Economic Report of the President

Transmitted to the Congress
February 1997

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:

Four years ago, we began a journey to change the course of the American economy. We wanted this country to go into the 21st century as a Nation in which every American who was willing to work for it could have a chance—not a guarantee, but a real chance—at the American dream. We have worked hard to achieve that goal, and today our economy is stronger than it has been in decades.

THE ECONOMIC RECORD

The challenge we faced in January 1993 was to put the economy on a new course of fiscal responsibility while continuing to invest in our future. In the last 4 years, the unemployment rate has come down by nearly a third: from 7.5 percent to 5.4 percent. The economy has created 11.2 million new jobs, and over two-thirds of recent employment growth has been in industry/occupation groups paying above-median wages. Over the past 4 years inflation has averaged 2.8 percent, lower than in any Administration since John F. Kennedy was President. The combination of unemployment and inflation is the lowest it has been in three decades. And business investment has grown more than 11 percent per year—its fastest pace since the early 1960s.

As the economy has grown, the fruits of that growth are being shared more equitably among all Americans. Between 1993 and 1995 the poverty rate fell from 15.1 percent to 13.8 percent—the largest 2-year drop in over 20 years. Poverty rates among the elderly and among African-Americans are at the lowest level since these data were first collected in 1959. And real median family income has risen by $1,600—the largest growth rate since the Administration of President Johnson.

THE ECONOMIC AGENDA

Our comprehensive economic agenda has helped put America's economy back on the right track. This agenda includes:

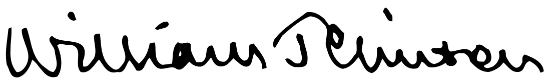
- *Historic Deficit Reduction*. Since the 1992 fiscal year, the Federal budget deficit has been cut by 63 percent—from $290 billion to $107 billion in fiscal 1996. As a percentage of the Nation's gross domestic product, the deficit has fallen over the same period from 4.7 percent to 1.4 percent, and it is now the lowest it has been in more than 20 years. In 1992 the budget deficit for all levels of government was larger in relation to our economy than those of Japan and Germany were to theirs. Now the deficit is smaller by that same measure than in any other major industrialized economy. And this Administration has proposed a plan that balances the budget by 2002, while protecting critical investments in America's future.

- *Investments in Education and Technology.* Deficit reduction remains a priority, but it is not an end in itself. Balancing the budget by cutting investments in education, or by failing to give adequate support to science and technology, could actually slow economic growth. To succeed in the new global economy, our children must receive a world-class education. Every child in America should be able to read by the age of 8, log onto the Internet by the age of 12, and receive at least 14 years of quality education: 2 years of college should become as universal as high school is today. And we must make sure that every child who wants to go to college has the resources to do so.
- *Expanding Markets.* We have aggressively sought to expand exports and open markets abroad. In the past 4 years we have achieved two major trade agreements: the North American Free Trade Agreement and the Uruguay Round accord of the General Agreement on Tariffs and Trade, which established the World Trade Organization. Members of the Asia-Pacific Economic Cooperation forum and the proposed Free Trade Area of the Americas have committed to establishing free trade among themselves by 2020 and 2005, respectively. And we have opened new markets abroad by signing more than 200 other important trade agreements. As a result, U.S. exports have boomed, which means higher wages for American workers in export industries—often 13 to 16 percent higher than the rest of the workforce.
- *Reforming Government.* The strength of the American economy lies in the energy, creativity, and determination of our citizens. Over the past 4 years we have worked hard to create an environment in which business can flourish. And as the private sector has expanded, the Federal Government has improved its efficiency and cost-effectiveness. We have energetically reformed regulations in key sectors of the economy, including telecommunications, electricity, and banking, as well as environmental regulation. And we have reduced the size of the Federal Government as a percentage of the workforce to the smallest it has been since the 1930s.

CONTINUING TO CREATE AN ECONOMY FOR THE 21ST CENTURY

America's workers are back at work and our factories are humming. Once again, America leads the world in automobile manufacturing. Our high-technology industries are the most competitive in the world. Poverty is down and real wages are at last beginning to rise. And we have laid the foundations for future long-term economic growth by reducing the deficit and investing in education.

During the past 4 years, we have worked to prepare all Americans for the challenges and opportunities of the new global economy of the 21st century. We have worked to restore fiscal discipline in our government, to expand opportunities for education and training for our children and workers, to reform welfare and encourage work, and to expand the frontiers of free trade. But there is more work to be done. We must continue to provide our citizens with the tools to make the most of their own lives so that the American dream is within the reach of every American.



THE WHITE HOUSE

FEBRUARY 10, 1997

THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., February 10, 1997.

MR. PRESIDENT:

The Council of Economic Advisers herewith submits its 1997 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,

Joseph E. Stiglitz
Chairman

Alicia H. Munnell
Member

Jeffrey A. Frankel
Member-Nominee

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CHAPTER 1

Growth and Opportunity: Creating a New Economic Order

THE AMERICAN ECONOMY TODAY is the healthiest it has been in three decades. But just as important as the economy's current performance is the foundation being laid for its future health and strength. Like its predecessors, this *Economic Report of the President,* the last of this President's first Administration, summarizes the present state of the economy and the accomplishments of the past 4 years. But it also sets forth the economic legacy this Administration hopes to leave. That legacy includes a vibrant and evolving set of public institutions, investments that will provide the basis for continued growth, and an economic philosophy of government and markets that will help to guide these institutions and investments. Together these will constitute a bequest to future generations, contributing to rising living standards, expanded opportunities, and a greater sense of community.

The real measure of the success of any Administration's economic policies is not just today's economic statistics, but also the strength of the Nation's economy in 10 or 20 years' time. Today's economic policies will be judged favorably if, as a result, growth is stronger, the environment cleaner, and the number of children growing up in poverty fewer. History will pronounce these efforts a success if, a generation from now, opportunity has been expanded in our cities, tomorrow's senior citizens are at least as economically secure as today's, and all our citizens have the education they need not just to cope with but to profit from the challenges of a changing world. If we can look back upon a record of such accomplishments, we will know that the last years of the 20th century laid a solid foundation for the 21st.

No Administration starts with a clean slate: each must work with the assets and the liabilities it has inherited, and each Administration that follows will to some degree reshape and revise what this one has built. We are constrained and enabled not just by our physical and our fiscal inheritance, but also by our intellectual inheritance—by prevailing modes of thought and by the ways in which we and our contemporaries view and approach the world. Consequently, it is hard enough in the present to formulate the policies that will guide us toward a more prosperous future, harder still to assess today their impact decades hence.

For more than two decades America has faced several serious problems: productivity growth has been slower than in the past, income inequality has increased, and poverty has persisted. In addition, serious challenges loom for the future, such as the aging of the baby boom, which threatens to create severe fiscal strains in the next century. In the last 4 years the Administration has taken important steps to respond to these challenges. Only if we maintain and extend these initiatives will we leave a strong legacy for the future.

This chapter begins by describing what will perhaps be viewed as this Administration's most enduring contribution, the formulation and implementation of an economic philosophy for the 21st century. The economic record, which reflects the policies articulated by this philosophy—policies that have mitigated or reversed many of the undesirable economic trends of the 1980s and early 1990s—is the second subject of this chapter. But the task of preparing for the future is far from complete. The third section of this chapter therefore focuses on the Administration's agenda for promoting the three complementary goals of growth, opportunity, and responsibility.

AN ECONOMIC PHILOSOPHY

At the center of the U.S. economy is the market: vibrant competition among profit-maximizing firms has enhanced economic efficiency and generated innovation, giving the United States one of the highest standards of living in the world. Within this market-based economy, government plays a limited, yet critical, role. It is essential to understand the proper role of government if the economy's strong performance is to continue and to improve.

In the past, two opposing visions of the American economy have vied for dominance. To put it starkly, one is a Panglossian view of an America of vigorous, self-sufficient individualism, the other of a world in which government is primarily responsible for our well-being. The first view is one of Horatio Algers making their way on their own, of self-reliant entrepreneurs creating wealth from which everyone eventually benefits. In this vision the main job of government is to keep out of the way, to do no harm. This economic worldview has its roots in the writings of Adam Smith, was refined into the classical liberalism of the 19th century, and has persisted into contemporary times in the rhetoric of the Reagan Presidency and its supporters.

The second vision is one that distrusts markets. At its extreme, this is a vision of an America full of monopolistic firms despoiling the environment and exploiting the masses of workers to earn huge profits for a handful of managers and shareholders. It sees pervasive market failures producing dire consequences, such as farmers and workers precluded from earning a decent living, and large parts of society—particularly in the inner cities and impoverished rural areas—simply left behind. The hero of this vision is government, endowed with both the omniscience and the omnipotence to cure these ills through active intervention in the market. The New Deal crystallized these currents into a new kind of liberalism, in some ways antithetical to the old.

THE NEW VISION

Over the past 4 years, this Administration has promoted a third vision, one that synthesizes and transcends these two polar worldviews. This vision puts individuals at its center, but it emphasizes that individuals live within and draw strength from communities. It recognizes that many have been left behind by the changing economy and may need government assistance, but that the role for government is limited: it can and should promote opportunity, not dependence.

This new vision includes a renewed conception of government—one in which government recognizes both the market's efficiencies *and* its imperfections. The government can sometimes make markets work better, but it is seldom in a position to replace them. Government has its strengths and its limitations. We need to understand those limitations and, where possible, work to improve government's performance. The government cannot ignore the role of market forces in its own programs: it needs to take advantage of the power of incentives to accomplish its objectives.

Critics of government often pose a false dilemma: which can do the job better, the government or the market? Yet the question is seldom whether government should replace the market, but rather whether government can usefully complement the market. On this question a consensus holds that, in many particular circumstances, the answer is clearly yes. In the trough of the Great Depression, for example, one out of four workers was without a job—clearly the market was not performing well. It was that harrowing experience that led to enactment of the Employment Act of 1946 (the same legislation that established the Council of Economic Advisers), which assigned to the Federal Government the responsibility to "promote maximum employment, production, and purchasing power."

Over the years, economists have identified the various circumstances in which markets fail to produce desirable outcomes, and in which selective government intervention can complement markets. Competition may be imperfect, market participants may lack needed information, or markets may be missing. Would-be innovators and entrepreneurs may fail to capture enough of the benefits of their activity to justify their effort, or the users of resources, such as clean air and water, may escape the full costs of their use, degrading the resources for all. Although such problems may occur throughout the economy, it is important for the government to focus on those that are particularly severe. Like any successful enterprise, it must identify a core mission and pursue it.

GOVERNMENT'S CORE ECONOMIC MISSION

Government's presence in the economy has become so pervasive that we can easily lose sight of its core mission. A few simple principles can serve as a guide to rediscovering that core mission.

The criterion for government involvement in any activity should not be how essential that activity is to the economy, or how many jobs it generates, or how much it contributes to the trade balance. In the overwhelming number of cases, the government cannot hope to surpass private firms at generating output, jobs, and exports. The proper question in circumstances where a choice between government and the market arises is whether any reason exists *not* to rely on markets. Is there—in the language of economists—a market failure?

The government should focus its attention on those areas in which markets will not perform adequately on their own, in which individual responsibility is insufficient to produce desirable results, and in which collective action through government is the most effective remedy. Americans are better off in a society in which individuals are encouraged to exercise as much responsibility as possible. But both economic theory and historical evidence indicate that, left to themselves, individuals and firms will produce too little of some goods like basic scientific research, and too much of others, such as pollution and toxic wastes. We also know that, without government assistance, many children from disadvantaged backgrounds may not be able to realize their full potential. Government social insurance programs have enabled individuals to make provision for risks that almost all individuals face and that, at the time the programs were launched, markets did not—and still largely do not—address effectively. Among them are programs that provide some insurance against unemployment, retirement benefits secured against the risk of inflation, and medical care for the aged.

It is essential to remember, whenever evaluating an existing government program or contemplating a new one, that the government cannot direct resources to someone without taking resources away from someone else. In a full-employment economy such as the Nation enjoys today and hopes to maintain, misguided subsidies pull resources away from more productive sectors and divert them toward less productive ones. Some individuals gain, but society as a whole suffers a net loss.

To prepare the economy, and the government, for the 21st century, we need to rethink and revitalize our policies to respond to the new challenges. We also need to strip away outmoded programs that respond primarily to problems of the past.

AN INTERNATIONAL VISION

In international just as in domestic economic policy, two fundamentally different visions have long dominated the debate. At one extreme, countries interact atomistically in an undifferentiated world of free trade abroad and free markets at home. In this view, international economic relations are just a matter of opening markets. The other perspective harks back to 18th-century mercantilism, often supplemented with metaphors from the Cold War. It replaces ideological competition with economic competition, and sees the gains on one side of the border coming at the expense of losses on the other. The trade deficit, in this view, replaces the missile gap as the measure of our national inadequacy.

Here, too, this Administration has sought to carve a new path. It recognizes the benefits of free trade, but also the existence of international public goods, not just in the trade arena but in other dimensions of international affairs as well. This new vision does not split the difference between these two views; rather, it recognizes that the vision of trade as war is profoundly wrong. Trade is not a zero-sum game. It does not merely create a winner for every loser: *all* countries can gain. As America's trading partners grow, they buy more U.S. goods and services. As the U.S. economy grows, we buy more of theirs, so that trade can play a catalytic role in a virtuous cycle of ever-higher levels of growth and living standards. The opposite is also true: attempts by many countries in the 1930s to escape from the Great Depression by pursuing beggar-thy-neighbor policies only made everyone worse off.

Defenders of free trade can do it a disservice by promoting it as a way to create more jobs or to reduce bilateral trade deficits. Jobs, the unemployment rate, and the overall balance of payments are ultimately a consequence of macroeconomic policies, not of trade barriers. The real objective of free trade is to raise living standards by ensuring that more Americans are working in areas where the United States is comparatively more productive than its trading partners. In a full-employment economy, trade has more impact on the *distribution* of jobs than on the *quantity* of jobs.

The new philosophy recognizes that unfettered global markets are not, by themselves, sufficient. Markets function best within an institutional environment that makes rules to promote free competition while facilitating the cooperation necessary for a stable world economy. What is required is general understanding of the issues and difficulties in international trade and mutual commitments, of the kind embodied in the General Agreement on Tariffs and Trade and the World Trade Organization (WTO), not to allow the pleadings of special interests to interfere with the gains that all enjoy from free international trade.

The new philosophy also recognizes that just as domestic public goods will be underprovided by free markets at home, so a decentralized trading system is insufficient to supply public goods that benefit people around the globe. An important example of an international public good is economic cooperation, including that essential to maintaining free trade. Basic research and a clean environment are other examples of international public goods in which cooperation can provide benefits to the United States, while also helping other countries. In making these international public goods available, we need to combine competition in the international marketplace with cooperation in establishing the rules of the game.

THE ECONOMIC RECORD

In 1992, against a backdrop of an uncertain and jobless recovery and rising budget deficits, the then-Governor of Arkansas, campaigning for President, set two basic goals for economic performance in his first term: to establish an economic environment in which more than 8 million jobs would be created, and to cut the Federal budget deficit in half. Both these goals have been surpassed.

THE ACHIEVEMENTS

In 1992 the national unemployment rate averaged 7.5 percent. Almost 10 million people were looking for work. Over the last 4 years the unemployment rate has come down to 5.4 percent. Not only has the economy created more than 11 million new jobs, over 3 million more than promised, but the new jobs are mostly good jobs: two-thirds of recent employment growth has been in industry/occupation groups paying wages above the median.

Meanwhile underlying inflationary pressures have subsided. In 1992, inflation as measured by the core consumer price index (the core CPI excludes the volatile food and energy components) was 3.7 percent. In 1996 core inflation was only 2.7 percent. The combination of low unemployment and stable inflation has given the United States the lowest "misery index" since the 1960s (Chart 1–1). Some of the key factors contributing to the economy's increased ability to maintain both stable prices and low unemployment are analyzed in Chapter 2. Among the important ingredients are increasing competition and greater openness to the rest of the world economy.

Economic growth has been strong and sustainable. The economic expansion has been marked by a healthy balance among the components of demand. Private, not public, demand has been the engine of growth. The Administration's initiative to reinvent government has slowed the growth of the public sector. Private sector demand, by contrast, has grown at a 3.2 percent annual rate since the beginning of this Administration, up from 2.4 percent over the previous 12 years. It is particularly heartening to note that investment and exports have led the expansion. Investment is booming: real spending on producers' durable equipment has grown a stunning 11 percent per year since 1993. Not only has investment been the strongest component of demand for the past 4 years, but the new structures and equipment that it represents will remain part of the Nation's capital stock, promoting growth and productivity for years to come. The second-strongest component of growth has been exports, which have increased by 7 percent per year since this Administration took office.

Chart 1-1 **The "Misery Index"**
The combination of a low unemployment rate and stable inflation has produced the lowest "misery index" since the 1960s.

Note: The "misery index" is the sum of the unemployment rate and CPI inflation.
Source: Council of Economic Advisers based on Department of Labor data.

Just as important as today's conjuncture of growth, unemployment, and inflation is the question of whether the economy can continue to grow, with low unemployment and stable inflation. In terms of sustainability and sound fundamentals, this expansion is one of the strongest in recent memory. In contrast, much of the growth of the 1980s and early 1990s was fueled by large deficits and a quadrupling of the national debt. This path of growth fueled by government spending could not have continued indefinitely. No less important, over that period changes in the tax system created perverse incentives that led to overbuilding of commercial real estate and high vacancy rates. Although investment rates were high, much of this investment did not enhance the long-run productive potential of the economy. Another factor that bodes well for this expansion to continue is the health of the financial system, which has finally recovered from the debacle of the late 1980s, caused in part by lax regulatory oversight.

Not only has the economy grown rapidly and sustainably, but the fruits of that growth have begun to be shared more equitably. Between 1993 and 1995, the most recent year for which data are available, the poverty rate fell from 15.1 percent to 13.8 percent—the largest 2 year drop in over 20 years. Poverty rates for elderly and for black Americans reached their lowest levels since these data began to be collected in 1959. Not only have the incomes of *every* quintile of the income distribution increased, but the largest percentage increase has been seen by the poorest in American society. Median real household income rose 2.7 percent in 1995—and more if, as some believe, the CPI has been overstating actual inflation. Chapter 5 provides more details on trends in household income and the factors that may account for the recent decrease in inequality, which appears to be larger than the normal cyclical improvement.

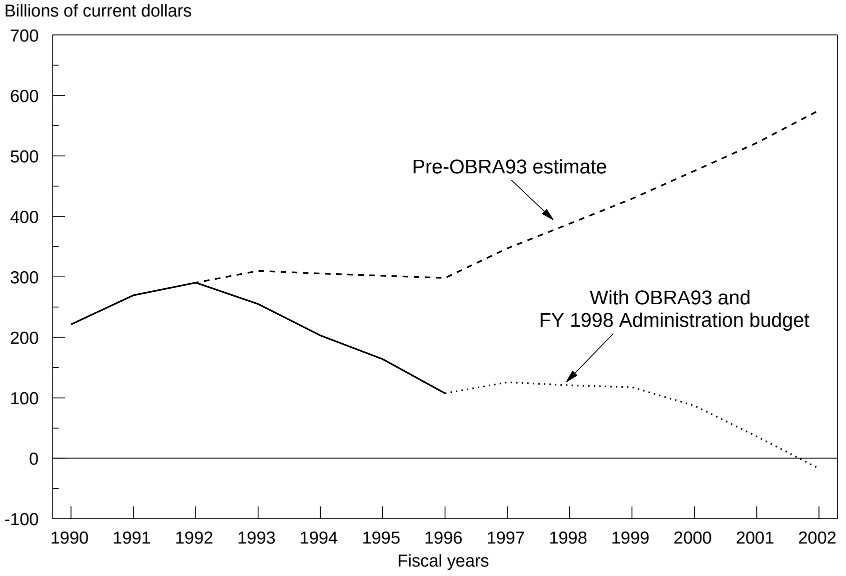
THE REASONS

Since 1993 this Administration has developed a comprehensive agenda that has contributed to the Nation's current economic health and strength. The key elements of this agenda are reducing the deficit, opening markets at home and abroad, and restoring prudence to macroeconomic management.

Reducing the Deficit

The Administration's most important economic policy accomplishment has been a substantial reduction in the Federal budget deficit. Since the 1992 fiscal year the deficit has been cut, not just in half as the President promised, but by 63 percent—from $290 billion in 1992 to $107 billion in fiscal 1996 (Chart 1–2). As a share of gross domestic product (GDP), the deficit has fallen over the same period from 4.7 percent to 1.4 percent—its lowest level in more than 20 years. In 1992 the U.S. general-government deficit (the combined deficit for all levels of government) was larger in relation to the economy than the deficits of Japan or Germany were to theirs; today it is a smaller fraction of GDP than in any other major industrialized economy.

Chart 1-2 **Federal Budget Deficit**
Since fiscal year 1992, the Federal budget deficit has been cut by 63 percent.



Source: Office of Management and Budget.

