
1960.....	95.5	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4
1961.....	92.1	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0
1962.....	93.7	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1
1963.....	95.2	186,404	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6
1964.....	98.6	197,724	53.2	13,501	11,346	2,155	1,329.2	313.6	1,015.6
1965.....	100.2	203,897	53.3	13,514	11,340	2,174	1,321.7	321.7	1,000.0
1966.....	99.4	200,010	51.6	13,061	10,833	2,228	1,385.7	321.5	1,064.1
1967.....	100.0	206,569	49.0	12,364	10,144	2,220	1,265.2	297.9	967.3
1968.....	106.8	233,635	38.6	9,636	7,829	1,807	941.0	241.1	699.9
1969.....	112.9	274,267	37.3	9,154	7,192	1,962	1,142.1	231.3	910.8
1970.....	106.4	264,209	43.8	10,748	8,019	2,729	1,887.8	269.3	1,618.4
1971.....	108.5	287,577	41.7	10,326	7,611	2,715	1,916.9	271.3	1,645.6
1972.....	115.9	316,601	38.3	9,566	7,040	2,526	2,000.2	258.8	1,741.5
1973.....	114.9	329,358	36.4	9,345	6,627	2,718	2,298.6	235.6	2,063.0
1974.....	109.2	319,149	38.4	9,915	6,733	3,182	3,053.1	256.9	2,796.3
1975.....	107.0	326,345	42.6	11,432	7,504	3,928	4,380.2	298.6	4,081.6
1976.....	115.6	375,766	34.8	9,628	6,176	3,452	3,011.3	257.8	2,753.4
1977.....	123.2	436,170	28.4	7,919	4,861	3,058	3,095.3	208.3	2,887.0
1978.....	128.2	478,019	23.9	6,619	3,712	2,907	2,656.0	164.7	2,491.3
1979.....	128.3	524,565	27.8	7,564	3,930	3,634	2,667.4	179.9	2,487.5
1980.....	122.4	533,520	42.1	11,742	5,682	6,060	4,635.1	272.5	4,362.6
1981.....	118.6	581,242	61.3	16,794	8,233	8,561	6,955.2	405.8	6,549.3
1982 ^a	113.2	566,942	89.0	25,346					
Seasonally adjusted									
1982: Jan.....	113.2	43,330	66.2	1,535	730	805	645.1	35.0	610.1
Feb.....	115.6	47,234	77.0	1,854	843	1,011	913.5	39.7	873.7
Mar.....	113.5	46,899	77.6	2,088	986	1,102	836.0	48.2	787.8
Apr.....	115.2	46,876	73.4	1,882	877	1,005	1,309.3	41.0	1,268.3
May.....	114.7	46,995	80.3	1,941	931	1,010	2,850.5	44.9	2,805.5
June.....	112.1	45,936	103.6	2,452	1,077	1,375	1,020.3	53.1	967.1
July.....	112.4	44,525							
Aug.....	112.6	46,981							
Sept.....	110.4	45,552							
Oct.....	111.5	45,530							
Nov.....	112.9	48,474							
Dec.....	114.4	57,507							
1983: Jan.....	111.4	49,999							
Feb.....	113.3	48,296							
Mar.....	112.7	48,032							
Apr.....	112.0	48,903							
May.....	114.8	50,211							
June.....	116.4	50,992							
July.....	115.2	48,601							
Aug.....	114.4	52,828							
Sept.....	115.8	50,445							
Oct.....	118.8								
Nov.....	118.0								

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.

AGRICULTURE

TABLE B-92.—Farm income, 1929-83

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

Year or quarter	Income of farm operators from farming							
	Gross farm income					Production expenses	Net farm income	
	Total ¹	Cash marketing receipts			Value of inventory changes ²		Current dollars	1967 dollars ³
		Total	Livestock and products	Crops				
1929	13.8	11.3	6.2	5.1	-0.1	7.7	6.2	12.0
1933	6.9	5.3	2.8	2.5	-2	4.4	2.6	6.6
1939	10.7	7.9	4.5	3.3	.1	6.3	4.4	10.6
1940	11.3	8.4	4.9	3.5	.3	6.9	4.5	10.7
1941	14.3	11.1	6.5	4.6	.4	7.8	6.5	14.7
1942	19.9	15.6	9.0	6.5	1.1	10.0	9.9	20.2
1943	23.3	19.6	11.5	8.1	-1	11.6	11.7	22.7
1944	24.0	20.5	11.4	9.2	-4	12.3	11.7	22.2
1945	25.4	21.7	12.0	9.7	-4	13.1	12.3	22.8
1946	29.6	24.8	13.8	11.0	.0	14.5	15.1	25.8
1947	32.4	29.6	16.5	13.1	-1.8	17.0	15.4	23.0
1948	36.5	30.2	17.1	13.1	1.7	18.8	17.7	24.5
1949	30.8	27.8	15.4	12.4	-9	18.0	12.8	17.9
1950	33.1	28.5	16.1	12.4	.8	19.5	13.6	18.9
1951	38.3	32.9	19.6	13.2	1.2	22.3	15.9	20.5
1952	37.8	32.5	18.2	14.3	.9	22.8	15.0	18.8
1953	34.4	31.0	16.9	14.1	-6	21.5	13.0	16.2
1954	34.2	29.8	16.3	13.6	.5	21.8	12.4	15.4
1955	33.5	29.5	16.0	13.5	.2	22.2	11.3	14.1
1956	34.0	30.4	16.4	14.0	-5	22.7	11.3	13.8
1957	34.8	29.7	17.4	12.3	.6	23.7	11.1	13.1
1958	39.0	33.5	19.2	14.2	.8	25.8	13.2	15.2
1959	37.9	33.6	18.9	14.7	.0	27.2	10.7	12.3
1960	38.9	34.2	19.0	15.3	.4	27.4	11.5	13.0
1961	40.5	35.2	19.5	15.7	.3	28.6	12.0	13.3
1962	42.3	36.5	20.2	16.3	.6	30.3	12.1	13.3
1963	43.4	37.5	20.0	17.4	.6	31.6	11.8	12.8
1964	42.3	37.3	19.9	17.4	-8	31.8	10.5	11.3
1965	46.5	39.4	21.9	17.5	1.0	33.7	12.9	13.7
1966	50.5	43.4	25.0	18.4	-1	36.5	14.0	14.4
1967	50.5	42.8	24.4	18.4	.7	38.2	12.3	12.3
1968	51.8	44.2	25.5	18.7	.1	39.5	12.3	11.8
1969	56.4	48.2	28.6	19.6	.1	42.1	14.3	13.0
1970	58.8	50.5	29.5	21.0	.0	44.5	14.4	12.4
1971	62.1	52.7	30.5	22.3	1.4	47.1	15.0	12.4
1972	71.2	61.1	35.6	25.5	.9	51.7	19.5	15.6
1973	99.0	86.9	45.8	41.1	.4	64.6	34.4	25.9
1974	98.3	92.4	41.3	51.1	-1.6	71.0	27.3	18.5
1975	100.6	88.9	43.1	45.8	.4	75.0	25.6	15.9
1976	102.9	95.4	46.3	49.0	-1.5	82.7	20.1	11.8
1977	108.7	96.2	47.6	48.6	1.1	88.9	19.8	10.9
1978	127.2	112.9	59.2	53.7	.8	99.5	27.7	14.2
1979	150.4	131.8	68.6	63.2	4.9	118.1	32.3	14.8
1980	150.1	140.5	67.8	72.7	-5.3	128.6	21.5	8.7
1981	167.1	142.3	69.2	73.1	7.6	137.0	30.1	11.0
1982	162.2	144.6	70.2	74.4	-1.9	140.1	22.1	7.6
1983 ^p	158.6	142.4	70.7	71.7	-8.8	136.0	22.6	7.6
1981:								
I	161.2	141.9	69.2	72.7	3.1	135.1	26.1	9.9
II	165.1	138.5	69.5	69.0	10.1	136.5	28.6	10.7
III	172.2	145.7	70.1	75.6	9.5	137.8	34.4	12.5
IV	169.7	143.0	68.0	75.0	7.9	138.6	31.1	11.0
1982:								
I	168.4	147.6	70.7	76.9	2.0	141.0	27.4	9.7
II	158.5	142.0	71.0	71.0	-1.7	141.5	17.0	5.9
III	155.9	142.3	70.2	72.1	-3.5	140.3	15.6	5.3
IV	165.8	146.3	68.9	77.4	-4.2	137.6	28.2	9.6
1983:								
I ^p	156.4	144.5	71.5	73.0	-8.6	136.6	19.8	6.7
II ^p	153.1	141.3	70.8	70.5	-9.9	135.1	18.0	6.1
III ^p	154.1	145.0	70.1	74.9	-12.3	135.3	18.8	6.3
IV ^p	170.6	138.8	70.3	68.5	-4.4	137.0	33.6	11.1

¹Cash marketing receipts and inventory changes plus Government payments, other farm cash income, and nonmoney income furnished by farms.

²Physical changes in end-of-period inventory of crop and livestock commodities valued at average prices during the period.

³Income in current dollars divided by the consumer price index (Department of Labor).

Source: Department of Agriculture, except as noted.