The dramatic decline in the deficit over the past 4 years is the result of many factors. By far the most important are the fiscal policy changes adopted in the Omnibus Budget Reconciliation Act of 1993 (OBRA93) and the stronger economic performance to which it contributed. Under the policies in place when this Administration took office, the 1996 deficit was projected to rise to $298 billion, even though the projection assumed 5 years of robust expansion.

Lower spending and increased revenues resulting from OBRA93 and subsequent legislation were responsible for more than $100 billion of deficit reduction in the fiscal year that ended in September 1996. The remaining budget savings are due to a combination of higher-than-expected tax revenues and lower-than-expected spending, which resulted from the stronger economy and a variety of technical factors unrelated to legislative changes. Many of these economic and technical factors are also the product, although less directly, of the Administration's policies—including the policy of deficit reduction itself. Even though the Administration felt confident that its policies would significantly improve the economy, it continued to use conservative forecasts for budgetary purposes:

growth in every year of this Administration has turned out to exceed these budgetary forecasts.

It is difficult to say with confidence what would have happened had the Administration not put deficit reduction at the top of its economic agenda and pushed through OBRA93. A controlled experiment on the entire macroeconomy is obviously impossible, but a simple analysis can provide some insights. We can say, first of all, that if deficits had continued at the levels projected in 1992, the Federal debt today would be half a trillion dollars higher than the $3.7 trillion currently held by the public. With so much more accumulated debt, and with higher deficits continuing, interest rates would certainly be higher than they are today. The more restrained fiscal policy helped create conditions that enabled the Federal Reserve to maintain a more expansionary stance—that is, lower short-term interest rates—than it might have otherwise. It is hard to imagine that the rapid expansion of investment in producers' durable equipment that has supported this expansion could have happened in an environment of higher interest rates.

The effect of deficit reduction on business confidence has been less tangible, but no less important. Business confidence was weak in 1992: business leaders felt genuine concern about the mounting deficits and the political system's evident inability to address the underlying issues. Such anxieties are bad for investment. After 12 years of budgetary excess, however, this government has finally showed that it can bring its own finances under control. But confidence is something that has to be continually renewed. That is why this Administration is committed to continuing to reduce the deficit to zero.

In short, had the Administration not put deficit reduction at the top of its economic agenda, the Nation's debt would surely be much larger, and its economic future bleaker, than they are today. And it is unlikely that the economy would have experienced as healthy an expansion as it has.

Opening Markets at Home

Another cornerstone of the Administration's economic strategy has been an aggressive policy of reforming regulatory structures in key sectors of the economy, including telecommunications, electricity, and banking. In reforming electricity and telecommunications regulation, the Administration's belief was that the proper regulatory structure would enhance competition, which would lead to valuable new services and lower prices. Recent financial reforms have provided greater incentives for competition and innovation, in ways that have reduced the overall cost of regulation to both the government and the banking sector itself while preserving and enhancing the safety and soundness of the Nation's banks. On the environmental front, the Administration has shown that regulatory policies that recognize the importance of incentives can be both cheaper and more effective than traditional regulatory controls. Tradable permits for sulfur dioxide emissions are a prime example. The full import of these and other regulatory changes will not be felt for years to come.

Opening Markets Abroad

The third element of the Administration's economic policy has been an aggressive effort to increase exports through the opening of markets abroad. Two major trade agreements—the North American Free Trade Agreement (NAFTA) and the Uruguay Round accord of the General Agreement on Tariffs and Trade, which established the World Trade Organization—were enacted during the President's first term. The first major fruits of the WTO are now on the horizon, with the December 1996 agreement in Singapore to reduce tariffs on a wide variety of information technology products to zero. The United States will certainly gain, both as a major exporter of information technology and as an importer, as American industries take advantage of new foreign technologies that will lower their costs and increase their productivity. In addition, the value of NAFTA to U.S. exports was proved during Mexico's 1995 financial crisis. Despite Mexico's sharp economic contraction, NAFTA ensured that Mexico kept its markets open to U.S. products, in sharp contrast to the restrictive policies that had followed Mexico's 1982 financial crisis. As a result, U.S. exports were maintained, and by 1996 they had risen to new records. Mexico also benefited because NAFTA prevented any potential recourse to insular and protectionist policies; partly as a result, by the second half of 1995 the Mexican economy had started to recover.

Two other major regional groupings—our Pacific Rim trading partners in the Asia-Pacific Economic Cooperation forum and our Western Hemisphere neighbors engaged in talks toward a Free Trade Area of the Americas—have made commitments toward free trade among their members by 2020 and 2005, respectively. More than 200 other trade agreements have been completed since the beginning of this Administration.

As already noted, U.S. exports have boomed, especially in those areas where trade agreements have been reached. Increased trade allows the United States—and its trading partners—to exploit comparative advantage. These gains from trade are reflected in the fact that wages in jobs supported by goods exports are 13 to 16 percent higher than the national average. Some critics suggest that the growth in exports was simply a matter of exchange rates tilting in favor of the United States. Over the last 4 years, however, the trade-weighted exchange rate of the dollar (a standard measure of exchange rates with all of the United States' principal trading partners) changed by only about 2 percent.

Restoring Confidence in Economic Policymaking

Americans now have more confidence in their government's handling of the economy. Polls show that more Americans rated the conduct of economic policy favorably in November 1996 than at any time in the previous decade. This vote of confidence was the result of a number of factors. First, the government was putting into practice an economic philosophy that not only seemed to be working, but was in accord with the country's basic values. That economic philosophy, as enunciated above, understands both that neither the market nor the government can correct all the shortcomings in American society. Government has a place, but government has to know its place. The initiatives outlined above—from getting the deficit under control to securing the long-overdue passage of a new telecommunications bill—were proof that this philosophy could work.

Not only was the substance of economic policy viewed as a success; so was the process of policy development. The establishment of a National Economic Council (NEC) to oversee that process ensured that the economy would get the same attention within the White House that foreign affairs had gotten since the National Security Council was established nearly 50 years earlier. The NEC has effectively coordinated the inputs of the many Federal agencies, to ensure that the President receives the best options and advice, without setting agency against agency in wasteful internal turf battles. Also, the public differences between the Federal Reserve and the executive branch that had sometimes characterized earlier Administrations were replaced with a respect for the central bank's independence.

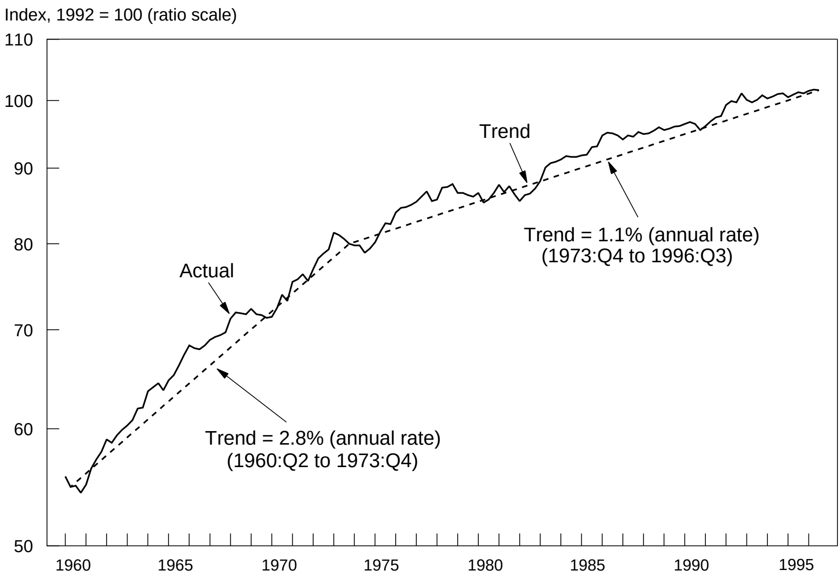
THE ECONOMIC AGENDA

The United States still faces major economic challenges. American technology, the economy, and society are all changing rapidly. Instead of ignoring or lamenting these changes, the Nation must embrace them, transforming problems into opportunities. We can do this only if we set a coherent economic agenda. This Administration has already accomplished much with the policies of the last 4 years. In the next 4 years the Administration will continue to build on those policies, holding fast to its new vision of the government's role in the economy as the basis for an agenda to promote growth, opportunity, and responsibility.

GROWTH

Productivity growth has been slow since the early 1970s. Since 1973, annual rises in productivity in nonfarm businesses have averaged 1.1 percent, a drastic decline from the 2.8 percent annual average that the Nation enjoyed between 1960 and 1973 (Chart 1–3). Biases in the methods used to calculate these numbers may exaggerate the slowdown (a question taken up in Chapter 2), but something has undoubtedly happened to slow the pace at which output per hour increases (Box 1–1). Slower productivity growth has the direct consequence of retarding increases in the Nation's standard of living. It also places obstacles in the way of solving some of the Nation's other challenges. Americans may be less supportive of freer trade when trade liberalization has been associated, however spuriously, with slower growth. It will be harder to balance the budget over the long term, especially while supporting a growing aged population, when productivity growth is slow. And workers are more reluctant to share their resources with those who are worse off when they feel that their own wages are stagnant.

Chart 1-3 **Actual and Trend Labor Productivity**
Labor productivity has grown at a 1.1 percent average annual rate since 1973.



Note: Data are for the nonfarm business sector.
Source: Department of Labor.

The sources of economic growth can be grouped under three headings: increases in physical capital, improvements in human capital, and increases in the overall efficiency of the economy—the amount of output per unit of input. The Administration's economic agenda is based on strengthening each of these three pillars of economic growth.

Box 1–1.—Explaining the Productivity Slowdown

The framework that economists use to decompose growth into contributions of physical capital, human capital, and their efficiency can be used to understand the causes of the productivity slowdown. This slowdown, which began around 1973, was similar in its timing and magnitude in all the advanced industrial economies. Consequently, it cannot be explained by purely domestic factors.

Slower growth of inputs—physical capital and human capital—is not a major cause of the slowdown. The capital-labor ratio has grown a bit more slowly since 1973, but only enough to account for 0.2 percentage point of the approximately 2-percentage-point decrease in productivity growth. And the rate of increase of human capital—the education and experience of workers—has actually increased since the 1950s and 1960s. Human capital growth now accounts for not only a larger *share* of productivity growth (27 percent from 1973 to 1994, compared with 3 percent from 1960 to 1973), but a larger absolute amount as well (0.3 percentage point versus 0.1 percentage point). Policies to increase investment, education, and training, however important for other reasons, do not address the underlying causes of the slowdown.

From an accounting perspective, almost the entire slowdown is attributable to a decrease in multifactor productivity growth, that is, the efficiency with which capital and labor are used. Although the causes are murky, some insight comes from the explanation of the productivity *speedup* of the 1950s and 1960s. Some of that era's abnormally rapid productivity growth resulted from the private sector's use for civilian purposes of the burst of innovation—largely government funded—inspired by the war effort in the 1940s. Some important examples are the digital computer, other advances in electronics, and the development of nuclear energy. Thus, although we may not fully understand the causes of the slowdown, policies aimed at increased support for science and technology are obviously strong candidates to be part of the solution.

Increasing Physical Capital

The first pillar of economic growth is increases in physical capital, which enable workers to produce more goods and services. Because it reduces the government's borrowing, deficit reduction will remain the key to how much of national saving is available for private investment in physical capital. The Nation has made great progress in bringing down the deficit in the last 4 years, but this ground will be lost unless we address the strains that some of the major entitlement programs will place on the budget over the long term. As the population ages, expenditures on Social Security are expected to grow from an estimated 4.7 percent of GDP in 1996 to around 6.4 percent in 2030, then stabilize. A much more serious challenge is posed by Medicare and Medicaid. If nothing is done to reform these programs, their outlays are projected to grow from an estimated 3.9 percent of GDP in 1996 to 13.0 percent in 2050. Their projected growth is due not just to the aging of the population, as in the case of Social Security, but also to the expectation that the volume and intensity of medical services consumed will continue their rapid rise. Chapter 3 analyzes the factors underlying these projections and some of their implications for the future of these programs.

Assuming Federal tax revenues remain at their historically constant level of around 18 percent of GDP, the projected increase in entitlements, especially Medicare and Medicaid, will have one of two effects: either it will balloon the budget deficit, or it will all but crowd out other vital government expenditures, including those necessary to sustain long-term economic growth, such as education and research and development. The deficit reduction of the last 4 years, however, has put the Nation in a position to address these long-term issues in a manner that preserves the important achievements of Medicare, Medicaid, and Social Security.

When the government runs a smaller deficit, it absorbs less private saving and frees up resources for private sector investment. But *public* investments in infrastructure, such as roads, schools, and airports, are also important. It is false economy to release funds for investment in one area by cutting back in another where the need and the return are just as great. Entrepreneurs will be reluctant to build new factories, homes, and offices if the highways and bridges that link them are inadequate for the new traffic they generate.

To be sure, government must take pains to see that every dollar it invests, like every other government dollar, is well spent. We have to think hard about how to put into place incentives that make such outcomes more likely. And we have to think carefully about which public investments should be the responsibility of the Federal Government and which the responsibility of States and localities. But fear of misdirected investment should not lead to underinvestment, because too little investment is costly to future growth. In short, we should not create an infrastructure deficit while attempting to improve the budget deficit.

Improving Human Capital

The second pillar of economic growth is improvements in what economists call human capital: the knowledge, experience, and skills of the workforce. As the economy has changed, the demands imposed on the brainpower of the American workforce have increased enormously. As Chapter 5 reveals, the returns to education, as measured by the difference in incomes between college and high school graduates, have risen sharply in the last 20 years. Much of this difference probably reflects the increasing importance of computer skills in the workplace.

Many American schools do a superb job of human capital formation, but some are failing at the task. Standardized test scores reflect only part of the learning that goes on in schools, yet the fact that American children perform less well on standard science and mathematics tests than many of their foreign counterparts is a continuing source of concern. There is no easy answer.

Recognizing the challenge that these changes pose, the President has set ambitious goals for the Nation's education system: every 8-year-old should be able to read, every 12-year-old should be able to log onto the Internet, every 18-year-old should be able to go to college, and every classroom and library in America should be linked to the Internet.

An array of policies, current and proposed, are directed toward achieving these goals. The America Reads initiative, working through the National Service program, will call on thousands of people to mobilize an army of a million volunteer tutors, dedicated to ensuring that every child in America can read by the age of 8. A good education in the early years of a child's life is necessary, but hardly sufficient to endow that child with the skills that our technological society demands. Therefore, in addition to early-education programs, we need to promote technology in the classroom and encourage young people to take more years of college.

Although the returns to additional years of education are substantial—between 5 percent and 15 percent—without government involvement many students would find it difficult to borrow for college. Not only do they lack a credit history, but they cannot borrow against expected future earnings—human capital cannot be pledged as collateral. The result is a classic market failure: markets by themselves do not provide all the education for which the benefits exceed the costs, even when the benefits are measured only in narrow economic terms. Since the G.I. Bill was passed in the 1940s, the Federal Government has had an acknowledged role in making higher education more affordable. Policies already implemented by this Administration are bringing us much closer to the day when every American who wants to will be able to attend at least 2 years of college. Under the new direct student loan program, for example, individuals can borrow money for college directly from the Federal Government and tailor their repayments to suit their own financial circumstances. Seeking to build on the success of this program, the President has also proposed tuition tax credits, to support those seeking higher education, and penalty-free withdrawals from individual retirement accounts, to encourage them to save for it themselves.

Meanwhile the Technology and Literacy Challenge initiative is bringing advanced computer technology into every classroom in the Nation. It is making significant progress toward ensuring that all American students are computer literate, equipped with the skills they will need in the 21st century. Under this initiative, 20 percent of all the schools in California have already been wired to the Internet—a good example of government and the private sector complementing each other. The Federal Government served as entrepreneur for this initiative, but much of the work was done by 50,000 volunteers, with many of the Nation's leading high-technology firms donating equipment. The initiative also stresses the development of educational software and the training of teachers to harness the potential of these new technologies.

Other steps are important in preparing the Nation's educational system for the 21st century. Recent reports have documented the extent to which America's public schools have become dilapidated. Schools with leaky and collapsing roofs have had to be closed. Because students need a more conducive environment in which to learn, the President has proposed $5 billion in Federal funding to support a program, administered by the States, that would spend $20 billion for school construction and renovation. Additional efforts are focused on enhancing resources for those communities facing the hardest problems (e.g., those with disproportionate numbers of disadvantaged children), improving standards through the Goals 2000 program, and promoting new approaches through the charter school movement.

Education does not end with college. That is why this Administration has consistently emphasized lifelong learning and employability security, to boost economic growth and reduce the adjustment costs associated with a vibrant economy. Unfortunately, the legacy of past efforts in this sphere has left workers facing a complicated maze of dozens of government-assisted training programs, each with its own rules, regulations, and restrictions. The President has proposed replacing this complex system with a single choice-based system for adults. This system should use a market-oriented approach, relying on training vouchers or grants to empower people directly to seek the training that will help them the most.

Research and Development

The third pillar of growth is greater economic efficiency—learning to produce more output with fewer inputs. Additions to the Nation's technological arsenal through research and development are an important contributor to efficiency: private industry invests over $100 billion in research and development each year. This is a huge sum, but it may not be enough: history and economic theory suggest that, left to their own devices, private firms will not invest sufficiently in improving technology, because they themselves do not realize the full benefit therefrom. Even though the patent system encourages invention by guaranteeing that inventors retain property rights to their innovations, many very useful ideas developed in more basic scientific research cannot (and should not) be patented.

The Federal Government has long played a critical role in promoting research and development. It has financed growth in telecommunications, for instance, from that industry's inception, with the first Baltimore-to-Washington telegraph line, to its latest major development, the Internet. In agriculture, government-funded research provided the basis for enormous improvements in productivity that today allow less than 3 percent of the workforce to feed the entire Nation, and have made the United States one of the world's leading agricultural exporters.

Detractors of government support for research have often distorted the issue. Some have posed a false dichotomy between basic research, for which public support is almost universal, and technology, which they say should remain the province of the private sector. Yet many areas of technology have huge spillover benefits and therefore would be underprovided without government support. Critics have also accused government of trying to "pick winners"—of seeking to supplant the market at one of the things it does best. But government support of technology is not aimed at outguessing the market. Rather, it is focused on setting up partnerships and other structures to identify, together with the private sector, those areas in which large benefits to society are not likely to be produced by the market alone.

In the spirit of the Administration's new vision for the economy, the Federal Government has placed public-private partnerships at the center of its research and development policy. The Advanced Technology Program (ATP), expanded substantially under this Administration, is a good example. ATP awards matching funds to industry, on a competitive basis, to conduct research on cutting-edge technologies and processes that, despite their great economic potential, might otherwise not have been pursued. The firms themselves set much of the research agenda, but this pairing has been an effective way to leverage government funding into larger increases in research and development. The record shows that the success rate of this and similar programs is indeed formidable.

Increasing Competition

Improving the efficiency of the economy is not just a matter of improving technology. How the economy is organized plays just as important a role in creating incentives for firms to use their capital and labor as efficiently as possible. If the market economy is to deliver on its promise of growth and prosperity, markets have to be competitive, because it is competition that drives firms to be efficient and innovative. Firms, however, often find it easier to increase profits by reducing competition than by improving efficiency in response to competition. Monopolies and oligopolies not only can charge inefficiently high prices and restrict output, but may also have a diminished drive to innovate.

The traditional way to increase competition is to prevent the growth of monopoly power in the first place. This Administration has restored vigor to the enforcement of the antitrust laws, blocking anticompetitive mergers and, where warranted, prosecuting alleged violators. But competition is not viable in some industries, namely, those called natural monopolies. Antitrust enforcement may be of little help in these areas; instead government regulation can help to ensure that monopoly power is not abused.

The extent and the form of competition are constantly changing. Joseph Schumpeter, one of the 20th century's great economists, described capitalism as a process of creative destruction. New industries constantly come into existence as old industries are destroyed. The late 19th and early 20th centuries saw the transformation of the economy from a mostly agricultural to a mostly industrial one. Today services and information are assuming the lead position, while at the same time demand for U.S. goods is increasingly coming from abroad. Sometimes analysts focus on manufacturing as if it still represented the core of the economy. Manufacturing is important—it is the Nation's largest investor in research and development and its leading exporter—but manufacturing employment today represents only 15 percent of total employment, and service industries also produce many of our important exports, for example in telecommunications, financial services, and other intellectual property.

Today, new technologies have expanded the scope for competition in many sectors that have historically been highly regulated, such as telecommunications and electric power. Traditional regulatory structures, however, with their rigid categories of regulation versus deregulation, and competition versus monopoly, have become increasingly unhelpful in guiding policy in these areas. These new technologies do not call for wholesale deregulation because not all parts of these industries are adequately competitive. Instead they call for appropriate changes in regulatory structure to meet the new challenges. Such changes must recognize the existence of hybrid areas of the economy, some parts of which are more suited to competition, while others are more vulnerable to domination by a few. Market power in one part of a regulated industry cannot be allowed to maneuver itself into a stranglehold over other parts, or else economic efficiency may be severely compromised. The Administration's regulatory reforms in the telecommunications and electric power industries have attempted to achieve competitive balance.