TABLE B-93.—Farm output and productivity indexes, 1929-83

[1977=100]

Year	Farm output						Productivity indicators				
	Total ¹	Crops ²				Live-stock and products ²	Farm output per unit of total input	Crop production per acre ³	Farm output per hour of farm work		
		Total ²	Feed grains	Food grains	Oil crops				Total	Crops	Live-stock and products
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	57	15	16	16
1946.....	60	59	51	55	19	66	61	60	16	18	17
1947.....	58	56	39	64	22	65	59	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.....	61	59	51	49	26	70	61	59	19	22	19
1951.....	63	60	47	49	26	73	61	59	20	22	20
1952.....	66	62	50	63	26	74	63	62	22	24	21
1953.....	66	62	49	57	26	74	64	62	23	25	22
1954.....	66	61	51	51	28	77	65	61	24	26	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.....	76	72	69	66	38	82	77	77	37	41	32
1961.....	76	70	62	60	43	86	78	78	39	42	35
1962.....	77	71	62	56	44	86	79	81	41	45	37
1963.....	80	74	68	59	46	89	82	83	45	47	40
1964.....	79	72	59	65	46	91	82	81	47	49	43
1965.....	82	76	70	67	53	89	86	85	52	56	45
1966.....	79	73	70	67	55	91	83	83	53	59	49
1967.....	83	77	79	76	56	94	86	86	58	63	53
1968.....	85	79	75	80	64	94	87	89	62	66	55
1969.....	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.....	95	93	91	108	86	95	99	96	89	89	85
1976.....	97	92	96	107	74	99	98	94	94	91	93
1977.....	100	100	100	100	100	100	100	100	100	100	100
1978.....	104	102	108	93	105	101	102	105	109	105	109
1979.....	111	113	116	108	129	104	106	113	119	118	118
1980.....	103	101	97	121	99	108	101	99	112	104	129
1981.....	118	116	121	144	114	109	115	113	131	120	138
1982.....	117	118	124	140	124	107	116	115	136	127	147
1983 ⁴	99	87	67	117	89	110	105	99	132	116	149

¹ Farm output measures the annual volume of net farm production available for eventual human use through sales from farms or consumption in farm households.

² Gross production.

³ Includes items not included in groups shown.

⁴ Computed from variable weights for individual crops produced each year.

Source: Department of Agriculture.

TABLE B-94.—Farm input use, selected inputs, 1929-83

Year	Farm population April ¹		Farm employment (thousands) ³			Crops harvested (millions of acres) ⁴	Selected indexes of input use (1977=100)					
	Number (thousands)	As percent of total population ²	Total	Family workers	Hired workers		Total	Farm labor	Farm real estate	Mechanical power and machinery	Agricultural chemicals ⁵	Feed, seed, and livestock purchases ⁶
1929.....	30,580	25.1	12,763	9,360	3,403	365	99	469	106	33	6	28
1933.....	32,393	25.8	12,739	9,874	2,865	340	93	457	99	27	4	26
1939.....	30,840	23.5	11,338	8,611	2,727	331	96	419	104	34	7	37
1940.....	30,547	23.1	10,979	8,300	2,679	341	97	417	106	36	9	39
1941.....	30,118	22.6	10,669	8,017	2,652	344	97	411	104	37	9	42
1942.....	28,914	21.4	10,504	7,949	2,555	348	100	421	102	44	10	44
1943.....	26,186	19.2	10,446	8,010	2,436	357	101	416	101	47	11	48
1944.....	24,815	17.9	10,219	7,988	2,231	362	102	412	101	49	13	48
1945.....	24,420	17.5	10,000	7,881	2,119	354	100	386	101	50	13	50
1946.....	25,403	18.0	10,295	8,106	2,189	352	98	371	105	49	14	49
1947.....	25,829	17.9	10,382	8,115	2,267	355	98	351	106	54	15	51
1948.....	24,383	16.6	10,363	8,026	2,337	356	100	342	106	62	16	52
1949.....	24,194	16.2	9,964	7,712	2,252	360	102	329	107	68	18	56
1950.....	23,048	15.2	9,926	7,597	2,329	345	101	310	108	72	19	58
1951.....	21,890	14.2	9,546	7,310	2,236	344	104	310	108	77	21	62
1952.....	21,748	13.9	9,149	7,005	2,144	349	104	296	107	81	23	63
1953.....	19,874	12.5	8,864	6,775	2,089	348	103	285	107	82	24	63
1954.....	19,019	11.7	8,651	6,570	2,081	346	102	274	107	82	24	65
1955.....	19,078	11.5	8,381	6,345	2,036	340	102	264	107	83	26	66
1956.....	18,712	11.1	7,852	5,900	1,952	324	100	249	105	84	27	69
1957.....	17,656	10.3	7,600	5,660	1,940	324	98	231	104	83	27	68
1958.....	17,128	9.8	7,503	5,521	1,982	324	98	222	103	83	28	73
1959.....	16,592	9.3	7,342	5,390	1,952	324	99	216	104	84	32	77
1960.....	15,635	8.7	7,057	5,172	1,885	324	98	207	103	83	32	77
1961.....	14,803	8.1	6,919	5,029	1,890	302	97	198	102	80	35	81
1962.....	14,313	7.7	6,700	4,873	1,827	295	97	189	103	80	38	83
1963.....	13,367	7.1	6,518	4,738	1,780	298	97	183	103	79	43	83
1964.....	12,954	6.7	6,110	4,506	1,604	298	97	174	103	80	46	85
1965.....	12,363	6.4	5,610	4,128	1,482	298	96	156	102	80	49	86
1966.....	11,595	5.9	5,214	3,854	1,360	294	96	147	101	82	56	89
1967.....	10,875	5.5	4,903	3,650	1,253	306	97	143	103	85	66	92
1968.....	10,454	5.2	4,749	3,535	1,213	300	97	138	102	86	69	89
1969.....	10,307	5.1	4,596	3,419	1,176	290	97	133	101	86	73	93
1970.....	9,712	4.7	4,523	3,348	1,175	293	97	126	104	85	75	96
1971.....	9,425	4.5	4,436	3,275	1,161	305	98	123	102	87	81	102
1972.....	9,610	4.6	4,373	3,228	1,146	294	97	117	101	86	86	104
1973.....	9,472	4.5	4,337	3,169	1,168	321	98	115	100	90	90	107
1974.....	9,264	4.3	4,389	3,075	1,314	328	98	112	98	92	92	99
1975.....	8,864	4.1	4,342	3,026	1,317	336	96	107	97	96	83	93
1976.....	8,253	3.8	4,374	2,997	1,377	337	99	103	98	98	96	101
1977.....	7 6,194	7 2.8	4,155	2,859	1,296	345	100	100	100	100	100	100
1978.....	7 6,501	7 2.9	3,957	2,689	1,268	338	102	95	100	104	107	104
1979.....	7 6,241	7 2.8	3,774	2,501	1,273	349	105	93	100	107	118	111
1980.....	7 6,051	7 2.7	3,705	2,402	1,303	352	103	92	101	104	120	108
1981.....	7 5,790	7 2.5	3 6,641	2 3,324	1 1,317	366	102	90	101	103	121	104
1982.....	7 5,620	7 2.4	3,578	2,248	1,330	365	100	86	102	99	111	105
1983			3,518	2,174	1,344	304	94					

¹ 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.

² 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.

⁶ 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, and 1982 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; and 6,870 and 3.0, respectively.

⁸ Previous basis for farm employment series has been discontinued. Employment after 1980 is estimated.

Note.—Population includes Alaska and Hawaii beginning 1960.

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

TABLE B-95.—Indexes of prices received and prices paid by farmers, 1946–83

[1977 = 100]

Year or month	Prices received by farmers			Prices paid by farmers					Addendum: Average farm real estate value per acre ³	
	All farm products	Crops	Live-stock and products	All commodities, services, interest, taxes, and wage rates ¹	Production items			Wage rates		
					Total ²	Tractors and self-propelled machinery	Fertilizer			Fuels and energy
1946.....	52	53	50	30	33		45		20	11
1947.....	60	61	60	35	39		50		22	13
1948.....	63	59	65	38	43		55		23	14
1949.....	55	52	56	36	41		56		22	14
1950.....	56	54	58	37	42		54		22	14
1951.....	66	61	70	41	47		57		25	16
1952.....	63	62	64	42	47		59		26	18
1953.....	56	55	56	40	44		59		27	18
1954.....	54	56	52	40	44		59		27	18
1955.....	51	53	49	40	43		58		27	19
1956.....	50	54	47	40	43		57		28	19
1957.....	51	52	51	42	44		58		29	21
1958.....	55	52	57	43	46		58		30	22
1959.....	53	51	53	43	46		57		32	23
1960.....	52	51	53	44	46		57		33	24
1961.....	53	52	52	44	46		58		33	25
1962.....	53	54	53	45	47		58		34	26
1963.....	53	55	51	45	47		57		35	27
1964.....	52	55	49	45	47		57		36	29
1965.....	54	53	54	47	48	39	57	49	38	31
1966.....	58	55	60	49	50	40	56	49	41	33
1967.....	55	52	57	49	50	42	55	50	44	35
1968.....	56	52	60	51	50	44	52	50	48	38
1969.....	59	50	67	53	52	47	48	51	53	40
1970.....	60	52	67	55	54	49	48	52	57	42
1971.....	62	56	67	58	57	51	50	53	59	43
1972.....	69	60	77	62	61	54	52	54	63	47
1973.....	98	91	104	71	73	58	56	57	69	53
1974.....	105	117	94	81	83	68	92	79	79	66
1975.....	101	105	98	89	91	82	120	88	85	75
1976.....	102	102	101	95	97	91	102	93	93	86
1977.....	100	100	100	100	100	100	100	100	100	100
1978.....	115	105	124	108	108	109	100	105	107	109
1979.....	132	116	147	123	125	122	108	137	117	125
1980.....	134	125	144	138	138	136	134	188	126	145
1981.....	139	134	143	150	148	152	144	213	137	158
1982.....	133	121	145	156	149	165	144	210	143	157
1983 ^a	135	128	141	160	153	174	137	202	147	148
1982:										
Jan.....	132	126	137	154	147	159	143	217	143	
Feb.....	133	123	143	154	148	159	143	215	143	
Mar.....	133	120	145	155	149	161	147	206	143	
Apr.....	135	123	147	155	149	161	147	199	143	157
May.....	139	126	151	156	150	161	146	201	143	
June.....	138	125	150	156	151	167	146	211	143	
July.....	137	125	147	157	151	167	146	214	143	
Aug.....	133	117	148	157	150	167	146	212	143	
Sept.....	136	124	147	157	149	168	146	212	143	
Oct.....	128	114	142	156	148	168	141	211	143	
Nov.....	128	117	139	156	148	168	141	212	143	
Dec.....	127	114	139	156	148	168	139	209	143	
1983:										
Jan.....	128	114	142	157	150	168	139	205	147	
Feb.....	132	118	146	158	151	168	139	199	147	
Mar.....	134	121	146	159	152	172	138	191	147	
Apr.....	136	127	145	159	153	172	138	198	147	148
May.....	137	129	144	160	154	172	138	203	147	
June.....	134	126	141	160	154	176	138	204	147	
July.....	131	125	137	160	152	176	138	205	147	
Aug.....	139	139	139	160	153	176	138	206	147	
Sept.....	136	135	137	161	154	177	138	206	147	
Oct.....	134	134	135	161	153	177	134	206	147	
Nov.....	135	134	135	162	154	177	134	203	147	
Dec ^a	140	136	144	162	155	177	136	201	147	

¹ Includes items used for family living, not shown separately.² Includes other items not shown separately.³ 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 and 1983. Monthly data are for first of month.

Source: Department of Agriculture.

TABLE B-96.—U.S. exports and imports of agricultural commodities, 1940-83

[Billions of dollars]

Year	Exports							Imports					Agricultural trade balance
	Total ¹	Feed grains	Food grains ²	Oil-seeds and products	Cotton	Tobacco	Animals and products	Total ¹	Crops, fruits, and vegetables ³	Animals and products	Coffee	Cocoa beans and products	
1940.....	0.5	(*)	(*)	(*)	0.2	(*)	0.1	1.3	(*)	0.2	0.1	(*)	-0.8
1941.....	.7	(*)	0.1	(*)	.1	0.1	.3	1.7	0.1	.3	.2	(*)	-1.0
1942.....	1.2	(*)	(*)	(*)	.1	.1	.8	1.3	(*)	.5	.2	(*)	-.1
1943.....	2.1	(*)	.1	0.1	.2	.2	1.2	1.5	.1	.4	.3	(*)	.6
1944.....	2.1	(*)	.1	.1	.1	.1	1.3	1.8	.1	.3	.3	(*)	.3
1945.....	2.3	(*)	.4	(*)	.3	.2	.9	1.7	.1	.4	.3	(*)	.5
1946.....	3.1	0.1	.7	(*)	.5	.4	.9	2.3	.2	.4	.5	0.1	.8
1947.....	4.0	.4	1.4	.1	.4	.3	.7	2.8	.1	.4	.6	.2	1.2
1948.....	3.5	.1	1.5	.2	.5	.2	.5	3.1	.2	.6	.7	.2	.3
1949.....	3.6	.3	1.1	.3	.9	.3	.4	2.9	.2	.4	.8	.1	.7
1950.....	2.9	.2	.6	.2	1.0	.3	.3	4.0	.2	.7	1.1	.2	-1.1
1951.....	4.0	.3	1.1	.3	1.1	.3	.5	5.2	.2	1.1	1.4	.2	-1.1
1952.....	3.4	.3	1.1	.2	.9	.2	.3	4.5	.2	.7	1.4	.2	-1.1
1953.....	2.8	.3	.7	.2	.5	.3	.4	4.2	.2	.6	1.5	.2	-1.3
1954.....	3.1	.2	.5	.3	.8	.3	.5	4.0	.2	.5	1.5	.3	-.9
1955.....	3.2	.3	.6	.4	.5	.4	.6	4.0	.2	.5	1.4	.2	-.8
1956.....	4.2	.4	1.0	.5	.7	.3	.7	4.0	.2	.4	1.4	.2	.2
1957.....	4.5	.3	1.0	.5	1.0	.4	.7	4.0	.2	.5	1.4	.2	.6
1958.....	3.9	.5	.8	.4	.7	.4	.5	3.9	.2	.7	1.2	.2	(*)
1959.....	4.0	.6	.9	.6	.4	.3	.6	4.1	.2	.8	1.1	.2	-.1
1960.....	4.8	.5	1.2	.6	1.0	.4	.6	3.8	.2	.6	1.0	.2	1.0
1961.....	5.0	.5	1.4	.6	.9	.4	.6	3.7	.2	.7	1.0	.2	1.3
1962.....	5.0	.8	1.3	.7	.5	.4	.6	3.9	.2	.9	1.0	.2	1.2
1963.....	5.6	.8	1.5	.8	.6	.4	.7	4.0	.3	.9	1.0	.2	1.6
1964.....	6.3	.9	1.7	1.0	.7	.4	.8	4.1	.3	.8	1.2	.2	2.3
1965.....	6.2	1.1	1.4	1.2	.5	.4	.8	4.1	.3	.9	1.1	.1	2.1
1966.....	6.9	1.3	1.8	1.2	.4	.5	.7	4.5	.4	1.2	1.1	.1	2.4
1967.....	6.4	1.1	1.5	1.3	.5	.5	.7	4.5	.4	1.1	1.0	.2	1.9
1968.....	6.3	.9	1.4	1.3	.5	.5	.7	5.0	.5	1.3	1.2	.2	1.3
1969.....	6.0	.9	1.2	1.3	.3	.6	.8	5.0	.5	1.4	.9	.2	1.1
1970.....	7.3	1.1	1.4	1.9	.4	.5	.9	5.8	.5	1.6	1.2	.3	1.5
1971.....	7.7	1.0	1.3	2.2	.6	.5	1.0	5.8	.6	1.5	1.2	.2	1.9
1972.....	9.4	1.5	1.8	2.4	.5	.7	1.1	6.5	.7	1.8	1.3	.2	2.9
1973.....	17.7	3.5	4.7	4.3	.9	.7	1.6	8.4	.8	2.6	1.7	.3	9.3
1974.....	21.9	4.6	5.4	5.7	1.3	.8	1.8	10.2	.8	2.2	1.6	.5	11.7
1975.....	21.9	5.2	6.2	4.5	1.0	.9	1.7	9.3	.8	1.8	1.7	.5	12.6
1976.....	23.0	6.0	4.7	5.1	1.0	.9	2.4	11.0	.9	2.3	2.9	.6	12.0
1977.....	23.6	4.9	3.6	6.6	1.5	1.1	2.7	13.4	1.2	2.3	4.2	1.0	10.2
1978.....	29.4	5.9	5.5	8.2	1.7	1.4	3.0	14.8	1.5	3.1	4.0	1.4	14.6
1979.....	34.7	7.7	6.3	8.9	2.2	1.2	3.8	16.7	1.7	3.9	4.2	1.2	18.0
1980.....	41.2	9.8	7.9	9.4	2.9	1.3	3.8	17.4	1.7	3.8	4.2	.9	23.9
1981.....	43.3	9.4	9.6	9.6	2.3	1.5	4.2	16.8	2.0	3.5	2.9	.9	26.6
1982.....	36.6	6.4	7.9	9.1	2.0	1.5	3.9	15.2	2.3	3.6	2.9	.7	21.4
Jan-Nov:													
1982.....	33.7	5.9	7.4	8.3	1.8	1.4	3.6	14.1	2.2	3.3	2.6	.7	19.7
1983.....	32.6	6.5	6.8	7.8	1.6	1.3	*2.8	15.3	2.2	*3.2	2.6	.8	17.3

¹ Total includes items not shown separately.² Rice, wheat, and wheat flour.³ Includes nuts, fruits, and vegetable preparations.⁴ Less than \$50 million.⁵ Total includes major animal products.

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.

Source: Department of Agriculture.

TABLE B-97.—Balance sheet of the farming sector, 1929-84

[Billions of dollars]

Beginning of year	Assets									Claims			
	Total	Real estate	Live-stock ¹	Other physical assets			Financial assets			Total	Real estate debt	Other debt	Proprietors' equities
				Machinery and motor vehicles	Crops ²	Household equipment and furnishings	Deposits and currency	U.S. savings bonds	Investments in cooperatives				
1929.....		48.0	6.6	3.2							9.8		
1933.....		30.8	3.0	2.5							8.5		
1939.....		34.1	5.1	3.2							6.8		
1940.....	53.0	33.6	5.1	3.1	2.7	4.2	3.2	0.2	0.8	53.0	6.6	3.4	43.0
1941.....	54.8	34.4	5.3	3.3	3.0	4.1	3.5	.4	.9	54.8	6.5	4.0	44.3
1942.....	62.9	37.5	7.1	4.0	3.8	4.8	4.2	.5	.9	62.9	6.4	4.1	52.5
1943.....	73.6	41.6	9.6	4.9	5.1	4.8	5.4	1.1	1.0	73.6	6.0	3.9	63.8
1944.....	84.0	48.2	9.7	5.4	6.1	4.7	6.6	2.2	1.1	84.0	5.4	3.5	75.1
1945.....	93.8	53.9	9.0	6.5	6.7	5.2	7.9	3.4	1.2	93.8	4.9	3.4	85.4
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
1951.....	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
1952.....	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
1953.....	167.6	100.1	14.8	17.4	9.0	9.6	9.4	4.6	2.7	167.6	7.2	8.9	151.5
1954.....	164.5	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
1956.....	173.6	107.5	10.6	19.3	8.3	10.0	9.5	5.2	3.2	173.6	9.0	9.8	154.9
1957.....	182.8	115.7	11.0	20.2	8.3	9.6	9.4	5.1	3.5	182.8	9.8	9.5	163.4
1958.....	191.3	121.8	13.9	20.1	7.6	9.6	9.5	5.1	3.7	191.3	10.4	10.0	170.8
1959.....	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
1961.....	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
1962.....	219.3	144.5	16.4	22.5	8.8	8.9	8.8	4.5	4.8	219.3	13.9	14.6	190.9
1963.....	227.6	150.2	17.3	23.5	9.3	8.8	9.2	4.4	5.0	227.6	15.2	16.2	196.2
1964.....	235.8	158.6	15.9	23.9	9.8	8.8	9.2	4.2	5.4	235.8	16.8	17.6	201.4
1965.....	243.8	167.5	14.5	24.8	9.2	8.4	9.6	4.2	5.6	243.8	18.9	17.9	207.0
1966.....	260.8	179.2	17.6	26.0	9.7	8.4	10.0	4.1	5.9	260.8	21.2	19.5	220.1
1967.....	274.3	189.1	19.0	27.4	10.0	8.3	10.3	3.9	6.2	274.3	23.1	20.9	230.2
1968.....	288.0	199.7	18.8	29.8	9.6	8.8	10.9	3.8	6.5	288.0	25.1	22.3	240.6
1969.....	302.8	209.2	20.2	31.3	10.6	9.4	11.5	3.8	6.8	302.8	27.4	23.1	252.3
1970.....	314.9	215.8	23.5	32.3	10.9	9.6	11.9	3.7	7.2	314.9	29.2	23.8	261.9
1971.....	326.0	223.2	23.7	34.4	10.7	10.0	12.4	3.6	8.0	326.0	30.3	24.1	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.....	1,083.4	818.9	53.6	108.8	36.3	20.8	16.7	3.6	24.6	1,083.4	105.5	96.1	881.7
1983.....	1,048.8	772.5	52.9	111.0	42.1	22.6	17.4	3.5	26.8	1,048.8	109.5	106.8	832.5
1984 ⁴	1,067.6	792.0	51.3	113.8	37.0	23.5	18.2	3.6	28.2	1,067.6	111.9	103.2	852.5

¹ Beginning with 1961, horses and mules are excluded.² Includes all crops held on farms and crops held off farms by farmers as security for Commodity Credit Corporation loans.³ Beginning 1975, data are for farms included in the new farm definition, that is, places with sales of \$1,000 or more annually.⁴ Forecast.