Even as these changes have intensified competition in some parts of the economy, it remains limited in others. In particular, where goods and services are locally provided, and where transportation costs are high, consumers in some areas may have too little choice, even if providers in the country as a whole are numerous. In parts of the country, for example, a single hospital may be the only one serving a large rural area. In the health care sector, new guidelines for antitrust enforcement were recently issued in response to concerns such as these, and the Administration has resisted attempts to scale back antitrust enforcement in this area. The benefits of competition can be seen in our university system, where competition remains keen—and perhaps partly accounts for the dominant position American universities hold in the world of higher education.

Expanding Trade

The third source of increasing efficiency in the economy is more-open markets abroad. Like the freeing up of domestic markets, opening of foreign markets shifts resources into relatively more productive areas. The Administration will continue to pursue its outward-oriented, protrade agenda through multilateral, regional, and bilateral means, expanding on and bringing to fruition initiatives like the Asia-Pacific Economic Cooperation group and the proposed Free Trade Area of the Americas.

The global economy, like the domestic economy, is evolving, and its change brings with it new challenges. A clean environment, a safe workplace, and competitive markets are important to us internationally just as they are at home. Trade liberalization can complement these goals in many ways. Anticompetitive practices abroad, for example, frequently cohabit with restrictions on trade and may forestall entry of American firms into foreign markets. Liberalizing trade in agriculture can lead to a more environmentally sound international allocation of farming activity. The side agreements to NAFTA, on which the Administration conditioned its approval of the agreement, demonstrate that safeguarding a shared environment, promoting better working conditions, and liberalizing trade are not mutually exclusive goods to be traded off against each other. Pursuing these goals in the multilateral framework of the WTO will be increasingly important. At the same time, it is important that countries not allow domestic regulation to become a pretext for nontariff trade barriers whose real purpose is to restrict competition.

Some of the fastest-growing economies are the emerging markets of the developing world, many of them in East and Southeast Asia. To grasp fully the opportunities that these new markets offer, the United States needs to strengthen economic relations with these countries. Chapter 7 sets forth some of the principles on which these new relations will have to be built.

Improving Public Sector Efficiency

The fourth and final way to increase the overall efficiency of the economy is by improving the efficiency with which the government itself does its job. By freeing up resources for potentially more productive uses in other sectors, and by reducing the cost of regulation, government reform can raise economy-wide productivity. The Vice President's reinventing government initiative has been doing just that. Thousands of pages of Federal regulations have been eliminated, and thousands more are being streamlined or improved in other ways. Hundreds of obsolete Federal programs have been eliminated, and red tape has been reduced dramatically. The Federal civilian workforce has been cut by more than 250,000, and as a percentage of the Nation's total employment it is now smaller than at any time since the early 1930s (Chart 1–4).

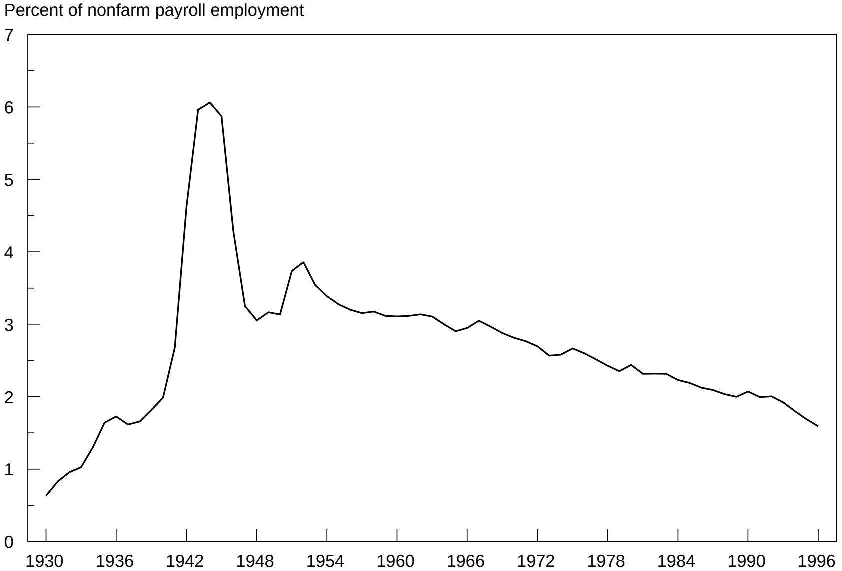
OPPORTUNITY AND INDIVIDUAL RESPONSIBILITY

America cannot reach its full economic potential if any of its assets—including its human resources—do not live up to theirs. Just as the productivity slowdown since 1973 poses a challenge for growth, so the persistence of income inequality and the entrenchment of poverty of the past two decades make it more difficult to ensure that all Americans have the opportunity to make the most of their lives.

Americans of all incomes participated in the economic growth of the 1950s and 1960s. But in the two decades that followed, not only was overall growth slower, but these shrunken gains were reaped disproportionately by those at the top of the income distribution. As already noted, some evidence suggests that this trend may have begun to reverse itself in the past few years. Chapter 5 discusses trends in inequality and shows that an important contributing factor is the increasing wage gap between educated and uneducated workers.

Another major problem is the persistence in some areas of pockets of poverty. The nationwide poverty rate has hovered between 10 and 15 percent for the past 30 years, but the burdens of poverty

Chart 1-4 **Federal Government Employment**
The Federal workforce as a percentage of total employment was smaller in 1996 than at any time since the early 1930s.



Note: Excludes Postal Service.
Source: Department of Labor.

have been spread very unevenly throughout American society. The poverty rate for blacks fell to its lowest level in 1995, yet over 40 percent of black children still grow up in poor homes. Poverty seems particularly entrenched—with poverty rates in some cases exceeding 50 percent—in the inner cities and in certain remote rural areas. The gap between rich and poor has a variety of origins. Changes in technology inevitably confer advantages on some parts of the country more than others, and citizens and governments in some places have more effectively seized upon the opportunities offered. Vestiges of discrimination, directed at the large share of minority members in many communities, may also have played a role in the geographic entrenchment of poverty.

Government programs have had much success in reducing inequality and poverty. Government cash transfers lifted over 21 million people out of poverty in 1995, lowering the poverty rate from 21.9 percent to 13.8 percent. If the effect of all taxes, the earned income tax credit (EITC), and the valuation of noncash transfers were included, the poverty rate would be still lower, at 10.3 percent. All told, more than half of all those who are reckoned poor on a before-tax-and-transfers basis escaped poverty with the help of government policies.

We must never allow the Nation's social safety net to become tattered, but it is also imperative to design policies in ways that will fully integrate our lagging communities into the American economy. The Administration's approach is based on four principles: providing people with opportunities to find work, making sure they have the right incentives to avail themselves of those opportunities, strengthening communities, and easing the transition between jobs for dislocated workers. Education, discussed above in the context of economic growth, also plays an important role in enhancing opportunities.

Work Opportunity

One of the most important contributions that any Administration can make to the Nation's economy is to ensure that every American seeking work can find it. The decline in the unemployment rate from over 7 percent in 1992 to below 5½ percent in 1996 was a major step forward not only for growth, but also for opportunity. But moving welfare recipients into jobs takes more than just creating job openings. Access to transportation, child care, and other infrastructure support will be needed. Many job seekers will also need to acquire the critical "soft skills"—a habit of punctuality, low absenteeism, and so forth—that will make them effective members of the labor force.

Jobs, skills, and infrastructure are all important, but discrimination and its legacy can still place obstacles in the way of some Americans. Some employers continue to deny employment or advancement on the basis of race or sex. This is illegal as well as economically irrational, and the Administration is committed to the vigorous enforcement of equal opportunity laws. But this may not be enough; affirmative action programs, based not on quotas but on principles of advancing opportunity, are also called for.

Incentives

Few individuals consciously choose a life of dependency, whether on public welfare or private charity. True, the environment into which a child is born, and the opportunities he or she is afforded, strongly influence whether that child matures into a productive member of society or becomes dependent on the state. But most economists believe that incentives also play a role in determining that outcome. When a worker earns little more from a minimum wage job than what he or she could get by going on welfare and accepting food stamps and free public housing, the incentive to work is not strong. In the past, the availability of welfare made the effective wage for many low-wage workers (i.e., the addition to income from an extra hour of work) not the advertised $4 or $5 an hour, but half of that or less.

Over the past 4 years this Administration has increased the returns to work relative to welfare in several ways. The expansion of the EITC and the recently legislated increases in the minimum wage have together increased the return to work for low-wage workers, to the point where a full-time, year-round minimum wage worker with two children will receive more income than ever before, even after adjusting for inflation. And the reforms of the welfare system, including the imposition of work requirements and time limits on benefits, may provide further incentives.

Incentives are not only important for individuals, but need to be designed with businesses in mind as well. The President has taken the first step in reforming welfare. As important as the public sector's role in creating opportunity is, however, the private sector must also participate if welfare reform is to result in better lives for those who have depended on support in the past. This Administration challenges the private sector to work with government to help welfare recipients move into the mainstream of work and opportunity. The welfare-to-work tax credit proposed by the President last summer is one example of how the government can help create the incentive for businesses to hire long-term welfare recipients.

Community

Many of the themes of this Administration's economic strategy are drawn together in policies that work not just with and for individuals, but with and for the communities in which they live. Part of any sensible economic strategy for reducing poverty involves concentrating on those areas where, as already noted, poverty is most entrenched. The Federal Government, however, cannot and should not be solely responsible for revitalizing these communities; rather, the most effective strategy is to provide local communities with the resources and tools they need to realize their full potential.

The Empowerment Zone/Enterprise Community initiative incorporates an entirely new approach to community revitalization. Rather than imposing restrictive Federal mandates on America's distressed central cities and rural areas, this effort begins from the premise that local residents know best how to solve their communities' problems. To be considered for an Empowerment Zone or Enterprise Community designation, communities have to meet eligibility criteria, be nominated by their State or local government, and submit a strategic plan that describes the community's vision for its future. This competition for designation provides an incentive for community leaders to develop innovative strategies to address their problems. The designated communities are then provided with access to a combination of flexible grants, tax incentives, and special assistance in removing bureaucratic red tape.

The Administration plans to expand the Empowerment Zone/Enterprise Community initiative. The Community Empowerment Act, which was introduced in the 104th Congress, embodies the Administration's proposal for a second round of zones and communities. This act would designate an additional 20 zones and 80 communities to receive, over 3 years, $1 billion in tax incentives and $1 billion in discretionary funds. The Administration will work with the 105th Congress in securing passage of this extension.

Dislocated Workers

It is a subject of some debate whether the pace of change today is such that individuals are more likely than in the past to lose their jobs. Chapter 4 discusses both the evidence concerning changes in the incidence of job dislocation and its economic consequences. But even if the risk of job loss is no greater than in the recent past, dislocation is still hard on workers and their families. The market does not provide insurance against job loss, which is understandably a source of anxiety for workers. Economists generally endorse the virtues of Schumpeter's creative destruction. But for individual workers and their families the costs of a changing economy are far more apparent than the broader benefits to society from an economy that is better able to adapt to changing technology and markets.

In a variety of ways, government can help individuals make the transition between jobs, and in the process help make the economy more supple, able to respond quickly to changes in markets and technology. Unemployment insurance has long been the most important system of support for dislocated workers. This Administration considers it one of its special responsibilities to help those in transition between jobs. One of the harshest ironies of an economy in which employers provide most health insurance is the fact workers typically lose their health benefits when they lose their jobs—precisely the time when they can least afford to purchase health insurance on their own. The Administration has proposed providing unemployed workers with 6 months of health insurance through the existing unemployment insurance system. At the same time, it is important to help the unemployed find new jobs through job retraining programs and "one-stop shopping" career centers to cushion and facilitate the transition for those hurt by economic change. Finally, the Administration has worked to make benefits more portable between jobs. For instance, the Health Insurance Portability and Accountability Act of 1996 (the Kassebaum-Kennedy bill) ensures that as many as 25 million workers will not be denied health insurance, including coverage of preexisting conditions, at their new jobs. Similarly, pension simplification and improved portability also make it easier to maintain crucial benefits when changing jobs.

CONCLUSION

The American economy is dynamic. This Administration's economic philosophy recognizes that American workers and enterprises, interacting through markets, are the source of that dynamism. The strength of this economy is its ability to adapt to change; at the same time, its dynamism sets further change in motion, ultimately enriching the lives and raising the living standards of all Americans.

Government has a limited but essential role in maintaining this dynamism. It creates an economic climate in which individuals and firms can flourish. It promotes competition. It seeks to ensure that all individuals have an opportunity to make the most of their talents. It protects our environment, our health, and our safety. This government's focus embodies elements both of continuity and of change. Many of its basic economic duties—such as enforcing property rights, maintaining a stable currency, and granting patents—are enduring, and the government's role in them is well established. As important as these areas are, this *Report* focuses on those other areas where the government's role is being, and needs to be, redefined.

Government must both adapt to and foster change. The past 4 years have demonstrated that the Federal Government is up to this challenge. And the private sector has more than amply demonstrated that it, too, can fulfill its part in this ever-evolving partnership.

The process is never-ending. Most of the challenges the Nation faces have deep roots in the past. Just as the productivity slowdown and the increase in inequality have no single, simple cause, neither do they have any single, simple solution. No magic policy wand can transport us back to the income distribution or the productivity growth America enjoyed in the 1960s. It takes time to respond effectively to, and even more time to reverse, trends that have been two decades in the making. To take just one example among myriad: the purely economic benefits of Head Start take 15 years or more to ripen—the time it takes for a Head Start child to grow up and join the labor force.

Our assessment of the success of government programs must therefore go beyond their impact on this year's or next year's GDP. Success will be measured by the kinds of lives that all Americans will live in the future. That success will be enhanced by the legacies we leave: not only investments in people, in the tools of production, and in technology that will increase our productivity, but also a philosophy of markets and of government that will guide us in the difficult choices we must make as we reach out toward the 21st century and beyond.

CHAPTER 2

Macroeconomic Policy and Performance

MACROECONOMIC PERFORMANCE over the past 4 years has demonstrated the soundness of this Administration's policies. It has also confirmed the economic analysis presented in the past three *Economic Reports of the President*, refuting critics who predicted the Administration's policies would not work.

In 1993 the President submitted to the Congress a package of measures to reduce the Federal budget deficit that cut Federal spending and raised income tax rates for the roughly 1.2 percent of taxpayers with the highest incomes. At the time, some critics said that these higher tax rates could hurt the economy by blunting incentives to work and to save. Adherents of supply-side theory went further, arguing that a combination of weaker economic performance and increased tax avoidance would result in little or no additional revenue from these higher tax rates. The 1994 *Report* explored this issue and concluded that the proposed increases in tax rates for high-income taxpayers would increase tax revenue without adversely affecting the economy. Three years later this conclusion has been justified. Between 1993 and 1994, households with adjusted gross incomes of $100,000 or more saw those incomes increase by an average of 9.0 percent while their income tax liability increased by 8.9 percent.

Although only a minority of economists shared the specific concerns of the supply-siders, the more general economic effects of deficit reduction have been an ongoing issue. Both the 1994 and the 1995 *Reports* analyzed the short- and long-run consequences of deficit reduction. They argued that, in the short run, deficit reduction should not cause growth to slow, provided the reduction is credible, financial markets are forward looking, and the Federal Reserve responds with an appropriately accommodative monetary policy. Under these conditions deficit reduction should contribute to lower real interest rates, stimulating interest-sensitive sectors of the economy. Indeed, for the most part, this prediction has been borne out over the past 4 years, with durable goods consumption and private nonresidential and residential investment supporting the expansion. Over the longer run, the *Reports* argued, this policy would increase saving and investment, thereby augmenting the Nation's stock of productive capital.

In 1996, with the economy growing and the deficit coming down, the question became whether the expansion, then almost 5 years old, was in danger of coming to a halt. That year's *Report* analyzed the reasons why past expansions had ended. It found that expansions do not die of old age. Instead they are brought to an end by specific (if unpredictable) factors, such as a runup of inflation followed by tight monetary policy; weak financial institutions and lack of credit; or a buildup of inventories. The combination of tame inflation, a healthy financial system, and lean inventory-to-sales ratios then prevailing augured well for the expansion to continue—as it did.

This *Report* continues the analysis of salient macroeconomic issues that inform current policy decisions. A number of these relate to inflation. One of the most striking macroeconomic developments of the last few years is the combination of low unemployment with steady inflation. We therefore examine whether changes in the structure of the economy have lowered the unemployment rate that is achievable without risking a rise in inflation—the so-called non-accelerating-inflation rate of unemployment, or NAIRU. Complementing this discussion is an analysis of the costs of inflation in the current economic environment of low and stable inflation and its implications for the conduct of macroeconomic policy.

The chapter then returns to last year's theme of the factors that cause expansions to end, focusing this time on the financial condition of households. We conclude that—notwithstanding recent increases in consumer indebtedness, credit card delinquencies, and personal bankruptcies—the overall financial condition of households poses no obvious threat to the current expansion. Households will also be helped by the recent decision by the Treasury to issue inflation-indexed government securities, discussed in the following section. This innovation will allow the private sector to broaden the array of assets available to households for longer range financial planning, providing greater financial security in retirement.

Economists' understanding of the economy and policymakers' ability to make sound economic and budget decisions are greatly affected by the quality of available economic statistics. This chapter addresses two important measurement issues: the identification of biases in measuring inflation, and the difference between income- and product-side measures of national output. We analyze the extent to which official measures may overstate inflation while understating growth in output, productivity, and the Nation's material standard of living.

Drawing on these analyses, the chapter concludes with a review of the macroeconomic highlights of 1996 and a look ahead, which suggests that all signs point to continued stable growth. The final section describes the economic outlook and presents the Administration's economic forecast.

THE NAIRU AND ITS EVOLUTION

The nonaccelerating-inflation rate of unemployment is a useful concept for thinking about the state of the macroeconomy. The NAIRU (also called the natural rate of unemployment) is defined as the rate of unemployment consistent with a stable inflation rate. Inflationary pressure tends to increase when unemployment is below the NAIRU, and decrease when unemployment is above the NAIRU. A number of explanations for this phenomenon have been proposed, but one plausible story is that, when unemployment is low, firms have to offer higher wages to attract, retain, and motivate new workers than they do when unemployment is high. Nominal wage growth is passed on to purchasers in the form of faster growth of prices.

PREDICTING CHANGES IN INFLATION

The unemployment rate provides useful information about the future course of inflation. This can be seen in its simplest form by comparing the direction of the change in inflation—as measured by the core consumer price index (CPI), which excludes the volatile food and energy components—with the demographically adjusted unemployment rate. Some groups such as new labor market entrants may have higher "normal" unemployment rates than others. The demographically adjusted unemployment rate weights the actual unemployment rates for different demographic groups by their labor force shares in a given base year, in this case 1993. Inflation rose in the 12 months following 28 of the 32 quarters since 1958 in which the demographically adjusted unemployment rate was below 5 percent, and fell in 26 of the 32 quarters when it was above 7 percent. This empirical regularity is not only strong but also statistically significant (Box 2–1 and Chart 2–1). It shows that the NAIRU appears to have been contained between 5 and 7 percent for the period from 1958 to the present.

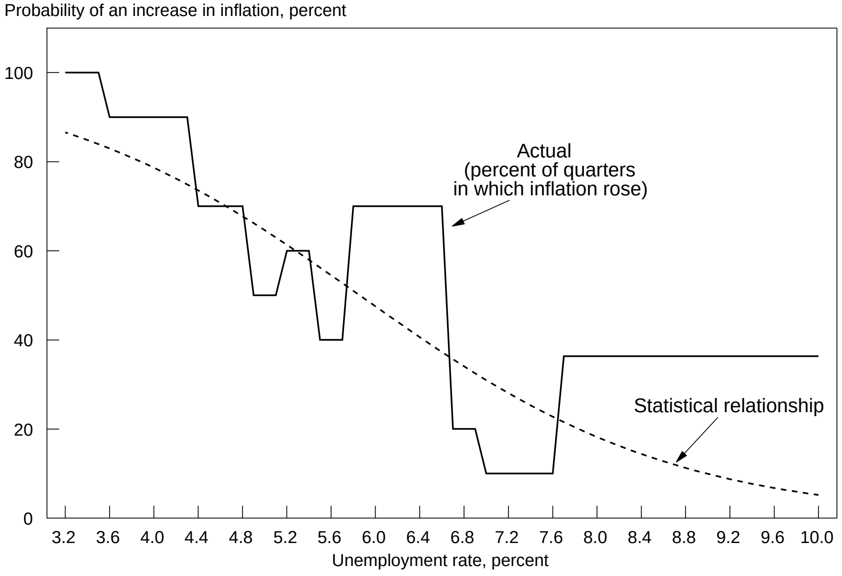
More typically, models of the relationship between unemployment and inflation do not just predict whether inflation will rise or fall, but also give some indication of the likely magnitude of this change. The usual result is that the further the unemployment rate is below the NAIRU, the more inflation tends to rise. In Chart 2–2 the demographically adjusted unemployment rate at the beginning of the year is plotted on the horizontal axis, and the change in core inflation over the course of that year on the vertical axis. The downward-sloping line (the regression line) in the chart depicts

Box 2–1.—Unemployment and Changes in Inflation

Very few economists have empirically tested the NAIRU hypothesis itself: that inflation rises when unemployment is below the NAIRU, and falls when it is above the NAIRU. The advantage of this basic hypothesis over more structured theories is that it is amenable to tests that are nonparametric, that is, that do not require as many assumptions about how the economy functions. These tests are therefore less sensitive to precise specification.