Note.—Beginning 1960, data include Alaska and Hawaii.

Source: Department of Agriculture.

INTERNATIONAL STATISTICS

TABLE B-98.—*Exchange rates, 1967-83*

(Cents per unit of foreign currency, except as noted)

Year and month	Belgian franc	Canadian dollar	French franc	German mark	Italian lira	Japanese yen
March 1973	2.5378	100.333	22.191	35.548	0.17604	0.38190
1967	2.0125	92.689	20.323	25.084	.16022	.27613
1968	2.0026	92.801	20.191	25.048	.16042	.27735
1969	1.9942	92.855	19.302	25.491	.15940	.27903
1970	2.0139	95.802	18.087	27.424	.15945	.27921
1971	2.0598	99.021	18.148	28.768	.16174	.28779
1972	2.2716	100.937	19.825	31.364	.17132	.32995
1973	2.5761	99.977	22.536	37.758	.17192	.36915
1974	2.5713	102.257	20.805	38.723	.15372	.34302
1975	2.7253	98.297	23.354	40.729	.15338	.33705
1976	2.5921	101.410	20.942	39.737	.12044	.33741
1977	2.7911	94.112	20.344	43.079	.11328	.37342
1978	3.1809	87.729	22.218	49.867	.11782	.47981
1979	3.4098	85.386	23.504	54.561	.12035	.45834
1980	3.4247	85.530	23.694	55.089	.11694	.44311
1981	2.7007	83.408	18.489	44.362	.08842	.45432
1982	2.1844	81.011	15.199	41.186	.07386	.40151
1983	1.9561	81.136	13.123	39.156	.06582	.42096
1982:						
I	2.4166	82.721	16.686	42.630	.07932	.42821
II	2.2216	80.366	15.949	42.048	.07575	.41003
III	2.1017	80.022	14.396	40.268	.07169	.38614
IV	2.0529	81.199	14.143	39.998	.06968	.38697
1983:						
I	2.1110	81.463	14.517	41.513	.07139	.42436
II	2.0178	81.214	13.403	40.256	.06773	.42109
III	1.8838	81.110	12.561	37.828	.06351	.41252
IV	1.8357	80.743	12.251	37.344	.06156	.42714
	Netherlands guilder	Swedish krona	Swiss franc	United Kingdom pound	Multilateral trade-weighted value of the U.S. dollar (March 1973=100)	
					Nominal	Real ¹
March 1973	34.834	22.582	31.084	247.24	100.0	100.0
1967	27.759	19.373	23.104	275.04	120.0	.....
1968	27.626	19.349	23.169	239.35	122.1	.....
1969	27.592	19.342	23.186	239.01	122.4	.....
1970	27.651	19.282	23.199	239.59	121.1	.....
1971	28.650	19.592	24.325	244.42	117.8	.....
1972	31.153	21.022	21.193	250.08	109.1	.....
1973	35.977	22.970	31.700	245.10	99.1	98.8
1974	37.267	22.563	33.688	234.03	101.4	99.2
1975	39.632	24.141	38.743	222.16	98.5	93.9
1976	37.846	22.957	40.013	180.48	105.6	97.3
1977	40.752	22.383	41.714	174.49	103.3	93.1
1978	46.284	22.139	56.283	191.84	92.4	84.2
1979	49.843	23.323	60.121	212.24	88.1	83.2
1980	50.369	23.647	59.697	232.58	87.4	84.8
1981	40.191	19.860	51.025	202.43	102.9	100.8
1982	37.427	15.914	49.196	174.80	116.6	111.7
1983	35.035	13.035	47.605	151.59	125.3	117.3
1982:						
I	38.836	17.432	53.358	184.61	109.9	106.0
II	37.920	16.929	50.124	177.95	114.0	109.2
III	36.609	16.229	47.272	172.41	119.8	115.3
IV	36.526	13.660	46.739	164.81	122.2	116.1
1983:						
I	37.545	13.486	49.595	153.28	119.4	112.1
II	35.820	13.260	48.178	155.21	123.0	115.3
III	33.816	12.806	46.563	150.95	128.7	120.5
IV	33.300	12.626	46.306	146.91	130.2	121.3

¹ Adjusted by changes in consumer prices.

Source: Board of Governors of the Federal Reserve System.

TABLE B-99.—U.S. international transactions, 1946-83

[Millions of dollars; quarterly data seasonally adjusted, except as noted. Credits (+), debits (-)]

Year or quarter	Merchandise ^{1 2}			Investment income ³			Net military transactions	Net travel and transportation receipts	Other services, net ³	Balance on goods and services ^{1 4}	Remittances, pensions, and other unilateral transfers ¹	Balance on current account ^{1 4}
	Exports	Imports	Net	Receipts	Payments	Net						
1946	11,764	-5,067	6,697	772	-212	560	-493	733	310	7,807	-2,922	4,885
1947	16,097	-5,973	10,124	1,102	-245	857	-455	946	145	11,617	-2,625	8,992
1948	13,265	-7,557	5,708	1,921	-437	1,484	-799	374	175	6,942	-4,525	2,417
1949	12,213	-6,874	5,339	1,831	-476	1,355	-621	230	208	6,511	-5,638	873
1950	10,203	-9,081	1,122	2,068	-559	1,509	-576	-120	242	2,177	-4,017	-1,840
1951	14,243	-11,176	3,067	2,633	-583	2,050	-1,270	298	254	4,399	-3,515	884
1952	13,449	-10,838	2,611	2,751	-555	2,196	-2,054	83	309	3,145	-2,531	614
1953	12,412	-10,975	1,437	2,736	-624	2,112	-2,423	-238	307	1,195	-2,481	-1,286
1954	12,929	-10,353	2,576	2,929	-582	2,347	-2,460	-269	305	2,499	-2,280	219
1955	14,424	-11,527	2,897	3,406	-676	2,730	-2,701	-297	299	2,928	-2,498	430
1956	17,556	-12,803	4,753	3,837	-735	3,102	-2,788	-361	447	5,153	-2,423	2,730
1957	19,562	-13,291	6,271	4,180	-796	3,384	-2,841	-189	482	7,107	-2,345	4,762
1958	16,414	-12,952	3,462	3,790	-825	2,965	-3,135	-633	486	3,145	-2,361	784
1959	16,458	-15,310	1,148	4,132	-1,061	3,071	-2,805	-821	573	1,166	-2,448	-1,282
1960	19,650	-14,758	4,892	4,616	-1,237	3,379	-2,752	-964	579	5,132	-2,308	2,824
1961	20,108	-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	6,624	-1,784	5,040	-2,133	-1,146	1,041	9,604	-2,781	6,823
1965	26,461	-21,510	4,951	7,437	-2,088	5,349	-2,122	-1,280	1,387	8,285	-2,854	5,432
1966	29,310	-25,493	3,817	7,528	-2,481	5,047	-2,935	-1,331	1,365	5,963	-2,932	3,031
1967	30,666	-26,866	3,800	8,020	-2,747	5,273	-3,226	-1,750	1,612	5,708	-3,125	2,583
1968	33,626	-32,991	635	9,368	-3,378	5,990	-3,143	-1,548	1,630	3,563	-2,952	611
1969	36,414	-35,807	607	10,912	-4,869	6,043	-3,328	-1,763	1,833	3,393	-2,994	399
1970	42,469	-39,866	2,603	11,747	-5,516	6,231	-3,354	-2,038	2,180	5,625	-3,294	2,331
1971	43,319	-45,579	-2,260	12,707	-5,436	7,271	-2,893	-2,345	2,495	2,269	-3,701	-1,433
1972	49,381	-55,797	-6,416	14,764	-6,572	8,192	-3,420	-3,063	2,766	-1,941	-3,854	-5,795
1973	71,410	-70,499	911	21,808	-9,655	12,153	-2,070	-3,158	3,184	11,021	-3,881	7,140
1974	98,306	-103,811	-5,505	27,587	-12,084	15,503	-1,653	-3,184	3,986	9,147	-5,186	1,962
1975	107,088	-98,185	8,903	25,351	-12,564	12,787	-746	-2,792	4,598	22,749	-4,613	18,136
1976	114,745	-124,228	-9,483	29,286	-13,481	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	224,237	-249,781	-25,544	72,445	-42,875	29,570	-2,286	-1,434	7,172	7,477	-7,056	421
1981	237,019	-265,086	-28,067	86,243	-52,760	33,483	-1,355	-598	8,060	11,523	-6,931	4,592
1982	211,217	-247,606	-36,389	84,146	-56,842	27,304	179	-2,095	7,822	-3,177	-8,034	-11,211
1981:												
I	60,793	-65,275	-4,482	20,683	-12,477	8,206	-583	-266	1,964	4,839	-1,495	3,344
II	60,031	-67,373	-7,342	21,717	-13,505	8,212	-435	-178	2,052	2,309	-1,567	742
III	57,812	-66,214	-8,402	22,043	-13,888	8,155	179	-184	2,053	1,801	-1,884	-83
IV	58,383	-66,224	-7,841	21,801	-12,892	8,909	-515	30	1,988	2,571	-1,986	585
1982:												
I	55,636	-61,739	-6,103	20,761	-13,824	6,937	-51	-208	2,050	2,625	-2,061	564
II	54,996	-60,850	-5,854	22,316	-14,779	7,537	201	-561	1,914	3,236	-1,802	1,434
III	52,241	-65,319	-13,078	21,569	-14,748	6,821	54	-557	1,906	-4,854	-1,742	-6,596
IV	48,344	-59,698	-11,354	19,499	-13,491	6,008	-26	-769	1,951	-4,190	-2,431	-6,621
1983:												
I	49,506	-58,316	-8,810	17,697	-12,608	5,089	516	-935	2,114	-2,026	-1,561	-3,587
II	48,913	-63,574	-14,661	19,027	-13,326	5,701	117	-1,222	2,234	-7,832	-1,823	-9,655
III	50,585	-68,754	-18,169	20,622	-13,694	6,928	-21	-745	2,092	-9,915	-2,061	-11,976

¹ Excludes military.² Adjusted from Census data for differences in valuation, coverage, and timing.³ Fees and royalties from U.S. direct investments abroad or from foreign direct investments in the United States are excluded from investment income and included in other services, net.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.

See next page for continuation of table.

TABLE B-99.—U.S. international transactions, 1946-83—Continued

(Millions of dollars; quarterly data seasonally adjusted, except as noted)

Year or quarter	U.S. assets abroad, net [increase/capital outflow (-)]				Foreign assets in the U.S., net [increase/capital inflow (+)]			Alloca- tions of special drawing rights (SDRs)	Statistical discrepancy	
	Total	U.S. official reserve assets *	Other U.S. Govern- ment assets	U.S. private assets	Total	Foreign official assets	Other foreign assets		Total (sum of the items with sign reversed)	Of which: Seasonal adjust- ment discrep- ancy
1946		-623								
1947		-3,315								
1948		-1,736								
1949		-266								
1950		1,758								
1951		-33								
1952		-415								
1953		1,256								
1954		480								
1955		182								
1956		-869								
1957		-1,165								
1958		2,292								
1959		1,035								
1960	-4,099	2,145	-1,100	-5,144	2,294	1,473	821		-1,019	
1961	-5,538	607	-910	-5,235	2,705	765	1,939		-989	
1962	-4,174	1,535	-1,085	-4,623	1,911	1,270	641		-1,124	
1963	-7,270	378	-1,662	-5,986	3,217	1,986	1,231		-360	
1964	-9,560	171	-1,680	-8,050	3,643	1,660	1,983		-907	
1965	-5,716	1,225	-1,605	-5,336	742	134	607		-458	
1966	-7,321	570	-1,543	-6,347	3,661	-672	4,333		629	
1967	-9,757	53	-2,423	-7,386	7,379	3,451	3,928		-205	
1968	-10,977	-870	-2,274	-7,833	9,928	-774	10,703		438	
1969	-11,585	-1,179	-2,200	-8,206	12,702	-1,301	14,002		-1,516	
1970	-9,337	2,481	-1,589	-10,229	6,359	6,908	-550	867	-219	
1971	-12,475	2,349	-1,884	-12,940	22,970	26,879	-3,909	717	-9,779	
1972	-14,497	-4	-1,568	-12,925	21,461	10,475	10,986	710	-1,879	
1973	-22,874	158	-2,644	-20,388	18,388	6,026	12,362		-2,654	
1974	-34,745	-1,467	* 366	-33,643	34,241	10,546	23,696		-1,458	
1975	-39,703	-849	-3,474	-35,380	15,670	7,027	8,643		5,897	
1976	-51,269	-2,558	-4,214	-44,498	36,518	17,693	18,826		10,544	
1977	-34,785	-375	-3,693	-30,717	51,319	36,816	14,503		-2,023	
1978	-61,130	732	-4,660	-57,202	64,036	33,678	30,358		12,540	
1979	-64,331	-1,133	-3,746	-59,453	38,752	-13,665	52,416	1,139	25,404	
1980	-86,052	-8,155	-5,140	-72,757	54,922	15,566	39,356	1,152	29,556	
1981	-110,601	-5,175	-5,078	-100,348	80,678	5,430	75,248	1,093	24,238	
1982	-118,045	-4,965	-5,732	-107,348	87,866	3,172	84,694		41,390	
1981:										
I	-23,335	-4,529	-1,361	-17,445	8,437	5,517	2,920	1,093	10,460	-1,057
II	-22,170	-905	-1,469	-19,796	13,959	-2,999	16,958		7,470	855
III	-17,279	-4	-1,274	-16,001	16,731	-5,880	22,611		632	-1,145
IV	-47,817	262	-973	-47,106	41,551	8,792	32,760		5,680	1,350
1982:										
I	-31,456	-1,089	-807	-29,560	27,124	-3,061	30,185		3,768	-729
II	-40,934	-1,132	-1,489	-38,313	31,612	1,930	29,682		7,887	881
III	-26,099	-794	-2,502	-22,803	17,613	2,642	14,972		15,082	-1,190
IV	-19,553	-1,950	-934	-16,670	11,517	1,661	9,855		14,657	1,042
1983:										
I	-21,699	-787	-1,053	-19,859	16,452	49	16,403		8,833	-212
II	-658	16	-1,162	488	10,956	1,973	8,983		-644	792
III P	-6,429	529	-1,188	-5,770	18,487	-3,235	21,722		-82	-1,355

* 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-100.—U.S. merchandise exports and imports by principal end-use category, 1965–83

[Millions of dollars; quarterly data seasonally adjusted]

Year or quarter	Exports					Imports				
	Total	Agricultural	Nonagricultural			Total	Petroleum and products	Nonpetroleum		
			Total	Capital goods except automotive	Other goods			Total	Industrial supplies and materials	Other goods
1965.....	26,461	6,305	20,156	8,052	12,104	21,510	2,034	19,476	9,123	10,353
1966.....	29,310	6,949	22,361	8,907	13,454	25,493	2,078	23,415	10,235	13,180
1967.....	30,666	6,453	24,213	9,934	14,279	26,866	2,091	24,775	9,956	14,819
1968.....	33,626	6,297	27,329	11,111	16,218	32,991	2,384	30,607	12,027	18,580
1969.....	36,414	6,098	30,316	12,422	17,894	35,807	2,649	33,158	11,662	21,496
1970.....	42,469	7,381	35,088	14,659	20,429	39,866	2,929	36,939	12,250	24,689
1971.....	43,319	7,836	35,482	15,372	20,110	45,579	3,641	41,937	13,595	28,342
1972.....	49,381	9,514	39,868	16,914	22,954	55,797	4,650	51,147	16,002	35,145
1973.....	71,410	17,977	53,433	21,999	31,434	70,499	8,415	62,085	19,188	42,897
1974.....	98,306	22,410	75,896	30,878	45,018	103,811	26,608	77,204	27,421	49,783
1975.....	107,088	22,243	84,846	36,639	48,207	98,185	27,018	71,167	23,620	47,547
1976.....	114,745	23,380	91,365	39,113	52,252	124,228	34,572	89,656	29,145	60,511
1977.....	120,816	24,332	96,484	39,766	56,718	151,907	44,982	106,925	34,951	71,974
1978.....	142,054	29,902	112,152	46,471	65,681	176,020	42,312	133,706	41,301	92,405
1979.....	184,473	35,595	148,879	58,843	90,036	212,028	60,482	151,546	48,494	103,052
1980.....	224,237	42,158	182,079	74,178	107,901	249,781	79,263	170,518	54,027	116,491
1981.....	237,019	44,034	192,987	81,548	111,439	265,086	77,794	187,292	57,428	129,864
1982.....	211,217	37,230	173,986	73,816	100,170	247,606	61,201	186,404	49,764	136,640
1981:										
I.....	60,793	12,230	48,565	20,147	28,418	65,276	20,386	44,890	13,730	31,160
II.....	60,031	10,994	49,037	21,102	27,935	67,373	20,801	46,572	14,548	32,024
III.....	57,812	9,965	47,847	20,147	27,700	66,214	19,008	47,207	14,708	32,499
IV.....	58,383	10,845	47,538	20,152	27,386	66,224	17,599	48,624	14,442	34,182
1982:										
I.....	55,636	10,087	45,549	19,337	26,212	61,739	15,473	46,266	12,837	33,429
II.....	54,996	10,435	44,562	19,195	25,367	60,850	13,361	47,489	12,209	35,280
III.....	52,241	8,442	43,798	18,431	25,367	65,319	17,234	48,085	12,622	35,463
IV.....	48,344	8,266	40,077	16,853	23,224	59,698	15,133	44,565	12,096	32,469
1983:										
I.....	49,506	9,009	40,497	17,340	23,157	58,316	10,497	47,819	12,513	35,306
II.....	48,913	8,830	40,083	16,952	23,131	63,574	13,027	50,547	13,340	37,207
III.....	50,585	9,442	41,143	16,731	24,412	68,754	16,585	52,168	13,681	38,487

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-101.—U.S. merchandise exports and imports by area, 1974-83

(Millions of dollars)