The relationship between the demographically adjusted unemployment rate and the probability of a rise in inflation is shown in Chart 2–1. For a given range of the unemployment rate, the fraction of quarters in which the core CPI inflation rate rose over the following 12 months is shown in the solid line. The dashed line is the best statistical fit for these data, estimated using a procedure called logit. This relationship supports the simple NAIRU hypothesis: when unemployment is low, inflation is more likely to rise. Further, inflation is about as likely to rise as to fall when unemployment is in the middle range of about 5 to 7 percent.

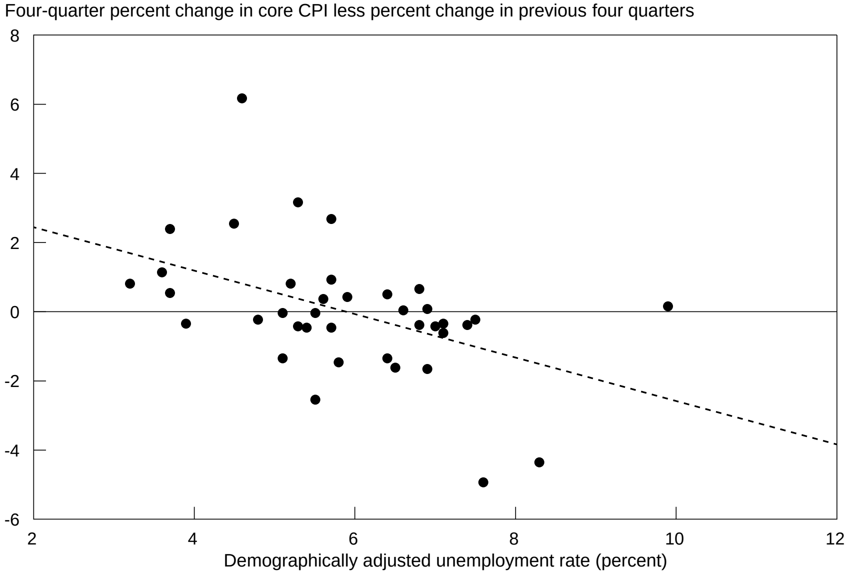
Chart 2-1 **Unemployment and the Probability of Inflation**
At very low unemployment rates, the probability that inflation will increase is high.
But at higher unemployment rates, it becomes more likely that inflation will fall.



Sources: Department of Labor and calculations by Council of Economic Advisers.

the statistical relationship; it shows that increasing the unemployment rate by 1 percentage point lowers the rate of inflation by around 0.6 percentage point.

Chart 2-2 **Changes in Core Inflation and the NAIRU**
Each 1-percentage-point rise in the unemployment rate tends to lower inflation by 0.6 percentage point over the following year.



Note: Unemployment rate adjusted using 1993 labor force weights.
Source: Department of Labor.

Chart 2–2 illustrates by implication another point: other factors besides unemployment also affect inflation. If the unemployment rate were the only factor affecting inflation, all the points would lie exactly on the regression line (assuming also that this is the correct specification). Instead, some points represent periods when unemployment was low but inflation was falling, and others periods when unemployment was high but inflation was rising. These changes would have escaped any forecaster relying on the unemployment rate alone to predict inflation.

Three extensions to the approach embodied in Chart 2–2 are helpful. First, the NAIRU need not be viewed as an unchanging constant, but instead can be thought of as evolving with changes in the economy. We need to understand how it evolves in order to determine the current level of the NAIRU and thus be able to predict future inflation. This issue is explored in the next section. Second, economic slack is a general concept that is unlikely to be perfectly captured by any single measure. Accordingly, it is useful to employ other measures of slack, such as capacity utilization or job vacancy rates, in conjunction with the unemployment rate in explaining and predicting changes in inflation. Third, other factors also affect the inflation rate; these are usually grouped under the collective heading of supply shocks. For example, the only two periods of double-digit inflation since the immediate aftermath of World War II occurred in 1974 and in 1979–81; both coincided with large increases in the price of oil. An analyst focusing exclusively on unemployment would not have predicted the severity of these inflations.

CHANGES IN THE NAIRU

The natural rate hypothesis was originally interpreted as implying a single, unchanging NAIRU. Today, however, it is recognized that the evidence is more consistent with a NAIRU that evolves over time. Accepting this time-varying NAIRU raises a number of questions: is it possible to explain why the NAIRU changed in the past, predict how it might change in the future, and perhaps even identify policies that might influence it?

A few years ago, typical estimates of the NAIRU were in the neighborhood of 6 percent. If the same natural rate prevailed today, the fact that the economy achieved below-6-percent unemployment from September 1994 through the end of 1996 should have increased inflation. To calculate the rough magnitude of the expected increase, assume for the sake of argument that the NAIRU is 6.0 percent and that a year in which the unemployment rate is a percentage point below the NAIRU raises inflation by about ½ percentage point. Then the average unemployment rate of 5.5 percent over the roughly 2-year period from September 1994 to December 1996 should have led to about a ½-percentage-point increase in the inflation rate. Instead, inflation, as measured by the 12-month change in the core CPI, fell from 3.0 percent to 2.6 percent. In contrast to previous experience with unemployment below 6 percent, inflation has fallen rather than risen.

Through 1995 and 1996, inflationary pressures were milder than in previous periods when unemployment was this low—a point discussed in greater detail later in this chapter. Although potentially transitory factors, such as a slowdown in the rise of employee health benefit costs and declining import prices, partly explain why inflation is subdued, the underlying reason is probably that the NAIRU has fallen substantially. The three main forces driving this decline are the changing demographics of the labor force, the delayed alignment of workers' real wage expectations with productivity growth, and increased competition in labor and product markets.

Changing Demographic Structure

Each demographic group can be thought of as having its own natural rate of unemployment: higher for teenagers than for adults, higher for women than for men, and so on. Even if these individual natural rates were constant, the overall NAIRU would change in response to changes in the proportions of these different groups in the labor force. If it is assumed that demographic changes had about the same effect on the NAIRU as they have had on observed unemployment, then about 0.5 percentage point of the decline in the NAIRU since the early 1980s can be attributed to demographic changes. The single most important demographic change is the aging of the baby-boom generation: the United States now has a more mature labor force, with smaller representation of age groups that traditionally have higher unemployment rates.

Productivity Growth and the Wage Aspiration Effect

The second explanation for the decline of the NAIRU can be called the wage aspiration effect. Neither the level nor the rate of change in productivity seems to have any long-run effect on the unemployment rate: the average unemployment rate in different periods has been approximately unchanged despite a century of massive productivity growth and shifts in its trend. Nevertheless, changes in productivity growth can have temporary effects on the natural rate. Workers' demands for increased real wages may depend on past increases, possibly because people get accustomed to a certain rate of increase in their standard of living. But in the long run, real wage growth tracks productivity increases. Thus, after a fall in the productivity growth rate, workers may initially demand wage growth that is faster than increases in productivity can justify. This puts upward pressure on the inflation rate and requires a higher level of unemployment to stabilize the rate of inflation. But this increase in the NAIRU is only temporary, either because the productivity slowdown itself is temporary, or because workers eventually moderate their demands in response to permanently lower productivity growth. Either way, the NAIRU eventually returns to its level before productivity slowed.

This wage aspiration effect raised the NAIRU after productivity slowed beginning in 1973, and its level remained elevated for some time. However, workers have now had time to lower their aspirations for real wage growth to reflect the slower productivity growth, which has helped the NAIRU return to its earlier, lower rate. Altogether, estimates of this effect show it lowering the NAIRU by a meaningful amount since the early 1980s.

Increased Competition: The Changing Structure of Labor and Product Markets

Many of the likely suspects for the remaining decline in the NAIRU fall under the heading of increased competition in product and labor markets. This is partly the consequence of opening of markets at home and abroad through regulatory reform and trade agreements. Although imports meet only a small fraction—around 13 percent—of total demand, the fact that much of the U.S. manufacturing sector faces potential import competition may provide significant wage restraint. Changes in labor market institutions and practices may also have had some salutary effects on inflation, whatever their other impacts. Quantifying these general notions of increased competition and the institutional structure of the labor market is extremely difficult; however, they can plausibly explain much of the decline in the NAIRU that is not accounted for by demography or the wage aspiration effect.

Beneficial Effects of Persistently Low Unemployment

It has been argued that Europe's sustained high level of unemployment has raised the natural rate of unemployment there, in a process called hysteresis. High and sustained unemployment causes the skills of the unemployed to atrophy, limiting their ability to compete for employment. Attempts by the smaller number of employed workers to maintain their wages reinforce this mechanism, also perpetuating high unemployment. The opposite phenomenon may be at work in the U.S. labor market today. With the lower unemployment of the past few years, previously unemployed workers have acquired new skills from on-the-job training. Research has not shown that "reverse" hysteresis has acted to lower the NAIRU in the American economy. But if it has, it means that sustained high unemployment is even more damaging than we thought, because it can raise the NAIRU, and sustained lower unemployment is even more beneficial than we thought, because it can reduce the NAIRU.

Future Evolution of the NAIRU

A number of factors may continue to reduce the NAIRU in the future. Demographic change will probably continue to lower the natural rate of unemployment as the current bulge of workers in the 25- to 54-year-old age bracket moves into the 55-plus age bracket, where the unemployment rate is typically lower. And if hysteresis is operative in the United States, the current spell of low unemployment may help generate a lower NAIRU in the next few years. The other two factors affecting the natural rate are harder to predict, although competition in the economy seems likely to increase with liberalization of international trade and continued regulatory reform.

THE ECONOMIC CONSEQUENCES OF INFLATION

If our growing understanding of the empirical relationship between unemployment and inflation is to inform policy choices—in particular the appropriate stance of macroeconomic policy—it needs to be combined with an analysis of the costs and benefits of inflation and unemployment.

Policies to lower the inflation rate generally cause temporarily higher unemployment. The costs of this unemployment are straightforward: involuntary unemployment imposes substantial hardship on individuals without jobs and represents wasted resources that could be used in production. According to Okun's law, a well-known empirical regularity in economics, every percentage-point reduction in the unemployment rate corresponds to an increase in output relative to potential of about 2 percent. The 2-percentage-point reduction in the unemployment rate since the end of 1992, for instance, corresponds to an increase in annual output of about 4 percent—roughly $300 billion in total, or $3,000 for every American household.

Accounting for the costs imposed by high levels of inflation is less straightforward. Inflation is often described as if it were inherently harmful, but this is misleading. People care about the purchasing power of their wages, not about the price level itself. If, for example, the dollar value of everything doubled—including goods prices, salaries, the money in peoples' pockets, bank accounts, and debt—almost no one would be worse off; everyone could buy just as much as before. This general doubling of nominal prices and account balances in the economy would impose one direct cost: the value of the time, effort, and materials that goes into reprinting catalogs, account statements, menus, and the like to reflect the new prices. These costs are minor, however. Instead the potential damage inflation does is for the most part *indirect*, through its effect on the level and distribution of output. In the example just given, if prices and wages doubled but cash and bank accounts did not, the burst of inflation would redistribute resources away from people who held wealth and would thus be very costly to them, whereas debtors would find themselves better off. Inflation also has complicated links to the level and growth rate of output. Although "costs of inflation" is an acceptable shorthand for these links, it is the consequences of inflation, not inflation itself, that are the real concern.

THE EFFECT OF INFLATION ON OUTPUT

A number of economists argue that the current relatively low rate of inflation has substantial adverse effects and that lowering the inflation rate by approximately 2 percentage points, to achieve a situation in which the cost of living is constant (on average), would bring large benefits. One cost they cite is that taxation of nominal interest income and nominal capital gains distorts saving and investment decisions in an inflationary environment, although in some cases these distortions may offset others elsewhere in the tax system. Other commonly cited costs of inflation, although lower when the level of inflation is lower, would remain significant, in the view of these economists. Whenever *any* inflation exists, people have trouble distinguishing relative price changes from general inflation; inflation thus creates noise in the price system, interfering with its role in allocating resources efficiently. And although higher levels of inflation are associated with greater variability of inflation, even at low levels some risks from its variation exist. The welfare of individuals is lowered, both directly and indirectly, as they take steps to mitigate these risks. These costs may sound small, but some economists argue that they can be quite substantial. More important, even if the gains from eliminating inflation are small for any given year, they can be large when aggregated over time, provided they are permanent.

Although all these costs exist in theory, several studies suggest that, in practice, the benefits of eliminating inflation in a low-inflation country such as the United States are not likely to be large. The argument for zero inflation assumes that the elimination of inefficiencies associated with inflation will raise the level or the growth rate of gross domestic product (GDP), yet studies mostly find a weak link, or none, between the level or the rate of growth of GDP and the level of inflation in low-inflation countries. Because statistical techniques cannot disentangle the many factors that influence growth, however, these studies may have failed to detect small but economically meaningful effects of low inflation. Also, no one doubts that very high inflation rates adversely affect growth.

On the other hand, maintaining price stability might impose its own costs. Some intriguing new research suggests that price stability might lead to a permanent increase in unemployment and a corresponding decrease in the level of GDP. Some evidence suggests, for example, that workers are more resistant to nominal wage cuts than to an equivalent erosion in their real wages due to inflation. If this were the case, then in a moderate-inflation environment, firms could adjust to shocks by letting real wages erode without resorting to layoffs. In a zero-inflation world, layoffs would be more common.

Another potential cost of price stability is that unemployment and output might fluctuate more over the course of the business cycle. At low levels of inflation, policymakers' tools for stabilizing demand would become less effective. For example, zero inflation would preclude using negative real interest rates (i.e., nominal interest rates below the rate of inflation) to stimulate the economy out of recession. Although monetary policy can affect the economy through other channels, including changing the quantity of credit, establishing a floor under real interest rates could make stabilization more difficult.

THE EFFECT OF INFLATION ON THE DISTRIBUTION OF INCOME

The distributional consequences of achieving zero inflation are not widely recognized. The unemployment required to achieve, and possibly even that to maintain, zero inflation would place a disproportionate burden on the less well off. The winners from zero inflation are harder to characterize precisely. The immediate transition to lower inflation would benefit holders of nominal claims and people on fixed incomes (e.g., unindexed pensions) while increasing the burden on debtors. In the long run as the lower inflation becomes built into expectations, interest rates would fall, and it would have no added effects on debtors or creditors. Zero inflation would, however, be a permanent boon to people with large cash holdings—many of whom live abroad or are engaged in illegal activities. In summary, reaching zero inflation might require the less advantaged to take on a disproportionate amount of the burden of achieving benefits whose size and distribution are uncertain.

RISKS IN MACROECONOMIC POLICY

The previous discussion identified the uncertainties associated with estimating the changing level of the NAIRU. There are also other uncertainties facing policymakers. This Administration has a record of forecasting accurately—but conservatively—output, inflation, and unemployment. But no forecast is without uncertainty. The long and variable lags in all policies, from the initial decision through implementation to the realization of the full effects, create uncertainty about what the right policy should be. Not only do we lack precise knowledge about where the economy will be in, say, 6 months' time, when the effects of today's policy decisions may be felt; often it is hard to know with precision where the economy is today. Good policymaking recognizes this uncertainty and weighs carefully the risks of alternative courses of action. An added advantage of the stable macroeconomic environment achieved over the past 4 years is that those risks are far smaller than they would be in a more volatile environment.

The preceding discussion of the NAIRU and analyses in recent *Reports* set the stage for an evaluation of these risks. On the one hand, expansionary policies that lead to unemployment below the NAIRU may result in a slight increase in inflation, with an accompanying risk of higher unemployment later as the economy returns to its lower inflation level. On the other hand, policies that lead to unemployment above the NAIRU result in a decrease in inflation, but also a waste of the economy's productive potential, slower growth, and unnecessary suffering, as workers who are able and willing to work cannot find it. Evaluating the risk of more expansionary policies raises several key issues. How high are the costs of a slight increase in inflation? Does the economy stand at a precipice, such that once inflation increases, it is likely to accelerate quickly? How high is the cost of disinflating should the economy overshoot?

Recent research lends support to those who advocate a cautiously expansionary policy: as the preceding discussion suggested, given the United States' recent history of low and stable inflation, slight increases in inflation do not seem to be associated with large costs. And last year's *Report* indicated that the economy does not stand at a precipice: at least in today's stable environment, runaway inflation is not a threat. Moreover, econometric evidence suggests that the relationship between the level of unemployment and inflation is such that the "extra" cost of disinflating—of wringing out inflation by temporarily increasing unemployment above the NAIRU—is no greater than the increased output resulting from the unintended lowering of unemployment below the NAIRU through cautiously expansionary policies. Moreover, the earlier discussion suggested that, in the current environment of low and stable inflation, the benefits of reducing inflation may be lower and those of reducing unemployment higher than had previously been thought.

THE FINANCIAL CONDITION OF HOUSEHOLDS

As 1996 ended, economic fundamentals appeared quite strong. Almost none of the economic symptoms that often precede a downturn, such as financial imbalances or inflationary pressures, were evident at the end of the year. The exceptions to this positive outlook were potentially worrisome trends in consumer indebtedness, credit card delinquencies, and personal bankruptcies. But upon analysis they do not seem to reflect dangerous financial imbalances or presage banking sector troubles. Indeed, at the beginning of 1997 the overall financial condition of households was sound and the banking system was very healthy.

TRENDS IN CONSUMER CREDIT

The past few years have been marked by a rapid rise in consumer credit (which does not include residential mortgage loans) and a subsequent worsening of some indicators of household financial condition. The runup in consumer credit had slowed considerably by the end of 1996, following more than 2 years of double-digit credit growth. Even in 1996, however, consumer credit appears to have grown faster than disposable income. Reflecting this rise, total required debt-service payments of households (including payments on mortgage debt) have also risen as a share of disposable income.

The largest and fastest-growing type of consumer credit is revolving credit, which consists primarily of credit card accounts (Table 2–1). Banks hold the largest share of consumer credit: almost half of the total outstanding, or about three times the shares held by finance companies and credit unions. Other holders include savings institutions, retailers, and gasoline companies. A large and rapidly rising share of consumer loans is held in securitized pools: loans are packaged by the originator and securities issued against them, which are then sold to investors (Box 2–2).

TABLE 2–1.—*Growth in Consumer Credit Outstanding*

[Percent change; simple annual rates [1]]

Period	Total	Revolving	Automobile	Other	Addendum: Disposable personal income
1993	7.5	11.3	8.8	2.7	3.0
1994	14.5	18.2	13.4	11.8	3.6
1995	14.2	22.0	10.6	9.3	5.5
1996: I	11.9	16.8	8.9	9.0	3.5
II	7.2	12.8	10.2	–2.7	6.7
III	6.9	9.3	9.2	1.4	4.4
October	6.6	3.7	3.2	14.3	.8
November	7.5	8.4	1.6	12.4	6.0
	Level, November 1996 (billions of dollars)				
	1,190.6	460.0	377.7	352.8	[2] 5,690.6

[1] Calculated from published levels.
[2] Annual rate.

Note.—Annual percent changes are for December to December; quarterly, for last month in quarter to last month in quarter. Data are seasonally adjusted.

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

The rapid growth in consumer debt in recent years reflects both demand and supply factors. On the demand side, the strong economic expansion and the consequent decline in unemployment and rise in consumer confidence are likely to have increased households' willingness to borrow. Borrowing may also have been boosted by the increases in household wealth generated primarily by higher stock prices. Refinancing of residential mortgages has cut household interest burdens, increasing the amount of consumer debt that households can support. At the same time, a desired rebound in spending on durable goods following the 1990–91 recession may well have stimulated the demand for consumer credit.

On the supply side, the recovery of the banking system following the substantial losses and capital pressures of the late 1980s and early 1990s may have encouraged banks to try to increase lending

Box 2–2.—Securitization of Consumer Loans

In recent years lenders have financed an increasing share of consumer loans by selling them to investors in the form of asset-backed securities. These securities allow investors to purchase a claim on the interest and principal payments generated by a pool of consumer loans. The first sales of such securities occurred only in 1985, but by 1996 more than 20 percent of outstanding consumer loans had been securitized and sold. The largest issuers are the finance subsidiaries of automobile manufacturers, credit card banks, and nonbank credit card issuers. The structure of consumer loan-backed securities varies, reflecting the types of loans being securitized and the needs of the seller. The securities are sold to a variety of investors, including insurance companies, pension funds, and mutual funds.

Automobile loans were the first type of consumer loans to be securitized. More recently, however, credit card loans have become the largest class of securitized consumer loan. In large part this shift reflects heavy securitization by banks, virtually all of which represents sales of credit card loans. A recent Federal Reserve survey of senior loan officers at large banks found two main reasons for the increase in securitization: rapid growth in credit card lending had outstripped banks' willingness to hold such loans on their books, and banks had gained experience in arranging securitizations. In addition, the banks pointed to the capital market's greater receptiveness to securitized loans, and the rising costs of carrying loans on their own balance sheets.