Item	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983 first 3 quarters at annual rate ¹
Exports.....	98,306	107,088	114,745	120,816	142,054	184,473	224,237	237,019	211,217	198,672
Industrial countries.....	64,487	66,496	72,335	76,970	87,948	115,930	137,152	141,918	127,326	125,371
Canada.....	21,842	23,537	26,336	28,533	31,229	38,690	41,626	46,016	39,275	42,808
Japan.....	10,724	9,567	10,196	10,566	12,960	17,629	20,806	21,796	20,694	21,131
Western Europe.....	28,164	29,884	31,883	34,094	39,546	54,177	67,603	65,108	59,701	54,860
Australia, New Zealand, and South Africa.....	3,757	3,508	3,920	3,777	4,213	5,434	7,117	8,998	7,656	6,572
Other countries, except Eastern Europe.....	32,082	37,343	38,287	40,951	50,213	62,630	82,942	90,639	80,142	70,884
OPEC ²	6,219	9,956	11,561	12,877	14,846	14,537	17,364	21,097	20,651	15,305
Other ³	25,863	27,387	26,726	28,074	35,367	48,093	65,578	69,542	59,491	55,579
Eastern Europe.....	1,737	3,249	4,123	2,895	3,893	5,913	4,143	4,439	3,749	2,417
Imports.....	103,811	98,185	*124,228	*151,907	*176,020	*212,028	*249,781	*265,086	*247,606	*254,192
Industrial countries.....	61,254	56,117	67,665	79,447	99,357	112,809	127,908	144,339	144,099	150,536
Canada.....	22,554	21,854	26,652	29,864	33,758	39,229	42,903	48,258	48,473	53,405
Japan.....	12,414	11,257	15,531	18,565	24,541	26,261	31,217	37,598	37,685	39,043
Western Europe.....	24,267	20,764	23,003	28,226	36,618	41,826	47,255	52,873	52,908	52,891
Australia, New Zealand, and South Africa.....	2,019	2,242	2,479	2,792	4,440	5,493	6,533	5,610	5,033	5,197
Other countries, except Eastern Europe.....	41,580	41,334	55,379	70,679	74,403	96,137	119,142	119,194	102,417	102,295
OPEC ²	17,234	18,897	27,409	35,778	33,286	45,039	55,602	49,934	31,517	24,395
Other ³	24,346	22,437	27,970	34,901	41,117	51,098	63,540	69,260	70,900	77,900
Eastern Europe.....	977	734	875	1,127	1,508	1,896	1,444	1,553	1,067	1,361

¹ Preliminary; seasonally adjusted.² Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.³ Latin American Republics, other Western Hemisphere, and other countries in Asia and Africa, less members of OPEC.⁴ Trade with international organizations is included in totals for 1976-82, but not in area detail. This includes imports of nonmonetary gold from International Monetary Fund in 1976-80; an export of tin to International Tin Council (ITC) in 1981; and an import of tin from ITC in 1982.

Note.—Data are on an international transactions basis and exclude military.

Source: Department of Commerce, Bureau of Economic Analysis.

[Millions of dollars; monthly data seasonally adjusted]

¹ Beginning 1960, data have been adjusted for comparability with the revised commodity classifications effective in 1965.

² Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports.

³ Total includes commodities and transactions not classified according to kind.

⁴ Includes fats and oils.

⁵ 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.

⁶ Total arrivals of imported goods other than transit shipments.

⁷ C.I.f. (cost, insurance, and freight) import value at first port of entry into United States. Data for 1967-73 are estimates.

⁸ F.a.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.

Source: Department of Commerce (Bureau of the Census and International Trade Administration, Office of Trade Information and Analysis, Trade Performance Division).

TABLE B-103.—*International investment position of the United States at year-end, selected years, 1970-82*

[Billions of dollars]

Type of investment	1970	1972	1974	1976	1978	1980	1981	1982
Net international investment position of the United States...	58.6	37.1	58.8	83.8	76.2	120.6	156.5	168.6
U.S. assets abroad	165.5	199.0	255.7	347.2	447.9	606.7	716.9	834.2
U.S. official reserve assets	14.5	13.2	15.9	18.7	18.7	26.8	30.1	34.0
Gold	11.1	10.5	11.7	11.6	11.7	11.2	11.2	11.1
Special drawing rights (SDRs)	.9	2.0	2.4	2.4	1.6	2.6	4.1	5.3
Reserve position in the International Monetary Fund (IMF)	1.9	.5	1.9	4.4	1.0	2.9	5.1	7.3
Foreign currency reserves	.6	.2	.0	.3	4.4	10.1	9.8	10.2
Other U.S. Government assets	32.1	36.1	38.4	46.0	54.2	63.5	68.4	73.9
U.S. loans and other long-term assets	29.7	34.1	36.3	44.1	52.3	61.9	67.1	72.8
U.S. short-term assets other than reserves	2.5	2.0	2.1	1.9	1.9	1.7	1.3	1.2
U.S. private assets	118.8	149.7	201.5	282.4	375.0	516.4	618.4	726.3
Direct investments abroad (book value)	75.5	89.9	110.1	136.8	162.7	215.4	226.4	221.3
Foreign securities	21.0	27.6	28.2	44.2	53.4	62.5	63.2	75.3
Claims on foreigners reported by U.S. banks, not included elsewhere	13.8	20.7	46.2	81.1	130.8	203.9	293.0	402.3
Claims on unaffiliated foreigners reported by U.S. nonbanks	8.5	11.4	17.0	20.3	28.1	34.7	35.9	27.3
Foreign assets in the United States	106.8	161.8	196.9	263.4	371.6	486.1	560.4	665.5
Foreign official assets	26.1	63.2	79.8	104.2	173.0	176.0	180.9	189.2
U.S. Government securities ¹	17.7	52.9	58.1	72.6	128.5	118.2	125.1	132.5
Other U.S. Government liabilities	1.7	1.6	2.6	8.8	12.7	13.3	13.3	13.8
Liabilities reported by U.S. banks, not included elsewhere	6.7	8.5	18.4	17.2	23.3	30.4	26.9	24.9
Other official assets	.0	.2	.6	5.6	8.5	14.1	15.6	18.0
Other foreign assets	80.7	98.7	117.1	159.1	198.7	310.1	379.5	476.3
Direct investments in the United States (book value)	13.3	14.9	25.1	30.8	42.5	68.4	90.4	101.8
Liabilities reported by U.S. banks, not included elsewhere	22.7	21.2	41.8	53.5	77.7	121.1	165.3	229.6
U.S. Treasury securities	1.2	1.2	1.7	7.0	8.9	16.1	18.6	25.8
Other U.S. securities ²	34.7	50.7	34.9	54.9	53.6	74.1	75.4	93.3
Liabilities to unaffiliated foreigners reported by U.S. nonbanks	8.8	10.7	13.6	13.0	16.0	30.4	29.9	25.8

¹ Includes Treasury and agency issues of securities.² Corporate and other bonds and corporate stocks.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-104.—*World trade: Exports and imports, 1965, 1970, 1975, and 1979-83*

[Billions of U.S. dollars]

Area and country	1965	1970	1975	1979	1980	1981	1982	1983 ¹
Exports, f.o.b. ²								
Developed countries ³	129.8	225.8	582.8	1,081.6	1,269.7	1,248.9	1,191.7	1,212.6
United States	27.5	43.2	108.1	182.0	220.8	233.7	212.3	198.8
Canada	8.4	16.7	34.1	58.3	67.7	72.7	71.2	75.3
Japan	8.5	19.3	55.7	102.3	130.4	151.5	138.4	146.0
European Community ⁴	65.2	113.5	299.5	577.2	665.9	612.4	590.0	604.8
France	10.2	18.1	53.1	100.7	116.0	106.4	96.7	94.7
West Germany	17.9	34.2	90.2	171.8	192.9	176.1	176.4	166.4
Italy	7.2	13.2	34.8	72.2	77.7	75.3	73.5	73.3
United Kingdom	13.8	19.4	43.4	86.4	110.1	102.2	97.0	91.2
Other developed countries	20.2	33.0	85.3	161.7	184.9	178.5	179.7	187.8
Developing countries	37.0	54.1	209.5	454.6	584.8	583.5	508.6	473.7
OPEC ⁵	10.3	16.8	113.4	212.8	296.4	274.7	208.2	169.6
Other	26.7	37.3	96.1	241.8	288.4	308.8	300.4	304.1
Communist countries ⁶	23.2	34.9	90.5	169.4	201.7	205.2	223.1	236.6
U.S.S.R.	8.2	12.8	33.4	64.9	76.4	79.4	87.2	90.9
Eastern Europe	11.8	18.2	45.3	76.9	86.2	83.8	90.1	98.0
China	2.0	2.2	7.3	13.5	18.9	21.5	23.5	24.0
TOTAL	190.0	314.8	882.8	1,705.6	2,056.2	2,037.6	1,923.4	1,922.9
Imports, c.i.f. ⁷								
Developed countries ³	136.8	235.8	612.5	1,175.0	1,411.7	1,346.1	1,272.0	1,313.3
United States	23.2	42.7	105.9	222.2	257.0	273.4	254.9	268.4
Canada	8.7	14.3	36.2	57.0	62.8	70.3	58.4	62.3
Japan	8.2	18.9	57.8	109.8	141.3	142.9	131.5	123.4
European Community ⁴	70.5	118.7	306.6	611.1	729.1	645.3	615.6	626.4
France	10.4	19.1	54.0	107.0	134.9	121.0	115.7	106.0
West Germany	17.6	29.9	74.9	159.6	188.0	163.9	155.4	151.8
Italy	7.4	15.0	38.5	77.9	99.7	91.1	86.2	80.7
United Kingdom	16.1	21.9	53.3	99.6	115.5	102.7	99.6	100.3
Other developed countries	26.3	41.2	106.0	174.8	221.5	214.2	211.6	232.8
Developing countries	38.7	56.4	189.3	399.4	515.8	589.5	544.8	510.6
OPEC ⁵	6.4	9.9	52.0	98.9	132.6	155.1	154.9	139.7
Other	32.3	46.5	137.3	300.5	383.2	434.4	389.9	370.9
Communist countries ⁶	22.5	34.1	100.8	170.3	200.4	200.0	203.1	216.6
U.S.S.R.	8.0	11.7	37.1	58.0	68.5	73.2	77.8	80.2
Eastern Europe	11.6	18.5	51.3	82.6	91.2	87.5	87.1	95.2
China	1.8	2.2	7.4	15.6	20.7	19.3	17.9	19.5
TOTAL	198.0	326.3	902.6	1,744.7	2,127.9	2,135.6	2,019.9	2,040.5

¹ Preliminary estimates.² Free-on-board ship value.³ Includes the OECD countries, South Africa, 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 Venezuela.⁶ Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.⁷ 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-105.—World trade balance and current account balances, 1965, 1970, 1975, and 1979–83

(Billions of U.S. dollars)