Most securities backed by consumer loans have what are known as credit enhancements, which can substantially reduce default risk. These features include third-party guarantees; "set-asides" in which either the lender puts up money at the time of the sale to cover possible losses, or a portion of the interest paid on the securitized loans is accumulated in a fund for the same purpose; and the sale of a subordinated class of securities that are paid only after payments on the senior securities have been made. As a result, the securities generally obtain top ratings from independent rating agencies. When losses on consumer loans were high during and after the 1990–91 recession, these enhancements proved quite robust: none of the securities missed a payment.

by easing their standards and terms. Simultaneously, three other changes may have reduced the apparent risk of consumer lending relative to other types of loans. First, improvements in computerization and credit scoring may have improved banks' ability to measure and manage consumer lending risk. Second, the development of a market for securitized consumer loans, especially credit card loans, allowed banks to shift some of the risk of these loans to security holders. Third, consolidation in the banking industry may have improved the geographical diversification of banks' consumer loans. Reflecting these trends, Federal Reserve surveys of senior loan officers between 1991 and 1995 consistently showed a net increase in willingness to provide consumer installment loans.

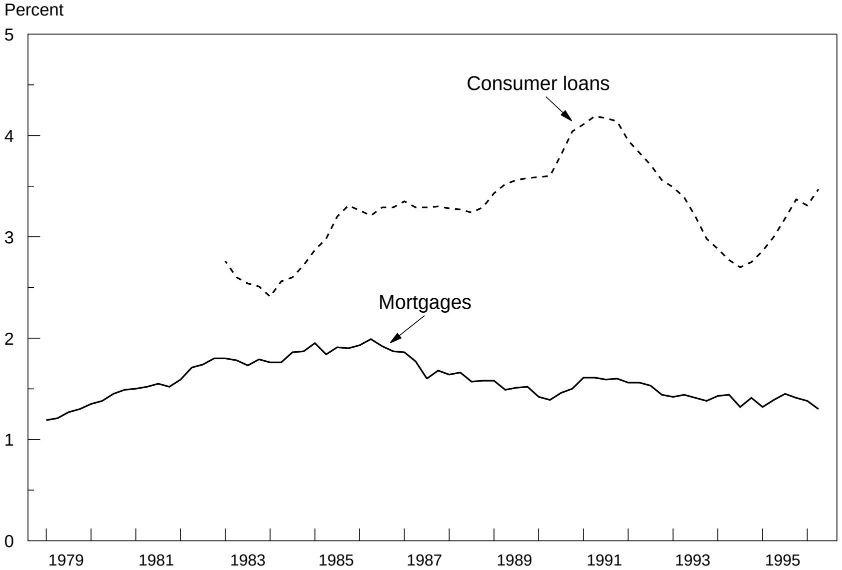
Other supply and demand factors also contributed to the particularly rapid growth in revolving credit. On the household side this rise may reflect, at least in part, increased convenience use of credit cards, as more nontraditional outlets such as grocery stores began accepting credit card payments. This sort of card use also reflects supply-side factors. Card issuers have offered incentives, such as frequent-flyer miles, to cardholders to encourage them to make purchases with their cards. In addition, lenders have aggressively pursued new credit card customers, with extensive promotions including widespread mailings of preapproved applications, and an increased willingness to provide card accounts to riskier customers. Data from the 1995 Survey of Consumer Finances by the Federal Reserve show that the share of lower income households with credit card debt has increased somewhat in recent years. However, the survey also shows that the largest increases in consumer credit use are not among low-income households, but rather among those with incomes of $50,000 to $100,000. The expansion in bank credit card activity, in turn, has been driven by the high profitability of credit card lending.

IMPACT ON HOUSEHOLDS

Measures of consumer loan delinquencies and increased losses on bank consumer loans, as measured by net charge-offs, suggest that at least some households are facing significant financial strains. The rise in the charge-off rate over the past 2 years has brought it back to near its 1991 peak. Consumer loan delinquency rates, however, remain well below their previous peak (Chart 2–3).

But both of these patterns need to be put into proper context. In the case of both delinquencies and charge-offs the recent deterioration has been more dramatic for credit card loans than for other consumer loans. For residential mortgages, the other major type of household loan, delinquency rates have declined recently and are near their lowest level in almost two decades. The number of non-

Chart 2-3 **Delinquency Rates**
In contrast to the rise in consumer loan delinquencies, the mortgage delinquency rate has dropped.



Note: The mortgage delinquency rate is the percentage of all loans 60 days or more past due. The consumer loan delinquency rate is the percentage of loan balances that are 30 days or more past due or nonaccruing.
Sources: Mortgage Bankers Association of America and Board of Governors of the Federal Reserve System.

business bankruptcies, which reached their highest quarterly level ever (more than 290,000) in the third quarter of 1996, represents another possible sign of distress among some households. As discussed in Box 2–3, however, this rise is probably at least partly the result of such factors as changes in bankruptcy law and a number of broader societal changes, which have increased the willingness of households to file for bankruptcy. Nonetheless, the pickup in bankruptcies has surprised many lenders.

One problem in assessing the implications of recent movements in bankruptcies and delinquencies is distinguishing between long-term trends and normal cyclical variations. Normally, as the economy goes into an expansion, bankruptcy and delinquency rates might be expected to decline at first and then rise. Since economic turnarounds are hard to predict, at the beginning of a recovery a large number of firms and households will do better than expected. As a result, delinquency rates will turn out lower than expected. Moreover, the pace of lending increases during recoveries, which may subsequently depress delinquency and loss rates because the new loans are unlikely to become delinquent soon after they are extended. Eventually, however, as banks lower their lending standards in response to their greater optimism about the economy and their own improved financial position, delinquencies and bankruptcies increase.

Box 2–3.—Nonbusiness Bankruptcy: Trends and Causes

The recent rise in nonbusiness bankruptcies is probably the result of changes in bankruptcy law and a number of broader societal changes, in addition to economic conditions. Indeed the trend has been evident for many years. The number of nonbusiness bankruptcy filings was fairly stable between the late 1960s and the late 1970s, but it has grown steadily since from about 200,000 a year in the late 1970s to more than 1 million for the 12 months ending in September 1996.

In recent years about two-thirds of nonbusiness bankruptcies have been filed under Chapter 7 of the U.S. Bankruptcy Code. Under Chapter 7, assets of the petitioner in excess of the State exemption level (if any) are liquidated, and the proceeds are distributed to the creditors. In return, most remaining unsecured debts of the petitioner are "discharged," that is, forgiven. Virtually all other nonbusiness bankruptcies are filed under Chapter 13. Those filing under Chapter 13 are not required to give up any assets but must instead provide a plan under which they will repay a portion of their debts from future income, generally over several years.

Researchers generally attribute much of the increase in bankruptcies since the late 1970s to effects of the Bankruptcy Reform Act of 1978. This act increased the protections available to petitioners and established Federal asset exemption levels that were quite generous compared with State exemption levels. However, the act also allowed States to override the Federal exemption levels, and many did so. The Federal exemption levels were doubled in the Bankruptcy Reform Act of 1994, which may have given further impetus to the rise in bankruptcy filings in 1995 and 1996.

Other economic and social factors may have contributed to the recent rise in bankruptcies. Improvements in the supply of consumer credit likely increased borrowing by households with lower levels of wealth and income, and such households seem more likely than others to file for bankruptcy after a financial shock. Bankruptcies may also have been boosted by a reduction in the social stigma attached to bankruptcy. The increase in the number of divorces may also have contributed. Finally, advertising by lawyers, which became legal in 1977, may have made households more aware of bankruptcy as an option.

As asset quality declines, banks are led to reassess their lending strategies. Recent Federal Reserve surveys have found that about half the banks had tightened their standards for approving new credit card accounts, and a significant share had also tightened some terms on these accounts. About a quarter of the banks reported having tightened lending standards for non-credit card consumer loans. More generally, surveys since the middle of 1996 have indicated that, on balance, banks have become slightly less willing to extend consumer loans.

POSSIBLE EFFECTS ON LENDING INSTITUTIONS AND CONSUMER SPENDING

Increased delinquency rates and loan losses could put the financial position of lending institutions in jeopardy, or they could depress consumer spending and thus adversely affect the economic expansion. Neither outcome appears likely at present.

Today, banks are in sound financial condition. Bank capital and reserve ratios are robust relative to their levels in the mid-1980s, and bank profitability is near record levels. Moreover, despite the rise in delinquency and charge-off rates on consumer loans, overall bank asset quality remains high: measures of business and real estate loan quality are near their best levels in recent years. Finally, credit card loans, which have shown the greatest deterioration, account for only about 5 percent of bank assets. Thus, bank regulators can react in a graduated manner to lending excesses at some banks. Indeed, Federal banking regulators, while continuing to monitor banks' consumer lending activities, have not taken any broad regulatory actions.

Households' spending could be adversely affected by their financial position either directly, because they become unwilling to borrow further to finance continued purchases, especially purchases of consumer durables, or indirectly, because banks become unwilling to lend to them. It seems unlikely that banks will pull back from consumer lending by enough to affect consumer spending on durable goods substantially. Because their condition is healthy, banks can respond to higher losses in a measured way, without drastic reductions in consumer lending. As already noted, the bulk of the loan quality problem appears to be in the credit card sector, where some banks may have eased standards excessively in earlier efforts to gain market share. Nonetheless, profitability among the largest credit card banks, although not as high as it was a few years ago, remains high relative to profits at other banks (Box 2–4).

Banks are also likely to pull back selectively, because rising delinquencies and losses on credit card loans may reflect the behavior of a relatively small group of riskier borrowers who have been able to obtain card accounts in recent years; the fact that other meas-

Box 2–4.—Profitability of Credit Card Operations

The credit card operations of large banks appear to have been far more profitable than other bank activities in recent years. However, competitive pressures and higher loan losses have eroded this difference since the early 1990s.

The profits of the large credit card banks significantly exceeded those of the banking industry as a whole through the late 1980s and early 1990s. In 1993 and 1994, before-tax profits at these banks, which account for about two-thirds of the banking industry's credit card loans outstanding, were roughly 4 percent of outstanding balances. By contrast, banking industry profits, before taxes, were only about 1.7 percent of assets in those 2 years. Since then this large gap has narrowed. Before-tax profits at large credit card banks fell to just 2.7 percent in 1995, and to just 2.1 percent in the first half of 1996. Over the same period, profits for the industry as a whole have increased slightly, to more than 1.8 percent of assets. The relative decline in profits at large credit card banks reflects a rise in loan losses, a reduction in fee income, and narrower interest spreads. Nonetheless, because of rising levels of securitization, returns on assets and equity at these banks remain quite high relative to returns for the industry as a whole.

ures of household financial strength have not deteriorated to the same degree supports this notion. Even the rise in the delinquency rate on non-credit card consumer loans at banks may be an overstatement: these loans include loans for automobiles, the delinquency rate for which may have been boosted in recent years by the shift of many relatively low risk customers to lease financing. Finally, banks may find it difficult to limit credit card lending in the short run, because unused lines of credit are currently more than three times the dollar volume of credit card loans outstanding, and these lines have been growing rapidly.

The high level of indebtedness is also unlikely to affect consumer spending significantly. Indeed, standard theoretical models of consumer spending indicate that indebtedness has no independent effect; consumer spending is determined by income patterns over people's lifetimes. Some research suggests that high levels of indebtedness may have an adverse effect. But in the current situation this effect should be offset by other influences. The ratio of households' net worth to disposable income is as high now as it has been in three decades. Historically, high levels of aggregate net worth relative to disposable income have been associated with high levels of consumer spending. In addition, high levels of consumer confidence should help to bolster consumer spending.

INFLATION-INDEXED SECURITIES

In September 1996 the Treasury announced that it would issue inflation-indexed debt securities starting in early 1997. Inflation-indexed securities provide two main benefits. First, they offer investors an asset that is protected against unexpected inflation. No other financial asset offers the same degree of protection against both credit risk and the risk of inflation. Moreover, financial firms may use indexed securities to provide other assets valued by households, such as indexed annuities. Second, since investors should be willing to accept a lower average yield on securities that provide such a hedge against inflation, a shift from conventional securities to indexed securities of the same maturity is likely to reduce the Treasury's average borrowing costs. Indexed securities offer other benefits as well: the spread that emerges in the market between rates on indexed and on comparable conventional securities will provide better information than is now available about investors' expectations of future inflation, which should prove useful in formulating monetary policy; and indexed securities could reduce the sensitivity of the Federal budget to unexpected fluctuations in real interest rates, by allowing the Treasury to lock in real financing costs over a relatively long horizon.

HOW INFLATION-INDEXED SECURITIES WORK

The first indexed securities issued carry a 10-year maturity. In the future the Treasury will issue indexed securities once each quarter. As with the current 2- and 5-year Treasury notes, the sales are single-price auctions in which all successful bidders receive the same return. Investors can make noncompetitive tenders so that they are assured of receiving securities at the rate determined in the auction. Indexed securities are available in denominations as small as $1,000, to encourage demand from small savers. The securities can also be stripped, that is, the interest component separated from the principal component to suit the needs of different investors for differing income streams. The Treasury expects to issue one other maturity of indexed security within a year. In addition, the Treasury intends to sell, starting in about a year, inflation-protected savings bonds that pay rates based on those on marketable indexed securities. Conventional EE savings bonds, which are not indexed, will continue to be available.

The principal of indexed Treasury securities is protected from inflation because its value is adjusted periodically (indexed) in line with changes in the consumer price index. The version of the CPI used for these calculations is the CPI for all items for urban consumers (CPI-U), without seasonal adjustment. Investors will receive semiannual interest (coupon) payments based on the indexed value of the principal. At maturity the indexed value of the principal or the par value, whichever is larger, is repaid. Because the coupon payments are based on the inflation-adjusted principal, both they and the principal of indexed securities are protected against increases in the general price level. The fact that the value of the principal can increase before it is repaid raises special issues of tax treatment, which are discussed in Box 2–5.

Box 2–5.—Tax Treatment of Indexed Securities

Before the first indexed securities were issued, the Internal Revenue Service proposed regulations on their tax treatment. Interest payments on indexed securities will be taxable as current income, as are those on conventional Treasury securities. However, increases in the inflation-indexed principal will also be taxable as interest income. If the CPI-U declines, the resulting reduction in the indexed principal may be used (subject to some limitations) to offset taxation of interest payments on the indexed securities.

Because holders of indexed securities receive the increase in the inflation-indexed principal only at maturity, in periods of high inflation the income tax they owe on the interest plus that on the increase in principal could exceed the interest payment received. The inflation rate at which this occurs depends on the interest rate on the indexed securities and the investor's marginal tax rate. With a real interest rate of 3 percent on indexed securities, for a taxpayer in the 28 percent tax bracket, taxes will exceed interest received if inflation exceeds about 8 percent. Investors in this position could cover the tax payment by selling a portion of their indexed securities. Holders of conventional Treasuries do not face this problem because inflation automatically reduces the real value of their principal.

Of course, many households will invest in indexed securities through tax-deferred accounts such as individual retirement accounts and 401(k) plans. For these investors the tax treatment of indexed securities will generally be immaterial unless they make a taxable early withdrawal. Similarly, holders of inflation-indexed savings bonds (as opposed to marketable indexed securities) will not pay taxes on interest received until maturity.

BENEFITS OF INDEXED SECURITIES

Indexed securities provide households with a savings vehicle that automatically adjusts to compensate for the effects of inflation. History suggests that the returns on most assets do not fully reflect changes in the inflation rate. Among financial assets, Treasury bills have provided the best protection against inflation (Table 2–2). Stocks and long-term government bonds have not provided such protection. Investments in new homes, and to an even greater degree in existing homes, have provided protection against inflation, but real estate investments are not liquid. Thus, families looking for a flexible and low-cost way to save for future expenditures such as retirement or a child's education should find inflation-indexed securities a valuable new option (Box 2–6). The availability of indexed Treasury securities may also allow private firms to develop other desirable financial instruments, such as inflation-indexed mutual funds and annuities, or to hedge pension liabilities. Indeed, at least one mutual fund manager has already filed with the Securities and Exchange Commission to offer a mutual fund investing primarily in indexed securities.

TABLE 2–2.—*Average Increase in Rate of Return When Inflation Rises by 1 Percentage Point*

[Percentage points; annualized]

Item	Holding period		
	3 months	1 year	5 years
Financial assets:			
Equities	–1.74	–1.34	–0.54
Long–term government bonds	–.97	–.79	–.11
Treasury bills	.53	.65	.69
Nonfinancial assets:			
New homes (median sales price)	.17	.26	.80
Existing homes (median sales price)	.95	.78	1.16

Note.—Data shown are the slope coefficients on the inflation rate taken from regressions of each rate of return on a constant and CPI inflation over the corresponding holding period.

Returns on financial assets are from Ibbotson Associates; equity returns are for the S&P 500 index.

Data for financial assets begin in 1955; for new home prices, in 1963; and for existing home prices, in 1968.

Sources: Council of Economic Advisers, based on data from Ibbotson Associates, National Association of Realtors, Department of Commerce, and Department of Labor.

Much of the attention surrounding the introduction of indexed securities has focused on their likely impact on households, but indexed securities also raise two important issues for the Treasury. First, many economists believe that the Treasury now pays an inflation risk premium on its intermediate- and long-term conventional securities. In other words, investors require a higher interest rate on these securities to compensate them for the possibility that higher-than-expected inflation will erode the real value of future interest payments and principal repayments received on the security. One recent study concluded that investor concerns about inflation risk might add as much as ½ to 1 percentage point to the required yield on some Treasury securities. Thus, by issuing indexed securities, the Treasury may be able to reduce average borrowing costs.

Box 2–6.—How Indexed Securities Reduce Inflation Risk

The table below illustrates how indexed bonds can reduce the risk of meeting a future expenditure. In this case the expense is the cost of a year of college for a child who is 8 years old today and will be attending college in 10 years. If the cost of a year of college rises at the same rate as the CPI, an indexed security guarantees the parents enough money to cover that cost, no matter how high the inflation rate in the intervening years.

Note that although the indexed security reduces risk, it may underperform the conventional security. In the example shown, if inflation turns out to be only 1 percent, the holder of the conventional security will end up with a larger net return than the holder of the indexed security. However, if inflation turns out to be 5 percent, the holder of the conventional security will end up with a smaller net return and will be unable to meet the cost of college with the security and its accumulated interest.

Savings Outcomes After 10 Years Under Different Inflation Assumptions

[Initial investment of $10,000; expected inflation of 3 percent]

If inflation turns out to be:	Conventional bond (Subject to inflation risk)		Indexed bond (Not subject to inflation risk)	
1 percent	Investment outcome:	$18,771	Investment outcome:	$14,845
	College cost:	14,728	College cost:	14,728
	Net:	4,043	Net:	117
5 percent	Investment outcome:	$18,771	Investment outcome:	$21,891
	College cost:	21,718	College cost:	21,718
	Net:	–2,947	Net:	173

Note: Real rate of return of 3 percent on indexed bond; nominal rate of return of 6.5 percent on conventional bond (3 percent real rate of return plus 0.5 percent inflation risk premium plus 3 percent expected inflation); current college cost of $13,333, assumed to grow at the same rate as the CPI; returns are assumed to accumulate tax free.

Source: Council of Economic Advisers calculations.

The second issue for the Treasury is the effect of the indexed securities on the riskiness of Treasury payments: indexed securities increase the risk to the Treasury of having to meet high interest payments if inflation is high. This uncertainty, however, is about the nominal payments that the Treasury will make; indexed securities actually reduce uncertainty about the *real* value of those payments. Fixed real payments on at least a portion of the Treasury's debt may be desirable, since an increase in inflation would increase nominal interest costs but would also be expected to increase nominal GDP and thus tax revenues. This effect of indexed securities on payments made by the Treasury can be seen in the example of household savings in Box 2–6. Since indexed securities provide for less variation in the real value of the household's savings, they must also provide for less variation in the real value of payments by the Treasury. Thus, indexed securities reduce real uncertainty not only for investors, but also for the Treasury.

Indexed securities may also have implications for monetary policy. Some economists have worried that substantial issuance of indexed securities could reduce the political pressure on the Federal Reserve to keep inflation low, because holders of Treasury securities would become, as a group, less anxious about inflation. On the other hand, indexed securities may increase the government's incentive to fight inflation, because it would not be possible to inflate away the value of inflation-indexed debt.

Whatever the effect on incentives, indexed securities could also provide the Federal Reserve with useful information about real interest rates and investors' expectations of future inflation rates. At present this information can only be inferred from nominal interest rates and survey data on expected inflation. Once a substantial market for indexed securities has developed, policymakers will be able to decompose interest rates for a given maturity into real and inflation-related components. Changes over time in these components may provide useful insights into the working of the economy that can be used in formulating monetary policy.

EXPERIENCE IN OTHER COUNTRIES

A number of other countries already issue indexed securities. The largest issuer is the United Kingdom, which began issuing nonmarketable indexed securities in the mid-1970s and marketable ones in 1981. Currently, indexed securities account for about $60 billion of U.K. marketable debt, about a sixth of the total. The indexed security market in Israel accounts for more than 85 percent of that country's marketable debt, probably because past periods of very high inflation there have made indexed securities more attractive. Australia issued indexed securities as early as 1985, as did Canada, New Zealand, and Sweden, starting in the 1990s. In these countries the share of debt that is indexed remains well below that in the United Kingdom.