Area and country	1965	1970	1975	1979	1980	1981	1982	1983 ¹
World trade balance ²								
Developed countries ³	-7.0	-10.0	-29.7	-93.4	-142.0	-97.2	-80.3	-100.8
United States	4.3	.5	2.2	-40.2	-36.2	-39.7	-42.6	-69.7
Canada	-3.3	2.4	-2.1	1.3	4.9	2.4	12.8	12.9
Japan	.3	.4	-2.1	-7.5	-10.9	8.6	6.9	22.6
European Community ⁴	-5.3	-5.2	-7.1	-33.9	-63.2	-32.9	-25.6	-21.6
France	-.2	-1.0	-.9	-6.3	-18.9	-14.6	-19.0	-11.3
West Germany	-.3	4.3	15.3	12.2	4.9	12.2	21.0	14.5
Italy	-.2	-1.8	-3.7	-5.7	-22.0	-15.8	-12.7	-7.4
United Kingdom	-2.3	-2.5	-9.9	-13.2	-5.4	-.5	-2.6	-9.1
Other developed countries	-6.1	-8.2	-20.7	-13.1	-36.6	-35.7	-31.9	-45.0
Developing countries	-1.6	-2.3	20.2	55.2	69.0	-6.0	-36.2	-36.8
OPEC ⁵	3.9	6.9	61.4	113.9	163.8	119.6	53.3	29.9
Other	-5.5	-9.2	-41.2	-58.7	-94.8	-125.6	-89.5	-66.8
Communist countries ⁶	.7	.8	-10.3	-.9	1.3	5.2	20.0	20.0
U.S.S.R.	.2	1.1	-3.7	6.9	7.9	6.2	9.4	10.7
Eastern Europe	.2	-.3	-6.0	-5.7	-5.0	-3.7	3.0	2.8
China	.2	.0	-.1	-2.1	-1.8	2.2	5.6	4.5
TOTAL ⁷	-7.9	-11.5	-19.8	-39.1	-71.7	-98.0	-96.5	-117.6
Current account balances ⁸								
Developed countries ³			3.3	-24.7	-65.2	-31.7	-29.8	-24.3
United States	5.4	2.3	18.1	-.9	.5	4.5	-11.5	-41.0
Canada	-1.1	.8	-4.7	-4.1	-.9	-4.8	2.5	2.5
Japan	.9	2.0	-.6	-8.7	-10.7	5.1	7.0	22.5
European Community ⁴	.8	2.9	3.4	-8.6	-36.5	-13.5	-9.5	3.0
France	.4	.1	2.7	5.2	-4.2	-4.8	-12.2	-5.3
West Germany	-1.6	.9	4.0	-6.2	-15.9	-6.3	3.5	5.3
Italy	2.2	.9	-.6	5.4	-9.8	-8.4	-5.6	1.5
United Kingdom	-.1	2.0	-3.4	-1.2	7.8	13.5	9.3	1.5
Other developed countries			-13.0	-2.4	-17.6	-23.0	-18.3	-11.3
Developing countries			7.1	6.2	8.3	13.7	8.8	
OPEC ⁵			27.3	65.0	111.0	52.0	-16.0	-31.0
Other			-20.2	-58.8	-102.7	-38.3	-24.8	
Communist countries ⁶		.6	-11.1	-6.5	-4.6	-.3	11.3	9.2
U.S.S.R.	-.2	.3	-4.6	2.2	1.9	-.1	4.2	4.0
Eastern Europe		-.8	-6.4	-7.6	-5.5	-3.7	1.5	1.2
China		-.1	-.1	-1.1	-1.0	3.5	5.6	4.0
TOTAL			-.7	-25.0	-61.5	-18.3	-9.7	

¹ 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, 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 Venezuela.⁶ Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.⁷ Asymmetries arise in global payments aggregations because of discrepancies in coverage, classification, timing, and valuation in the recording of transactions by the countries involved and because freight charges are attributed to the cost of imports.⁸ OECD basis.⁹ Includes only countries listed.

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B-106.—*International reserves, selected years, 1952-83*

[Millions of SDRs; end of period]

Area and country	1952	1962	1972	1979	1980	1981	1982	1983
								Novem- ber
All countries	49,388	62,851	147,443	307,149	355,100	370,051	364,202	400,135
Industrial countries	38,582	52,535	110,282	180,791	211,904	212,693	211,918	231,194
United States	24,714	17,220	12,112	15,170	21,479	25,502	29,918	30,668
Canada	1,944	2,561	5,572	2,944	3,119	3,717	3,428	4,310
Australia	920	1,168	5,656	1,359	1,603	1,713	6,053	7,211
Japan	1,101	2,021	16,916	15,667	20,164	25,083	22,001	24,465
New Zealand	183	251	767	344	277	580	577	702
Austria	116	1,081	2,505	3,832	4,878	5,279	5,544	5,007
Belgium	1,133	1,753	3,564	5,329	7,330	5,451	4,757	5,781
Denmark	150	256	787	2,514	2,712	2,246	2,111	4,010
Finland	132	237	664	1,204	1,501	1,319	1,420	1,047
France	686	4,049	9,224	16,212	24,301	21,991	17,850	22,503
Germany	960	6,958	21,908	43,225	41,430	40,892	43,909	45,420
Iceland	8	32	78	125	138	199	133	142
Ireland	318	359	1,038	1,693	2,255	2,290	2,390	2,534
Italy	722	4,068	5,605	16,149	20,477	19,631	15,107	21,444
Netherlands	953	1,943	4,407	7,301	10,669	9,562	10,723	11,432
Norway	164	304	1,220	3,241	4,783	5,414	6,272	6,325
Spain	134	1,045	4,618	10,550	9,813	9,794	7,450	7,266
Sweden	504	802	1,453	2,880	2,893	3,306	3,397	3,942
Switzerland	1,667	2,919	6,961	15,391	15,190	14,925	16,930	15,165
United Kingdom	1,956	3,308	5,201	15,626	16,851	13,757	11,904	11,778
Oil-exporting countries	1,699	2,030	10,071	56,318	69,508	75,577	70,031	75,847
Algeria	84	186	454	2,214	3,153	3,370	2,391	1,887
Indonesia	314	108	531	3,093	4,311	4,416	2,959	3,578
Iran	177	211	885	11,682				
Iraq	131	193	720					
Kuwait	50	97	335	2,268	3,169	3,583	5,449	4,903
Libya		96	2,694	4,902	10,372	7,860	6,525	5,280
Nigeria	500	289	346	4,235	8,049	3,371	1,486	1,032
Oman			149	445	692	988	1,283	1,352
Qatar			56	228	286	339	382	
Saudi Arabia		268	2,303	14,790	18,536	27,855	26,948	
United Arab Emirates				1,107	1,600	2,775	2,037	1,909
Venezuela	443	583	1,595	5,958	5,579	7,415	6,365	7,791
Non-oil developing countries	8,573	8,172	26,137	68,842	71,850	75,450	74,388	82,067
Africa	1,202	1,635	3,168	4,311	4,480	4,208	3,846	4,371
Asia	3,407	2,550	6,640	23,232	24,968	27,458	34,394	40,671
Europe	966	1,348	6,428	7,400	8,060	8,150	6,874	7,274
Middle East	825	940	2,406	7,442	8,311	9,001	10,132	9,206
Western Hemisphere	2,173	1,699	7,494	26,457	26,031	26,632	19,143	20,545

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).

U.S. dollars per SDR (end of period) are: 1952 and 1962—1.00000; 1972—1.08571; 1979—1.31733; 1980—1.27541; 1981—1.6396; 1982—1.10311; and November 1983—1.05058.

Source: International Monetary Fund, "International Financial Statistics."

TABLE B-107.—*Growth rates in real gross national product, 1960-83*

[Percent change]

Area and country	1961-65 annual average	1966-70 annual average	1971-75 annual average	1976-80 annual average	1979	1980	1981	1982	1983 ¹
Developed countries ²	5.3	4.6	3.1	3.4	3.2	1.2	1.5	-0.5	2.5
United States	4.7	3.2	2.6	3.7	2.8	-4	1.9	-1.7	4.8
Canada	5.7	4.8	5.0	3.1	3.2	5	3.8	-5.0	3.8
Japan	10.0	11.2	4.6	5.0	5.1	4.4	3.2	2.5	2.0
European Community ³	4.9	4.5	2.8	3.1	3.1	1.3	-4	4	1.0
France	5.8	5.4	4.0	3.3	3.3	1.1	2	1.5	5
West Germany	5.0	4.2	2.2	3.5	4.1	1.9	2	-1.2	1.2
Italy	5.2	6.2	2.4	3.8	4.9	3.9	-1	-3	-1.5
United Kingdom	3.1	2.5	2.1	1.6	1.6	-2.0	-2.0	5	2.5
Other developed countries	5.6	4.8	3.5	1.7	2.5	3.4	2.1	-8	-1.2
Developing countries	6.5	6.6	7.0	5.5	4.8	5.1	1.5	1.0	(*)
OPEC ⁵	7.0	7.8	9.0	5.0	4.0	1.8	-1.3	1.1	(*)
Other	6.3	6.3	6.3	5.7	5.2	6.4	2.5	9	(*)
Communist countries ⁴	4.2	5.0	4.1	2.6	1.1	1.6	1.6	2.1	3.0
U.S.S.R.	5.0	5.2	3.7	2.3	4	1.7	2.2	2.2	3.6
Eastern Europe	3.7	3.7	4.7	1.9	1.0	0	-9	-2	1.0
China	-2	8.3	5.5	5.9	7.0	6.1	4.8	7.4	4.0
TOTAL	5.1	5.2	4.0	3.4	2.5	1.7	1.6	8	(*)

¹ Preliminary estimates.² Includes the OECD countries, South Africa, and non-OECD Europe.³ Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.⁴ Not available.⁵ Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.⁶ Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

Sources: Department of Commerce, International Monetary Fund, Organization for Economic Cooperation and Development (OECD), and Council of Economic Advisers.

TABLE B-108.—Industrial production and consumer prices, major industrial countries, 1960-83

[1967=100]

Year or quarter	United States	Canada	Japan	European Community ¹	France	West Germany	Italy	United Kingdom
Industrial production ²								
1960.....	66.2	63.1	43.0	74.7	70	78.4	59.2	83.9
1961.....	66.7	65.6	51.2	78.1	73	82.8	65.5	84.2
1962.....	72.2	71.2	55.4	81.3	78	86.1	71.9	85.0
1963.....	76.5	75.7	61.7	84.8	86	88.9	78.4	87.8
1964.....	81.7	82.6	71.4	91.0	90	96.6	79.2	95.0
1965.....	89.8	89.7	74.2	94.7	93	102.1	82.8	97.8
1966.....	97.8	96.2	83.8	98.4	98	103.0	93.3	99.3
1967.....	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0
1968.....	106.3	106.4	115.2	107.4	104	109.2	106.4	107.6
1969.....	111.1	113.7	133.4	117.6	114	123.2	110.5	111.3
1970.....	107.8	115.3	151.8	123.3	120	131.1	117.6	111.8
1971.....	109.6	121.5	155.7	126.1	128	133.6	117.5	111.2
1972.....	119.7	130.7	167.0	131.7	135	138.7	122.7	113.2
1973.....	129.8	144.6	190.5	141.4	145	147.7	134.6	123.3
1974.....	129.3	149.2	183.1	142.3	148	145.1	140.6	120.8
1975.....	117.8	140.3	163.9	132.8	139	137.1	127.6	114.4
1976.....	130.5	148.5	182.0	142.6	149	149.1	143.5	118.1
1977.....	138.2	152.7	189.7	145.9	152	152.0	145.1	124.2
1978.....	146.1	157.8	201.1	149.7	155	154.1	147.9	127.8
1979.....	152.5	167.6	215.3	156.8	163	161.8	157.6	132.8
1980.....	147.0	165.1	225.2	155.5	161	162.3	166.5	124.1
1981.....	151.0	166.6	227.5	152.1	160	159.9	162.7	119.2
1982.....	138.6	148.8	228.4	149.9	158	156.2	159.1	121.7
1983 ³	147.7							
1982:								
I.....	141.8	155.5	230.5	151.8	159	161	161.0	120.5
II.....	139.4	150.5	227.9	151.5	159	160	158.6	121.6
III.....	138.2	146.8	228.9	149.5	155	154	146.6	122.6
IV.....	135.3	142.1	226.3	146.7	158	152	149.8	122.0
1983:								
I.....	138.5	149.5	228.2	147.9	159	154	149.0	123.6
II.....	144.5	153.9	231.7	148.7	155	157	145.0	123.0
III.....	151.8	160.9	239.0	150.7	159	157	144.1	125.3
IV ⁴	156.0							
Consumer prices								
1960.....	88.7	85.9	68.3	77.0	^a 78.0	82.9	74.1	79.0
1961.....	89.6	86.7	71.8	81.1	^a 80.6	84.8	75.7	81.6
1962.....	90.6	87.7	76.7	84.5	85.4	87.4	79.2	85.1
1963.....	91.7	89.2	82.5	87.6	89.5	89.9	85.1	86.8
1964.....	92.9	90.9	85.8	90.8	92.5	92.0	90.1	89.6
1965.....	94.5	93.1	91.6	94.2	94.8	95.0	94.2	93.9
1966.....	97.2	96.5	96.3	97.5	97.4	98.4	96.4	97.6
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.2	104.0	105.3	103.7	104.5	101.6	101.4	104.8
1969.....	109.8	108.8	110.9	108.0	111.3	103.5	104.1	110.3
1970.....	116.3	112.4	119.3	113.3	117.1	107.1	109.2	117.4
1971.....	121.3	115.6	126.5	120.3	123.5	112.7	114.4	128.5
1972.....	125.3	121.2	132.3	127.6	131.1	119.0	121.0	137.7
1973.....	133.1	130.3	147.9	138.3	140.7	127.2	134.0	150.2
1974.....	147.7	144.5	184.0	156.4	160.0	136.1	159.7	174.3
1975.....	161.2	160.1	205.8	176.7	178.9	144.2	186.8	216.5
1976.....	170.5	172.1	224.9	195.2	196.1	150.4	218.1	252.4
1977.....	181.5	185.9	243.0	214.7	214.5	155.9	255.2	292.4
1978.....	195.4	202.5	252.3	229.9	233.9	160.2	286.2	316.6
1979.....	217.4	221.0	261.3	250.7	259.1	166.8	328.5	359.0
1980.....	246.8	243.5	282.2	281.4	294.2	175.9	398.0	423.6
1981.....	272.4	273.9	296.2	313.4	332.7	186.3	472.4	473.9
1982.....	289.1	303.5	304.1	344.3	373.1	196.2	549.4	514.7
1983.....	298.4	321.0						
1982:								
I.....	283.0	292.2	300.3	333.4	359.8	192.7	523.7	500.5
II.....	287.3	301.2	303.4	342.0	371.0	195.4	539.6	516.6
III.....	292.8	307.6	304.8	347.5	376.0	197.6	562.7	518.9
IV.....	293.4	312.6	307.5	353.7	383.0	198.9	589.1	522.7
1983:								
I.....	293.2	314.5	306.5	359.5	393.2	199.9	609.7	525.3
II.....	296.9	318.8	310.1	366.6	404.4	201.1	627.5	536.1
III.....	300.5	324.0	309.0	372.6	413.1	203.1	643.0	543.0
IV.....	303.1	326.8						

¹ 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.

² All data exclude construction. Quarterly data are seasonally adjusted.

³ Data for 1960 and 1961 are for Paris only.

Sources: Department of Commerce (International Trade Administration, Office of Trade Information and Analysis, Trade Performance Division) and Department of Labor (Bureau of Labor Statistics).

TABLE B-109.—Civilian unemployment rate, and hourly compensation, major industrial countries, 1960-83

(Quarterly data seasonally adjusted)

Year or quarter	United States	Canada	Japan	France	West Germany	Italy	United Kingdom
Civilian unemployment rate (percent) ¹							
1960.....	5.5	6.5	1.7	1.6	1.1	3.2	2.1
1961.....	6.7	6.7	1.5	1.4	.6	2.8	1.9
1962.....	5.5	5.5	1.3	1.3	.6	2.5	2.7
1963.....	5.7	5.2	1.3	1.2	.5	2.1	3.3
1964.....	5.2	4.4	1.2	1.3	.4	2.4	2.4
1965.....	4.5	3.6	1.2	1.4	.3	3.0	2.1
1966.....	3.8	3.4	1.4	1.7	.3	3.3	2.2
1967.....	3.8	3.8	1.3	1.8	1.3	3.0	3.2
1968.....	3.6	4.5	1.2	2.4	1.1	3.1	3.2
1969.....	3.5	4.4	1.1	2.2	.6	3.1	3.0
1970.....	4.9	5.7	1.2	2.4	.5	2.8	3.1
1971.....	5.9	6.2	1.3	2.7	.6	2.9	3.9
1972.....	5.6	6.2	1.4	2.8	.7	3.4	4.2
1973.....	4.9	5.5	1.3	2.7	.7	3.2	3.2
1974.....	5.6	5.3	1.4	2.9	1.6	2.8	3.1
1975.....	8.5	6.9	1.9	4.2	3.4	3.2	4.6
1976.....	7.7	7.1	2.0	4.6	3.4	3.6	6.0
1977.....	7.1	8.1	2.0	5.0	3.5	3.6	6.3
1978.....	6.1	8.4	2.3	5.4	3.4	3.7	6.2
1979.....	5.8	7.5	2.1	6.1	3.0	3.9	5.6
1980.....	7.1	7.5	2.0	6.5	2.9	3.9	7.0
1981.....	7.6	7.6	2.2	7.7	4.1	4.3	10.6
1982.....	9.7	11.0	2.4	8.7	5.9	4.8	12.3
1983.....	9.6	11.9	2.7		7.3	5.1	
1982:							
I.....	8.8	8.9	2.3	8.4	5.3	5.0	11.9
II.....	9.4	10.5	2.4	8.7	5.7	5.0	12.1
III.....	10.0	12.1	2.4	8.8	6.1	4.6	12.6
IV.....	10.6	12.7	2.4	8.8	6.6	4.5	12.9
1983:							
I.....	10.4	12.5	2.7	8.7	7.1	4.9	13.5
II.....	10.1	12.4	2.7	8.8	7.4	5.7	13.8
III.....	9.4	11.7	2.7	8.8	7.5	4.8	13.6
IV.....	8.5	11.1	2.6		7.2	5.0	
Hourly compensation (1977=100) ²							
1960.....	36.7	29.7	6.6	15.2	10.5	11.9	24.2
1961.....	37.7	29.2	7.7	16.8	12.3	13.1	25.9
1962.....	39.1	28.4	8.8	18.5	13.9	15.5	27.2
1963.....	40.3	29.2	9.8	20.3	14.9	18.3	28.4
1964.....	42.0	30.3	11.0	22.0	16.1	20.4	30.2
1965.....	42.8	31.8	12.4	23.9	17.7	21.8	33.1
1966.....	44.8	34.4	13.6	25.3	19.3	22.8	35.8
1967.....	47.0	36.9	15.3	27.2	20.2	25.4	36.4
1968.....	50.4	39.7	17.9	30.5	21.5	27.1	33.9
1969.....	53.9	42.7	21.3	30.9	24.0	30.7	37.0
1970.....	57.6	47.4	25.4	32.6	30.3	36.8	42.8
1971.....	61.1	52.7	30.3	37.1	35.7	43.1	50.5
1972.....	64.4	57.6	40.1	44.7	43.1	52.3	58.2
1973.....	69.0	62.8	55.0	58.5	58.6	66.4	64.0
1974.....	76.3	74.4	67.1	64.1	69.0	74.0	77.4
1975.....	85.4	81.7	77.1	88.3	80.3	95.0	96.5
1976.....	92.3	96.9	82.3	91.1	84.2	89.5	92.9
1977.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978.....	108.3	99.5	136.1	124.3	124.7	119.1	125.6
1979.....	118.8	107.3	138.5	149.8	146.2	143.1	162.1
1980.....	132.7	118.7	144.5	172.2	160.5	165.3	216.0
1981.....	145.8	132.9	157.5	155.9	139.1	152.7	220.4
1982.....	158.2	144.8	143.9	149.5	136.3	150.6	207.8

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 30 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.