Because the issuance of indexed securities in countries with financial systems similar to ours is so recent, one cannot yet use these experiences to evaluate the likely impact of indexed securities in the United States. The relative real returns on conventional and indexed securities (and therefore the relative real payments by the government) depend on the happenstance of inflation, especially unexpected inflation, following the issuance of the securities. As a result, relatively long periods are needed to evaluate their relative returns with any confidence.

Finally, the experience in other countries does suggest that the market for indexed securities may be relatively illiquid. In the United Kingdom, where the indexed security market is largest, indexed securities are traded much less often than conventional securities. Purchasers, who are often pension funds and insurance companies, apparently buy these securities to hold in their portfolios rather than trade them. This pattern suggests that indexed securities satisfy a real need in the market, but the reduced liquidity might raise the return demanded by investors concerned about their ability to sell the securities on short notice at reasonable cost. This "liquidity premium" may offset to some degree the elimination of the inflation risk premium, at least until the new market becomes well established.

MEASUREMENT ISSUES

The quality of economic statistics affects the assessment of economic performance and the formulation of economic policy. The issues of possible bias in the measurement of consumer price inflation and the difference between income- and product-side measures of national output provide two important illustrations.

THE CONSUMER PRICE INDEX

Many researchers have argued that the CPI overstates increases in the cost of living. Much of this research comes from the Bureau of Labor Statistics (BLS), which produces the CPI. This research has identified several possible sources of bias; the degree of consensus on the importance of each varies.

Substitution Bias

The CPI prices a fixed market basket of commodities. Shares of these commodities in the basket are based on spending patterns observed in a base period. But consumers do not buy the same basket of goods from year to year. When the prices of some goods rise more quickly than those of other goods, consumers often substitute away from those that have become relatively expensive and toward others that have become relatively cheap. Increases in the CPI measure how much additional income a typical consumer would need to buy the base-period market basket at the new prices. In contrast, a true cost-of-living index would measure how much more income a consumer needs to maintain the same level of economic well-being, taking into account the ability to substitute among goods. By ignoring substitution, the CPI overstates increases in the cost of living.

Substitution bias takes place at two levels, given the way the CPI is constructed. At the "upper" level, substitution occurs among the basic categories that make up the CPI's market basket—for example, when consumers switch from apples to oranges (2 of the 207 categories). But these 207 categories are themselves made up of numerous individual items. For example, the apples category consists of a sample of Delicious, Granny Smith, Macintosh, and other varieties. Thus a second, "lower" level of substitution takes place within categories when the price of, say, Delicious apples rises and consumers shift to other varieties.

The market basket is divided into categories, and each category's weight is determined by its share in total consumption as measured by the Consumer Expenditure Survey. (Data for this survey are collected by the Bureau of the Census under contract with the BLS.) The current categorization is based on 1982–84 data; an updated categorization based on 1993–95 data will go into effect in 1998. The category weights are fixed for approximately 10 years. Within categories, the component weights are updated every 5 years on a rolling basis.

Certain other price indexes, called superlative indexes, take into account consumers' ability to substitute, and hence are not subject to substitution bias. Unlike fixed-weight indexes, superlative indexes use information about consumer purchases, both at the beginning and at the end of the period over which inflation is measured. Using a superlative index to aggregate the 207 expenditure categories, BLS researchers calculated that, on average, annual inflation was 0.14 percentage point per year lower than the change in the official CPI from 1988 to 1995.

Replacement of the CPI with a superlative index might seem an easy fix. But these indexes cannot be constructed in a timely fashion because the required data on spending patterns are compiled almost a year after the corresponding price data. Users would have to accommodate themselves to the inevitable lag or else accept a provisional forecast, to be revised when complete data became available. In contrast, one of the strengths of the current CPI is that it is up-to-date and virtually never revised. Because price indexes are used for several purposes, such as macroeconomic management, adjusting tax brackets, and Social Security payments, it may be desirable to have more than one index: a timely one that is sufficiently accurate for macroeconomic management, and a more accurate but less timely one for other purposes.

Substitution bias within categories is parallel to bias between categories: the current procedure for combining the price increases of individual items in a category is appropriate only if consumers do not make substitutions. Unfortunately, superlative indexes can be used neither to estimate the magnitude of the bias within categories, nor to redress it, because the necessary data on spending patterns are not available at the level of individual items. Instead, researchers have estimated this bias by comparing a geometric index with the fixed-market-basket index, on the grounds that a geometric index approximates a cost-of-living index if goods are moderately substitutable. (A geometric index, like a fixed-market-basket index, requires only beginning-of-period expenditure shares.) The BLS has estimated that a geometric index measures about 0.25 percentage point per year less inflation than the CPI does at the within-category level.

It is open to debate whether all or only part of this 0.25-percentage-point difference reflects actual substitution patterns, because the conditions under which a geometric index actually approximates a cost-of-living index may not hold. These conditions are likely to apply to the more narrow categories in the CPI, such as apples and oranges, where consumers can easily shift their purchases. However, they may not hold for broad categories such as prescription drugs, where purchases are based on doctor's orders and are little affected by prices. A similar problem occurs in categories like "toys, hobbies, and music equipment," which includes dolls, stamps, guitar picks, and grand pianos—items so different that they cannot plausibly substitute for one another. Another obstacle to substitution occurs where goods are normally used together—such as washers and dryers in the laundry equipment category or carburetors and air filters in the "other automobile parts and equipment" category. For these categories the fixed-market-basket index may only slightly overstate inflation and thus come closer to the truth than the geometric mean.

Even for the narrow categories, the bias from using a fixed market basket may be limited. Within these categories (such as between two varieties of apples) commodities may be highly substitutable. But some evidence suggests that for these categories relative price changes are small.

Quality Adjustment

Measuring inflation properly requires distinguishing between changes in the underlying price and changes in quality. The BLS measures quality changes when it can. Some are easy to measure, for example when bakers double the size of their chocolate chip cookies. Others are more difficult but straightforward: for example, optional automobile equipment that later becomes standard, such as air bags or antilock brakes, can be quality-adjusted by its price when it was sold as an option. Quality adjustments generally have a significant effect on price increases as measured by the CPI. For example, the BLS estimates that in 1995 quality adjustment reduced the increase in the CPI by 2 percentage points compared with what it would have been based on listed prices.

The BLS does not adjust for other, more difficult problems because the agency cannot make direct quality adjustments in the absence of quantifiable data. For example, televisions are less likely to need repair than they were a decade ago, and some surgical procedures are more likely to be successful today than in the past. But repair rates for televisions and success rates for surgery cannot be computed until years after the purchase. Several studies on quality adjustment are available; most suggest that BLS methods fail to capture a wide range of quality changes. However, these studies focus on a relatively few categories of the CPI—possibly those where the quality bias is presumed largest—making it difficult to assess the magnitude of the overall quality bias in the CPI.

New Products

New products, such as air conditioners in the 1950s or videocassette recorders in the 1980s, usually decline sharply in price during the first years they are available for sale. But these products are not usually included in the CPI basket until years after their introduction, and so the CPI never records their initial price declines.

Outlet Substitution

Over time, consumers may change their shopping patterns, shifting from high-priced to low-priced outlets, where the quality of service is often lower. Current methods assume that all of the difference in price between high- and low-priced outlets reflects differences in the quality of service. To the extent this assumption is not appropriate, current methods overlook one source of price decline.

To sum up, recent research has identified several possible sources of bias in the CPI. A commission appointed by the Senate Finance Committee recently reported on these sources of bias (Box 2–7). The magnitudes of some of these biases are based on hard estimates around which there is broad agreement. On the magnitudes of other biases, however, consensus has yet to emerge.

Implications of CPI Bias for Other Economic Statistics

The CPI is used as an input for calculating many other economic statistics, and therefore the potential biases in its measurement have consequences beyond our view of inflation. The accuracy of many economic measures is critically dependent on how well we measure price changes. Most of the individual consumption items used in calculating real GDP are deflated by component-level price indexes from the CPI. Most of the biases in the CPI result in an overdeflation of GDP, biasing real output growth downward. (Between-category substitution, however, is handled properly in the national income and product accounts.) Productivity is also calculated from real GDP, so overestimates of CPI inflation would lead us to underestimate productivity growth. The accuracy of many other statistics, such as real median household income and

Box 2–7.—Estimates and Recommendations of the Advisory Commission to Study the Consumer Price Index

An advisory commission appointed by the Senate Finance Committee has estimated that the current CPI overstates inflation by 1.1 percentage points per year. Their estimate of bias is the sum of the following parts:

Source of bias	Estimate of bias (percentage points)
Substitution	
Upper level (between-category)	0.15
Lower level (within-category)	.25
New products and quality change	.60
Switching to new outlets	.10
Total	1.1
Plausible range	.8–1.6

The commission made several recommendations based on its findings. It proposed that the BLS establish a cost-of-living index as its objective in measuring consumer prices. It recommended that the BLS develop two indexes: one to be published monthly and the other annually, with historical revision to the annual index. The annual measure should use a superlative index for aggregation at the between-category level and a geometric index at the within-category level. The monthly index would be called the CPI and should move toward geometric weighting at both levels, with the weights kept as up to date as possible.

The commission also recommended that the Congress provide additional resources to expand the surveys upon which the CPI is based. It further advised that the President and the Congress should reevaluate the indexing provisions in various Federal programs and features of the tax code in light of the commission's estimated bias in the CPI.

real earnings, that are directly converted from nominal values by the CPI would also be affected.

Although removing CPI bias would change some of the details of our views of productivity and income trends, it would not radically alter our views on such fundamental issues as the productivity slowdown that began around 1973 or the increase in income inequality over the past two decades. Although bias in the CPI would mean that real growth and productivity have been higher recently than official measures indicate, that bias would also apply to longer term measures of growth and productivity. To explain away the decrease in productivity growth, the CPI would have to be not merely biased but *increasingly* biased over time. It is certainly plausible that the increased share of the service sector in the economy has made it harder to measure quality, with the consequence that the approximately 2-percentage-point estimate of the slowdown in productivity overestimates the true reduction. Yet it would require an implausibly large increase in CPI bias to explain away the entire slowdown as an artifact of mismeasurement.

Similarly, CPI bias might be depressing measures of real wages, but that does not change the fact that real wages today are growing more slowly than in the 1950s and 1960s. Also, the increase in income inequality described in Chapter 5 is one widely discussed phenomenon that is completely unaffected by CPI measurement: inequality is measured by comparing income between groups; converting to real values is irrelevant, and in any case any bias in the deflator would affect all of the groups equally.

INCOME- AND PRODUCT-SIDE MEASURES OF OUTPUT

Another measurement issue that has a large effect on our assessment of the economy is the difference between two key measures of national output: gross domestic product and gross domestic income. The size of the economy can be measured by adding up either all the output produced (GDP) or all the income generated in producing that output (GDI). In theory these measures should yield the same result, but in practice they differ because of measurement error; this difference is called the statistical discrepancy. Over eight consecutive recent quarters, for example, measured real GDI grew faster than measured real GDP: 3.1 percent versus 2.1 percent at an annual rate from the third quarter of 1994 to the third quarter of 1996.

Which Is More Accurate?

Measurement problems exist on both sides of the accounts. A significant share of the published national income and product accounts estimates consist of extrapolations based on various indicators and trends until the full annual revision, when most of these projections are replaced with more complete and consistent source data. The latest year to have passed through the usual annual revision process is 1994.

The major problem on the output side is the measurement of services consumption, where about 30 percent of reported output is based on projections until the annual revision, and State and local purchases, where the figure is about 25 percent. The measurement problems in services consumption may be getting worse, as sales in such new and rapidly growing areas as casino gambling, cellular telephone service, and on-line services are not fully measured.

On the income side, estimates of several components of nonwage income, especially proprietors' income, are on shaky ground. Unlike the projections on the product side, which are for the most part replaced with more complete source data during the annual revision, the income projections are replaced only with a very long lag or, in some cases, never. For example, the problems with proprietors' income may persist, as such income is chronically underreported, and the correction for underreporting is based on an out-of-date (1988) taxpayer compliance study that has been discontinued.

In several ways the recent behavior of the economy is more consistent with the strength shown on the income side. Several economic relationships are currently misbehaving. Although the errors in each of these relationships are within their historical ranges, together they add up to a suspicion that the product-side measure of GDP is understating real growth:

- According to Okun's law, the unemployment rate is stable when GDP is growing at its potential rate, and falls when GDP is growing faster than its potential. Through the middle of 1994, potential output appeared to be growing a bit over 2 percent per year. Thus the 2.1 percent per year growth between the third quarter of 1994 and the third quarter of 1996 should have resulted in a stable unemployment rate. Instead, the unemployment rate dropped almost 0.4 percentage point per year. The drop in the unemployment rate is, however, perfectly consistent with the growth rate of real GDI over these 2 years (3.1 percent).
- Personal income tax payments in 1996 for the 1995 tax year were far higher than expected by the Treasury or the Congressional Budget Office, yet these estimates were calibrated to the relatively high income-side estimates—suggesting that even more income may have been generated than the official estimates of the Bureau of Economic Analysis indicate.
- The real product wage (hourly compensation deflated by the prices received by producers) usually rises at the same rate as labor productivity growth. But over the last 2 years the real product wage has grown at a 1.8 percent annual rate—much faster than the official measure of productivity, which has grown at only a 0.3 percent annual rate. However, income-side productivity (discussed below) has grown at a more compatible 1.6 percent annual rate over this period.

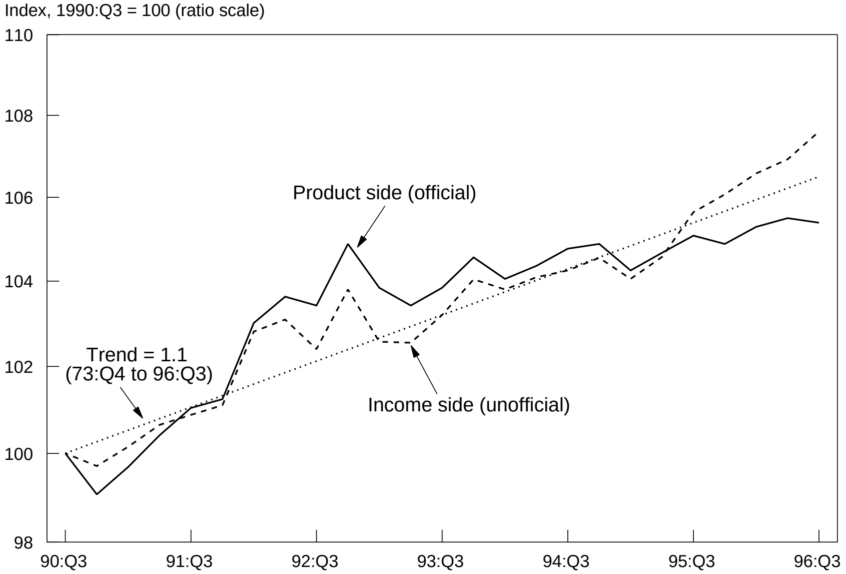
Implications for Recent Productivity Growth

Nonfarm business productivity can be measured using either an income- or a product-side measure of real output. The BLS formerly measured productivity on the income side (except for the advance estimate). Then, in February 1996, the agency changed to a product-side measure, in part to minimize revisions between their advance and their final estimates.

The recent difference between the two measures of productivity growth is dramatic. According to the official (product-side) measure, productivity growth has slowed to only a 0.3 percent annual rate over the past 2 years. In contrast, the income-side measure shows a 1.6 percent annual rate of growth over the same period. Similarly, over the 6 years since the last business-cycle peak, productivity has grown at a 0.9 percent annual rate by the official measure but at a 1.2 percent annual rate on the income-side measure.

The difference between the income- and the product-side measures of output obscures our view of recent productivity growth. The best guess is that productivity has been trending upward at about a 1.1 percent annual rate during the current business cycle. This rate is no different from that measured over the entire post–1973 period (Chart 2–4).

Chart 2-4 **Alternative Measures of Productivity**
Growth in the official measure of nonfarm productivity has been below trend recently, but growth in the income-side measure has been above trend.



Sources: Department of Labor, Department of Commerce, and Council of Economic Advisers.

REVIEW AND OUTLOOK

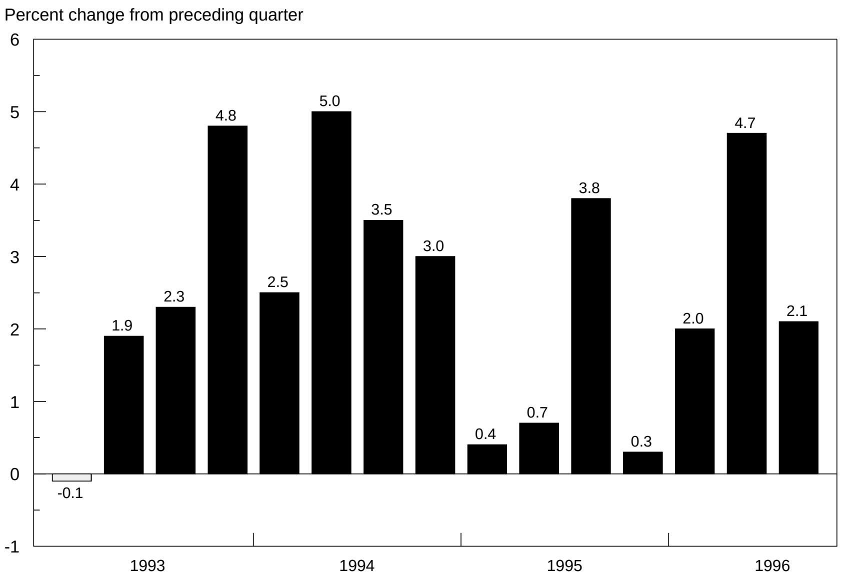
OVERVIEW OF 1996

Economic growth exceeded expectations in 1996. In February 1996 the Administration had forecast that real GDP would grow 2.2 percent over the four quarters of 1996. This forecast was in line with private forecasts at the time. As growth picked up in the first half, that forecast was revised upward to 2.6 percent in July 1996. The consensus of private forecasters now indicates that real GDP expanded 2.8 percent in 1996.

Growth over the last several quarters has been solid, but has fluctuated. Chart 2–5 shows that real growth was weak in the fourth quarter of 1995 and recovered slightly in the first quarter of 1996. Several transitory factors account for that sluggishness: the dispute between the President and the Congress over the budget, which led to two partial Federal Government shutdowns in the fall of 1995 and the following winter; unusually severe weather in January; and a March strike at a major automobile manufacturer. Much of the strong growth in the second quarter of 1996 was directly traceable to the rebound from these factors. Growth moderated in the third quarter to a 2.1 percent annual rate. However, as discussed above, the product- and income-side measures of output diverged: whereas real GDP was estimated to have increased at only a 2.1 percent annual rate in the third quarter, real GDI grew at a 4.2 percent annual rate. Estimates of fourth-quarter GDP are unavailable as this *Report* goes to press, but other data indicate that growth was robust.

Chart 2-5 **Growth in Real GDP**

Despite some fluctuations from quarter to quarter, growth has been solid.

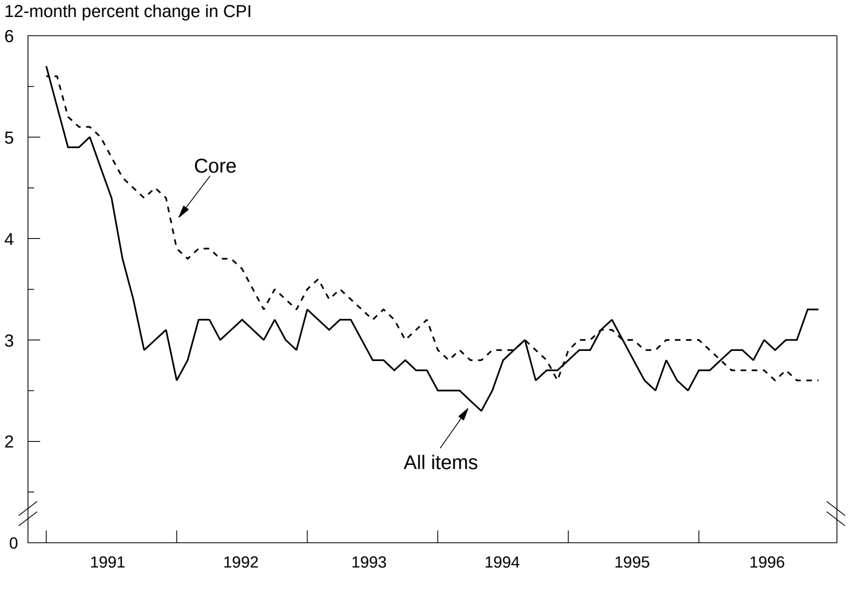


Note: Changes are at annual rates.
Source: Department of Commerce.

After holding fast at around 5.6 percent for all of 1995, the unemployment rate edged down about 0.3 percentage point over the 12 months of 1996. As measured by the *Current Employment Statistics* survey of the BLS, nonfarm employment grew at a brisk pace of 240,000 per month during the first 8 months of the year. But reflecting the deceleration in output in the second half, employment growth moderated to 162,000 per month over the last 4 months of 1996. Since January 1993, payroll employment has increased by 11.2 million.

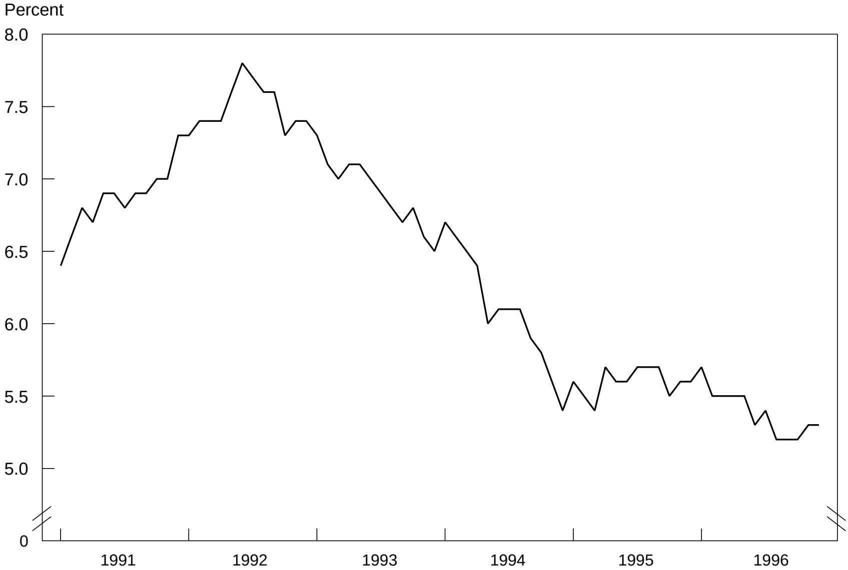
Inflation, as measured by the 12-month change in the CPI, rose in 1996 (Chart 2–6). All of the increase, however, was attributable to the acceleration in food and energy prices. An acceleration in these prices was anticipated in the Administration's forecast. The core CPI, which excludes these volatile components, moved down 0.4 percentage point from its year-earlier pace to 2.6 percent for the 12 months ending in December 1996. This deceleration was somewhat surprising given the decline in the unemployment rate (Chart 2–7) and the strong growth over the first half of the year. But as the earlier discussion of the NAIRU showed, the ability of the economy to sustain low unemployment and low inflation is the best it has been in years.

Chart 2-6 **Consumer Price Inflation**
Excluding the volatile food and energy components, consumer price inflation edged lower in 1996.



Source: Department of Labor.

Chart 2-7 **Civilian Unemployment Rate**
Unemployment fell below 5.5 percent in the first half of 1996 and remained low.



Source: Department of Labor.

Solid growth was achieved in 1996 despite a fiscal policy that has been very restrictive. The standardized-employment deficit (that which would result if the economy were at full employment) as a share of potential nominal GDP has fallen in each of the past 4 years, for a cumulative total of 2.1 percent of potential GDP. As a result, the Federal budget deficit in the 1996 fiscal year fell to only 1.4 percent of actual GDP on a unified-budget basis. Both the President and the Congress are committed to eliminating the deficit; hence fiscal policy should continue to tighten in the intermediate term. In 1997, however, the standardized-employment deficit as a share of potential GDP is expected to rise slightly from 1996.

With inflation contained and the economy expanding at a sustainable pace, the Federal Reserve kept the Federal funds rate flat after lowering it in January 1996. Over the course of the year, long-term interest rates ebbed and flowed with the pace of economic activity, rising from early in the year through the summer, declining in the fall, and then rising again toward the end of the year.

Private Domestic Spending

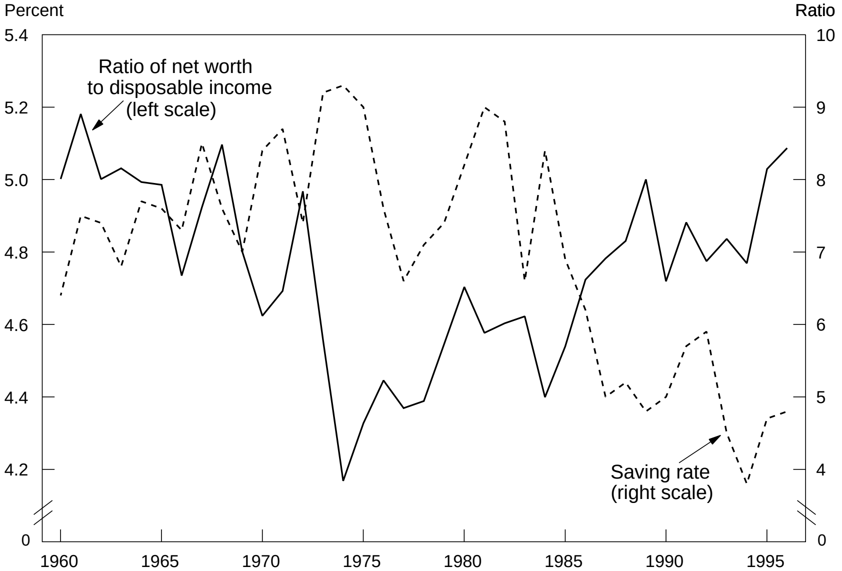
Consumption expenditures grew at a 3.4 percent annual rate in the first half of 1996, with growth concentrated in durable goods, which expanded at nearly a 10 percent pace. Purchases of new automobiles grew rapidly in the first quarter, and expenditures on other durable goods also picked up substantially in the first half. Spending on durables was probably stimulated not only by lower interest rates, but also by the rise in household wealth due in part to the very substantial increase in stock prices. The high level of mortgage refinancing activity last winter may also have contributed to the pickup by reducing households' mortgage payments.

Consumer spending growth slowed substantially in the third quarter. Again the effect was most dramatic for consumer durable goods, partly reflecting the effects of higher intermediate- and long-term interest rates. In addition, higher debt burdens and rising delinquency rates on consumer loans may have led some households to limit spending and some banks to tighten lending standards. However, the discussion of the financial condition of households earlier in this chapter suggests that concerns about consumer distress may have been exaggerated. Consumer fundamentals remain positive: consumer confidence is high, income growth is healthy (real disposable personal income expanded at a better than 3 percent rate over the four quarters ending in the third quarter of 1996), and the growth in household liabilities has been offset by rapid growth of assets. Moreover, as Chart 2–8 shows, the saving rate tends to be low when the ratio of net worth to income is high—at least over long periods; this ratio is at its highest level since 1969. Thus, it is likely that the third-quarter slowdown in consumption will prove largely temporary. Indeed, advance retail sales for the fourth quarter indicate a pickup.

The general soundness of the household sector is affirmed by the market for new homes. Residential investment expanded rapidly through the first half of 1996 despite harsh winter weather early in the year and rising long-term interest rates through the late winter and spring. In part, the effect of higher rates may have been offset by a substantial shift of purchasers to adjustable-rate mortgages, which offer considerable upfront savings. Moreover, despite the rise in rates, measures of housing affordability were the highest they have been since the 1970s. Residential investment did fall in the third quarter, perhaps reflecting the continued rise in interest rates over the summer. However, residential construction appears to have rebounded in the fourth quarter: new home sales were well maintained through November, and inventories of unsold new homes were low relative to sales. Long-term interest rates declined in the fall, with the rate on conventional mortgages retracing about half of its rise earlier in the year. Housing starts, after declining in September and October, increased sharply in November, although they fell back again in December.

As it has been over most of the expansion, private fixed investment was a bright spot in 1996. Investment in producers' durable equipment was particularly robust, growing at a better than 13

Chart 2-8 **Wealth and Saving**
The saving rate tends to fall when the ratio of net worth to income rises, but 1995 and 1996 did not conform to this pattern.



Note: Data for 1996 are for third quarter; household net worth estimated by Council of Economic Advisers.
Sources: Department of Commerce and Board of Governors of the Federal Reserve System (unpublished data).

percent annual rate through the third quarter, with computer investment especially strong. In part this strength is likely to have reflected firms' efforts to upgrade their equipment in a period of increasing demand, substantial profits, and rapid technological change.

In contrast, business investment in structures rose more modestly in the first three quarters of 1996, as this sector continued to grow out from under the large excess supply resulting from overbuilding in the 1980s. Construction in the office segment rebounded in the second and third quarters following declines in late 1995 and early 1996. Construction of industrial buildings fell off in early 1996, although it rebounded late in the year.

Investment in nonfarm business inventories declined in late 1995 as firms took steps to work off excess stocks. This effort continued into 1996, and with the March auto workers' strike cutting automobile inventories sharply, overall inventories declined in the first quarter. Inventory investment remained low in the second quarter, probably reflecting the unexpected strength in demand and, perhaps, further efforts by some firms to limit stocks. Inventory investment picked up in the third quarter, however, as final sales slowed and some firms may have moved to replenish stocks. Yet despite the third-quarter rise, inventory-to-sales ratios remained historically lean, suggesting that the increase should not cause a drag on production into 1997.

International Influences

The Nation's trade deficit expanded in the first three quarters of 1996, riding a combination of strong domestic demand and weaker activity in foreign markets. In real terms the deficit on trade in goods and services (on a national accounts basis) reached a 2-year low in the fourth quarter of 1995. The deficit expanded in each of the three subsequent quarters. This increase reflected a large rise in imports. Real imports of goods and services over the first three quarters rose at a 10.0 percent annual rate, while exports increased at only a 2.2 percent rate. In 1996, slower growth in economic activity in our major foreign markets negatively affected U.S. exports. Although weak growth in our trading partners was the main cause of the increased deficit, the strength of the dollar against the yen and the major continental European currencies may also have played a small role.

In Canada, our largest export market, growth has been slowing for the last 2 years: the Organization for Economic Cooperation and Development estimates growth for 1996 at 1.5 percent, down from 2.3 percent in 1995 and 4.1 percent in 1994. This slowdown, which was partly due to slower growth in government spending, was partly responsible for slower growth of U.S. exports to Canada: merchandise exports grew by only 3 percent in the first half of 1996, down from 11 percent in 1995. The Canadian economy picked up in the third quarter, and U.S. exports rose substantially from 1995 levels.

In the European Union, our second-largest export market, GDP growth slowed to an estimated 1.6 percent in 1996, about a percentage point lower than in 1995. Among the major EU countries, investment spending was weak in France and Germany, while government consumption expenditures contracted in Italy. Low consumer confidence also held back aggregate demand in Continental Europe. As a result of this weaker economic performance, growth in U.S. exports to the European Union slowed sharply in the first 11 months of 1996.

Growth is estimated to have slowed in Singapore and South Korea, because of oversupply in the market for certain electronic goods, and to have stayed virtually unchanged in Hong Kong and Taiwan. U.S. exports to these four markets expanded only 2 percent in the first 11 months of 1996, after growing at a rapid pace in 1995.

Activity in some other key export markets picked up in 1996. Japan saw substantial growth for the first time since 1991, although it was concentrated in the first quarter. Growth for all of 1996 is estimated to have been 3.6 percent, after 4 years of annual growth averaging less than 1 percent. U.S. exports to Japan expanded by a healthy 6 percent in the first 11 months of 1996, although this was below the strong pace in 1995. This partially reflects fluctuations in the value of the yen, which peaked at about 80 to the dollar in April 1995 and has since depreciated over 40 percent, making imports from the United States more expensive for Japanese residents.

Mexico pulled out of its severe 1995 recession last year, with estimated growth of 4.0 percent following a 6.9 percent contraction in 1995. Reflecting this turnaround, U.S. merchandise exports to Mexico expanded 21 percent in the first 11 months of 1996, after contracting sharply in 1995.

Although the growth rates of our trading partners have probably been the more important determinant of our trade balance, the level of the dollar might have had an influence as well. The dollar, measured against the currencies of the other major industrialized countries, fell to its lowest levels in almost 3 years in mid-1995. Since then it has appreciated by around 33 percent against the yen and around 11 percent against the deutsche mark. This pattern of depreciation followed by appreciation may explain part of the slowing in imports in late 1995 and the increase in 1996. However, exchange-rate movements were probably not the dominant cause of recent increases in the trade deficit for three reasons. First, although the dollar has moved against some currencies, its effective exchange-rate index, when weighted according to trade shares, has appreciated only 6 percent in real terms since mid-1995. Second, a lag of 2 or more years generally is seen before an import price change has its full effect on volumes. Third, the initial effect of an appreciation is generally to lower import prices, and therefore lower the dollar value of import spending (the valuation, or J-curve, effect), not to raise it.

Fiscal Policy

The Federal Government budget deficit for fiscal 1996 was $107 billion, a reduction of $57 billion from 1995. The deficit has now declined in each of the last 4 years, for the first time since the 1940s. Last year's unified deficit was just 1.4 percent of GDP, the smallest deficit by this measure since 1974. The U.S. general-government (combined Federal, State, and local) deficit was the smallest among the large industrialized countries. Moreover, the budget last year showed a primary surplus (defined as revenues less outlays other than net interest) of $134 billion, the largest ever, and the largest as a share of GDP since the 1950s. Indeed, the budget would have been in balance last year were it not for the interest due on the debt run up between 1981 and 1992. The low level of the budget deficit in recent years is reflected in the ratio of publicly held Federal debt to GDP, which has stabilized since 1993, after nearly doubling over the previous 12 years.

Part of this improvement in the deficit reflects the economic expansion. As output and employment grow, tax revenues are boosted and some types of expenditures, especially transfers to low-income households, decline. But policy changes have been important as well. As already noted, the standardized-employment deficit, as a share of potential GDP, which is measured holding the level of economic activity constant, has fallen for 4 straight years and was lower last year than it has been since 1974.

The recent progress on the deficit reflects in large part the increases in revenue and reductions in government spending due to the Omnibus Budget Reconciliation Act of 1993. The Administration has worked hard to increase the efficiency of government and has reduced the Federal workforce substantially. By October 1996, Federal civilian employment (excluding the Postal Service) had declined by more than 250,000 since January 1993. The Federal workforce is smaller than it has been in 30 years, and smaller as a share of the total workforce than it has been since the 1930s.

As a result of disagreements between the White House and the Congress over the budget, two partial Federal Government shutdowns occurred in late 1995 and early 1996. Although these closures temporarily interrupted the disbursement of some Federal spending, the overall stance of fiscal policy was largely unaffected because most of the spending was later restored. The shutdowns did, however, have a small, temporary effect on the level of real GDP because a large proportion of Federal workers did not work during the shutdowns. A related disagreement over passage of an extended increase in the debt ceiling on Federal borrowing authority forced the Secretary of the Treasury to take a number of extraordinary actions to ensure that the United States did not default on its debt obligations for the first time in its history. The debt ceiling bill was not passed until March, and the final spending bills for fiscal 1996 were not passed until April, more than 6 months after the start of the fiscal year.

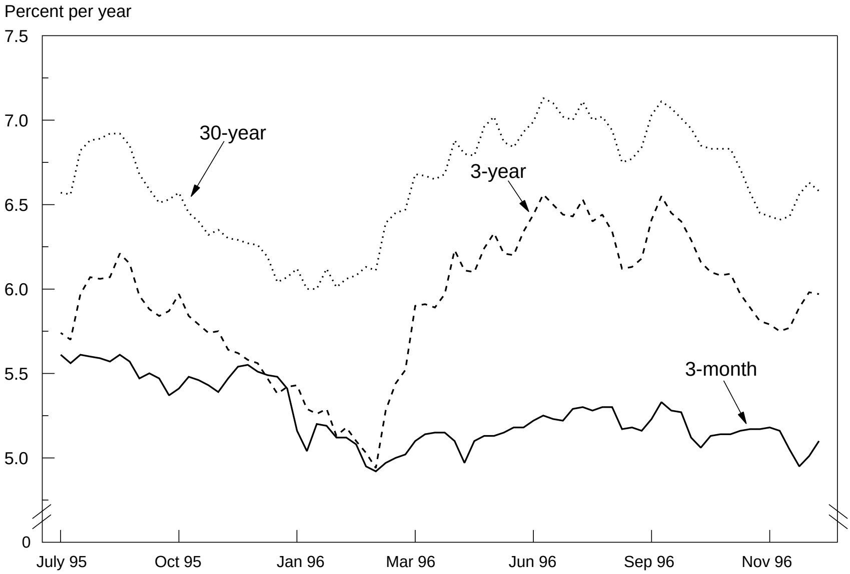
Monetary Policy and Interest Rates

Monetary policy changed little during 1996. The Federal Reserve cut the Federal funds rate by one-quarter percentage point at the end of January 1996. This cut, following a similar-size cut in December 1995, brought the funds rate down to about 5.25 percent, where it remained for the rest of the year. Other short-term market rates declined with the Federal funds rate early in the year but drifted slightly higher over the late spring and summer. Evidently the pickup in economic growth was seen in the markets as eliminating the possibility of further policy easing, and later led many investors to expect tighter monetary policy. Indeed, the minutes of the Federal Open Market Committee meetings held in the summer and fall show that, although the committee chose to leave policy unchanged, the members did see the risks as skewed toward an intensification of inflation pressures, to which they would have had to react with tighter policy. However, expectations of Federal Reserve action subsided as economic growth moderated without a change in monetary policy and as new data continued to show few signs of a pickup in inflation. As a result, short-term rates retraced some of their earlier rise. By year's end, expected future Federal funds rates, as measured by prices in the Federal funds futures market, were about flat, suggesting that market participants no longer thought that policy was likely to change in the near term.

Intermediate- and long-term rates followed the same general pattern as short-term rates over the course of the year, but the movements were considerably larger (Chart 2–9). By late February, intermediate- and long-term rates began to rise, and throughout the spring and early summer stronger-than-expected economic data pushed rates higher. By July the yield on 30-year Treasury bonds had risen more than a percentage point from its January low. Later in the year, when economic growth moderated and concerns about possible Federal Reserve policy action eased, longer term rates fell; they rebounded, however, to finish 1996 more than half a percentage point higher than at the start of the year.

Chart 2-9 **Yields on Treasury Securities**

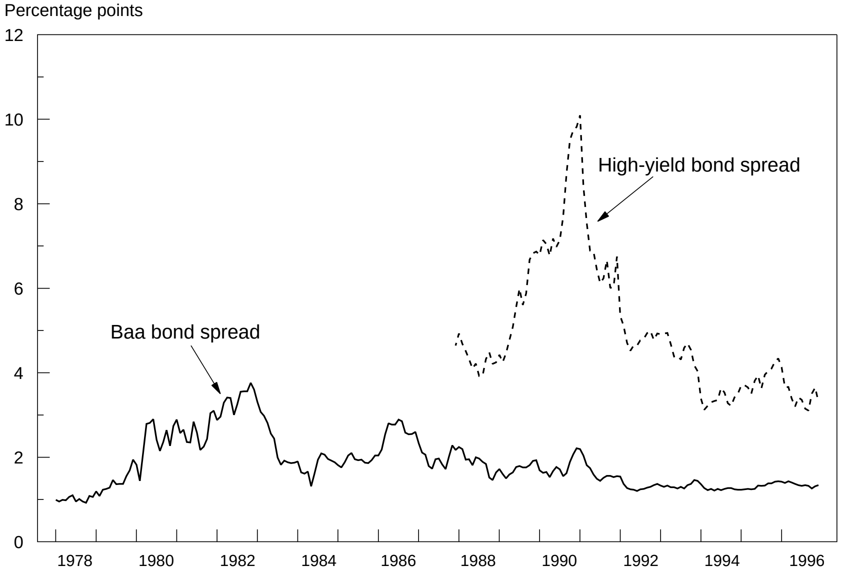
Intermediate- and long-term interest rates fluctuated with the pace of economic activity, rising between February and September, easing somewhat in the fall, but then picking up again.



Source: Department of the Treasury.

Rates on corporate bonds followed those on Treasury securities, as risk spreads remained quite narrow (Chart 2–10). The average spread between the rate on Baa-rated corporate bonds and that on 30-year Treasury bonds changed little over the course of the year, ending up at about 1.35 percentage points, fairly narrow by historical standards. The spread between rates on the high-yield bonds issued by riskier firms and those on comparable Treasury securities narrowed considerably in early 1996, following a steady increase in 1995. This spread, which was about 3.5 percentage points at year's end, is also quite narrow by historical standards. Similarly, spreads between rates on bank loans to businesses and market rates remained narrow as banks reported heavy competition from other banks and, to a lesser extent, nonbank lenders.

Chart 2-10 **Bond Yield Spreads**
Risk spreads between corporate bonds and Treasury securities remained narrow in 1996.



Note: Baa spread is the difference between yields on Baa-rated corporate bonds and 30-year Treasuries. High-yield spread is the difference between yields on the Merrill Lynch High-Yield Master II index and 10-year Treasuries.
Sources: Department of the Treasury, Moody's Investors Service, and Merrill Lynch.

These narrow spreads suggest that the markets believe the risk of corporate default to be unusually low, reflecting in part the robust profits enjoyed by U.S. firms in 1996. Indeed, in contrast to some measures of household stress, measures of business financial difficulties remain quiescent. Delinquency and charge-off rates for business loans at banks are near their recent lows and well below their levels in the mid-1980s. Similarly, the number of business bankruptcies remains quite low.

Strong profitability helped boost broad stock market indexes to successive record highs over the course of the year despite the rise in longer term interest rates. Indeed, the rise in stock prices outran corporate profits, so that the ratio of stock prices to recent earnings was elevated at year's end, but still below its 1992 and 1993 peaks. The runup in stock prices could reflect a number of factors. Investors may anticipate further rapid growth in earnings and dividends, or a decline in real interest rates as further progress is made in reducing the budget deficit. Investors may also have gradually reduced the compensation they demand for bearing the risk associated with holding stocks, because they expect the current, more stable, low-inflation environment to persist, or because of the influence of well-publicized research showing that equities have consistently outperformed other financial investments over long holding periods. The rise in stock prices may also reflect the impact of financial market innovations that have led to an unprecedented channeling of savings into the equity market through pension and mutual funds.

OUTLOOK AND FORECAST

One way to project the future is to extrapolate the recent past. For such a calculation it matters how fast real GDP has grown during the current expansion. Measured on the product side, real output has grown at a 2.0 percent annual rate since the business-cycle peak in the third quarter of 1990, while the income-side measure has grown at a 2.3 percent annual rate (Table 2–3, line 13). As already discussed, it seems that the truth is likely to be closer to the income-side measure.

Components of Long-Term Growth

It is useful to begin the discussion of the long-term outlook with the components of aggregate supply. Whether one considers income- or product-side measurement more accurate, it remains true that real output has decelerated during the current business cycle from its pace between the business-cycle peaks in 1973 and 1990. The deceleration is more than explained by the slowing of both of the two components of labor force growth, the working-age population and the labor force participation rate.

Since 1989 the participation rate has been virtually flat, in sharp contrast to the rising participation rates of the 1970s and 1980s. This stalling of the overall participation rate is due mainly to a deceleration in the participation rate for women; the participation rate for men has fallen no faster than in earlier years. The flattening of the female participation rate is probably the result of long-term demographic trends. The child dependency ratio (the number of children per woman aged 20 to 54) fell between the late 1960s and the early 1980s, echoing the earlier pattern in the birth rate.

TABLE 2–3.—*Accounting for Growth in Real GDP, 1960–2003*

[Average annual percent change]

Item	1960 II to 1973 IV	1973 IV to 1990 III	1990 III to 1996 III		1996 III to 2003
1) Civilian noninstitutional population aged 16 and over	1.8	1.5	1.0		1.0
2) PLUS: Civilian labor force participation rate [1]	.2	.5	.0		.1
3) EQUALS: Civilian labor force [1]	2.0	2.0	1.0		1.1
4) PLUS: Civilian employment rate [1]	.0	–.1	.1		.0
5) EQUALS: Civilian employment [1]	2.0	1.9	1.0		1.1
6) PLUS: Nonfarm business employment as a share of civilian employment [1 2]	.1	.1	.3		.1
7) EQUALS: Nonfarm business employment	2.1	2.0	1.3		1.2
8) PLUS: Average weekly hours (nonfarm business)	–.4	–.3	.1		.0
9) EQUALS: Hours of all persons (nonfarm business)	1.6	1.7	1.4		1.2
10) PLUS: Output per hour (productivity, nonfarm business)	2.8	1.1	.9	[3] (1.2)	1.2
11) EQUALS: Nonfarm business output	4.5	2.8	2.3	[3] (2.7)	2.4
12) LESS: Nonfarm business output as a share of real GDP [4]	.3	.1	.3	[3] (.4)	.1
13) EQUALS: Real GDP	4.2	2.7	2.0	[3] (2.3)	2.3

[1] Adjusted for 1994 revision of the Current Population Survey.
[2] Line 6 translates the civilian employment growth rate into the nonfarm business employment growth rate.
[3] Income–side definition.
[4] Line 12 translates nonfarm business output back into output for all sectors (GDP), which includes the output of farms and general government.

Note.—Detail may not add to totals because of rounding.
Except for 1996, time periods are from business–cycle peak to business–cycle peak to avoid cyclical variation.

Sources: Council of Economic Advisers, Department of Commerce, and the Department of Labor.

The decline in this ratio allowed an increasing fraction of women to enter the labor force between the mid-1970s and the mid-1980s, but its subsequent flattening in the late 1980s has limited further increases in participation.

The participation rate rose 0.15 percentage point in 1996, an acceleration from its recent stagnation, but below its pace in the 1970s and 1980s. Both male and female participation rates contributed to the acceleration in 1996. The male participation rate flattened out, after years of decline, while female participation rose 0.32 percentage point—faster than its recent pace but more slowly than in earlier decades.

Table 2–3 shows the contributions of population, labor force participation, and productivity growth to output growth, both historically and as projected. In the past, the contributions of these supply-side factors have varied substantially across time periods, and in ways that have tended to be offsetting. During the 1960–73 period, output growth was fueled by a rapid increase in both the working-age population and productivity. When productivity slowed after 1973, the slowdown was partially offset by an increasing rate of labor force participation. Growth in the working-age population was dramatically slower after 1990, but this slowdown was partly countered by stabilization in the length of the workweek.

The last column of Table 2–3 illustrates how the Administration's forecast of 2.3 percent average annual GDP growth for the next 7 years is consistent with projections of 1.0 percent growth in population, 0.1 percent growth in participation, and 1.2 percent growth in productivity.

As noted, the participation rate has turned up in the past year and may even rise faster to the extent that the recently enacted welfare reform legislation moves greater numbers of former recipients into the paid labor force. Measured productivity is expected to grow a bit faster than in the recent past, as further deficit reduction boosts investment, and as planned adjustments to the CPI, which will affect the measurement of productivity, are implemented.

As of December 1996 the current expansion had lasted 69 months, making it the third longest in the postwar record. There is no foreseeable reason why this expansion cannot continue. As last year's *Report* argued, expansions do not die of old age. Rather, most recent expansions have ended because of rising inflation, financial imbalances, or inventory overhangs. None of these conditions exists at present. As discussed earlier in the chapter, the financial condition of households is sound, inventories remain lean, and inflation remains under control.

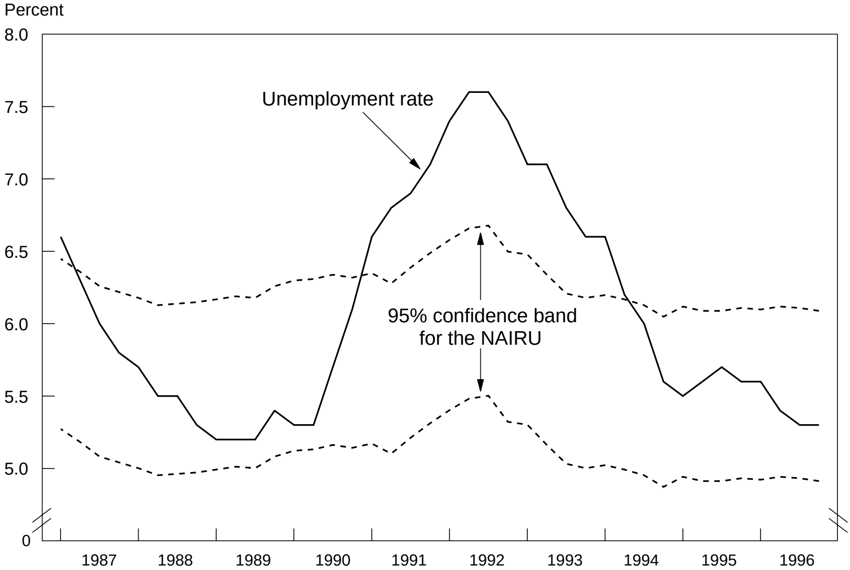
Inflation Considerations

The unemployment rate has fallen during the past 6 months, although it remains within a range that most economists would view as consistent with stable prices (Chart 2–11). The chart shows the band of uncertainty about the natural rate, and this band is wide. Despite the recent decline in unemployment, inflation remains stable, and economists are gradually revising down their consensus estimate of the natural rate.

Some have pointed to the acceleration in wages and salaries over the past year as proof that labor markets are tight enough for inflation to begin rising. However, wages and salaries are only one part of labor costs; the other component, hourly benefits, has slowed dramatically over the past few years. Most of the slowing has been in health insurance premiums. As a result, total hourly compensation for private industry workers as measured by the employment cost index (ECI) increased only 2.9 percent during the 12 months ending in September 1996—not much different from its rate during the previous 2 years. This pace for hourly compensation, less the 1.1 percent trend for productivity growth, implies that trend unit labor costs are increasing at a 1.8 percent annual rate. As this is far below the pace of recent price inflation, labor costs are not putting any upward pressure on prices (Chart 2–12).

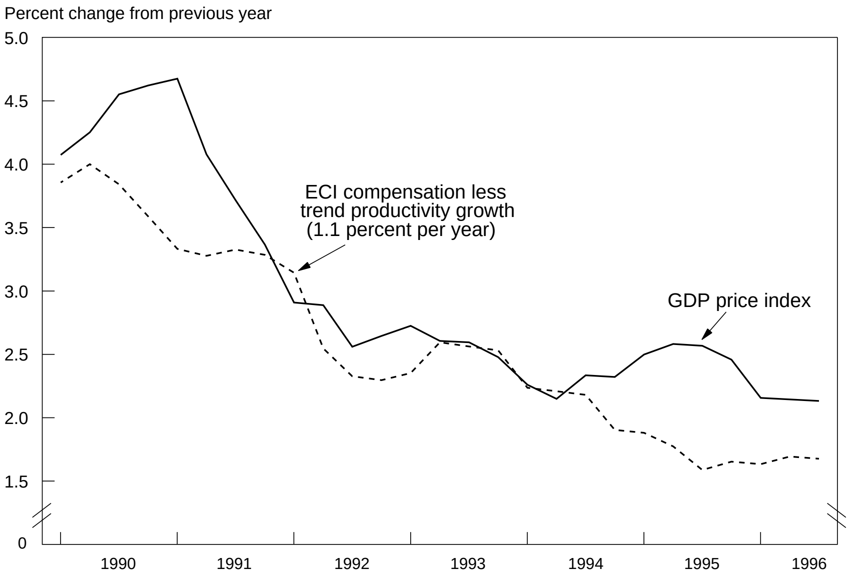
This reduction in the rise of employers' health premiums may be temporary. Therefore it is worth entertaining the notion that wages and salaries are the best measure of the trend in compensation. In this case, trend unit labor costs would increase by the 3.3 percent

Chart 2-11 **Unemployment and the NAIRU**
For the past 3 years, the unemployment rate has been within the (wide) band of reasonable estimates of the NAIRU.



Source: Calculations based on Department of Labor data.

Chart 2-12 **Inflation and Trend Unit Labor Costs**
Inflation has been held down recently by low increases in trend unit labor costs.



Sources: Department of Commerce and Department of Labor.

rate of ECI wage growth seen recently, less the 1.1 percent trend rate of productivity growth discussed earlier, resulting in an estimate of 2.2 percent. This differs little from the recent rate of inflation as measured by the price index for GDP (which is lower than CPI inflation). Wage increases are thus high enough so that workers share in productivity increases, but low enough that they do not put upward pressure on inflation.

But the case against a near-term outbreak of inflation is stronger. First, as already noted, slow growth in hourly benefits has been holding down labor costs and may continue to do so. Second, corporate profits are very high; profits as a share of GDP during the first three quarters of 1996 were higher than for any three-quarter period since the 1960s. Thus, profits could be a temporary buffer preventing accelerating wages from being immediately passed through to accelerating prices. In sum, with continued growth of productivity, with sustainable wage growth and with high profits as a buffer, the U.S. economy has room for a sustained increase in real wages—without rising inflation.

The rate of inflation in 1996 has been elevated by rapid increases in food and energy prices. These prices are not expected to grow any faster than other prices over the next year, and so the rate of increase in the CPI is expected to edge lower. Also holding down measured inflation over the next 2 years, by about 0.3 percentage point per year, are methodological changes that are already under way. The BLS estimates that by fixing a problem encountered when new stores are rotated into the sample, CPI inflation will be lowered by 0.1 percentage point. (This fix was completed in July 1996.) The forecast assumes that new procedures for calculating the hospital services price index will lower CPI inflation by about another 0.1 percentage point. Beginning in 1997, the BLS will collect transaction prices where available rather than list prices for hospital services, and will reorganize their categories so that inpatient and outpatient surgery might be substitutable. Finally, in 1998 the BLS will also replace its current market basket, based on 1982–84 data, with one based on 1993–95 data. Usually the items with the smallest price increases receive the largest increase in weights. The forecast assumes that the incorporation of the new market basket will lower CPI inflation by 0.1 percentage point. The importance of information-processing equipment alone will rise by enough to lower CPI growth by 0.02 percentage point per year, assuming prices for such goods continue to fall at a 10 percent annual rate as they have recently.

The Near-Term Outlook

With inflation not a problem, the economy can continue to move forward at a sustainable rate. Aggregate demand is likely to be sufficient. Consumption, which is two-thirds of the economy, should be supported by a combination of high income growth, high consumer confidence, and a high level of household net worth relative to income. Business investment in equipment probably will continue to react to the rapid improvements in technology—especially in computers and telecommunications equipment. However, it seems likely that equipment investment will not continue to grow at the torrid rate of the past few years. The market for business structures should remain on track as vacancy rates continue to decline. Finally, net exports were a drag on economic growth in 1996, as growth in many of our trading partners lagged behind our own. But there are signs that foreign growth is picking up, and exports should soon reflect this.

TABLE 2–4.—*Administration Forecast*

Item	Actual		1997	1998	1999	2000	2001	2002	2003
	1995	1996							
	Percent change, fourth quarter to fourth quarter								
Nominal GDP	3.8	[1] 5.0	4.6	4.7	5.0	5.0	5.0	5.0	5.0
Real GDP (chain–type)	1.3	[1] 2.8	2.0	2.0	2.3	2.3	2.3	2.3	2.3
GDP price index (chain–type)	2.5	[1] 2.2	2.5	2.6	2.6	2.6	2.6	2.6	2.6
Consumer price index (CPI–U)	2.7	3.2	2.6	2.7	2.7	2.7	2.7	2.7	2.7
	Calendar year average								
Unemployment rate (percent)	5.6	5.4	5.3	5.5	5.5	5.5	5.5	5.5	5.5
Interest rate, 91–day Treasury bills (percent)	5.5	5.0	5.0	4.7	4.4	4.2	4.0	4.0	4.0
Interest rate, 10–year Treasury notes (percent)	6.6	6.4	6.1	5.9	5.5	5.3	5.1	5.1	5.1
Nonfarm payroll employment (millions)	117.2	119.5	121.1	122.4	123.9	125.6	127.4	129.1	130.8

[1] Estimates.

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

In 1997 and 1998 the Administration projects a 2.0 percent increase in output (Table 2–4), slightly below the potential pace, but in line with the consensus. The balance of the Administration's forecast is built around a 2.3 percent growth rate of potential output. The Administration does not think that 2.3 percent real growth in the long term is the best the United States can do. This projected pace reflects a conservative estimate of the effects of Administration policies to promote education and investment and to balance the budget. The outcome could be even better. But the Administration's forecast is used for a very important purpose: to project Federal revenues, outlays, and the Federal deficit. For this purpose the most important virtues are credibility and conservatism, and the Administration has remained close to mainstream thinking on these issues. The Administration's forecasting record is good, and the projections here are close to the consensus of private forecasters.

CHAPTER 3

Economic Challenges of an Aging Population

IN 1993 THE ADMINISTRATION'S first job was to get the economy moving. The deficit reduction package enacted that year helped to reduce interest rates and restore business confidence. Since then the Federal deficit has been cut by more than half, and the economy has expanded robustly. The next task is to complete the work of deficit reduction. In 1995 and 1996 the Administration and the Congress both put forward plans to balance the Federal budget, but could not reach agreement at that time. The Administration is now submitting another proposal to balance the budget while protecting important national priorities. Legislation should be enacted this year to accomplish this goal.

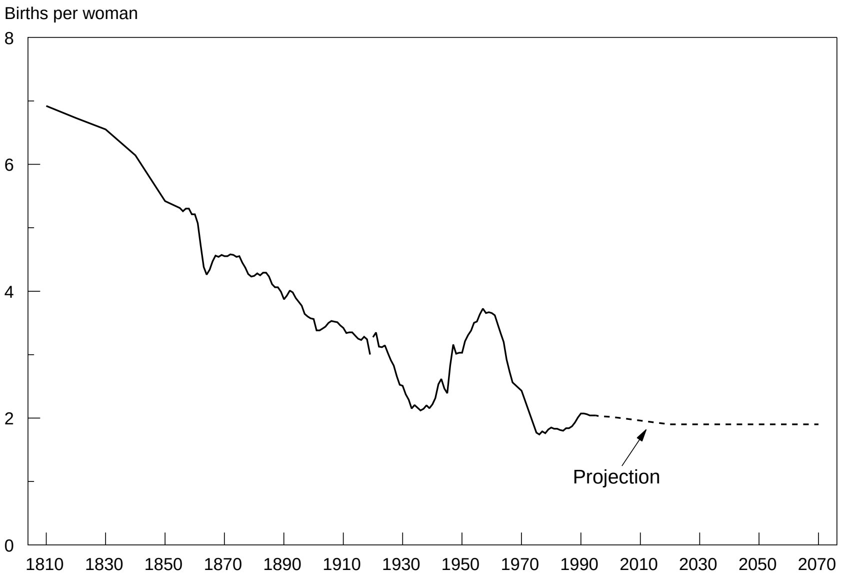
Balancing the budget in the medium term, however, is not the end of the story. The United States faces two important economic challenges now and after the turn of the century. First, without changes in current policy, as the baby-boom generation retires, entitlement spending, particularly for health care, will rise rapidly and budget deficits will increase. Second, the Nation needs to raise its overall rate of saving to improve long-term economic growth. These two issues are closely related. The President believes that action on these issues can come about only from a carefully considered, bipartisan process. This chapter discusses these challenges.

THE AGING OF THE POPULATION

The proportion of the elderly in the U.S. population will rise sharply in coming decades. This aging of the population is the inevitable result of a long-term decline in fertility rates and an enormous improvement in life expectancy.

Over two centuries, the fertility rate—the number of children that an average woman will bear over her lifetime—has declined fairly persistently, from 7.0 in 1800, to 3.6 in 1900, to roughly 2.0 today (Chart 3–1). The post-World War II baby boom and the immediately preceding baby bust, associated with the Great Depression and World War II, were temporary aberrations in a long-run trend of declining fertility. As the baby boom ended, the fertility rate resumed its decline, reaching a low point of 1.7 in 1976 before rebounding to roughly 2.0 in recent years.

Chart 3-1 **Total Fertility Rate**
The total fertility rate has been falling steadily over time, with the exception of the post-World War II baby boom.



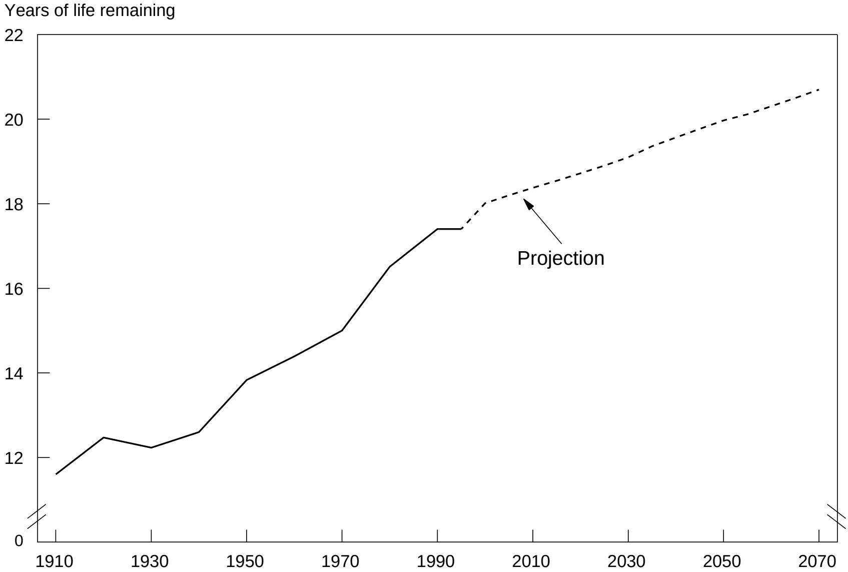
Note: The total fertility rate is the average number of births per woman during childbearing years. Data prior to 1920 are for whites only.
Sources: Data prior to 1920: Coale, A. and M. Zelnick (1963), "New Estimates of Fertility and Population in the U.S.;" 1920-1969: Department of Health and Human Services; 1970-2070: Social Security Administration.

The sequence of baby bust and baby boom thus has no impact on the elderly dependency ratio (the ratio of elderly Americans to those of working age) projected for 2070 and beyond; it does, however, alter the path to that ultimate ratio, and this has important implications for the medium term. The baby bust will produce a relatively constant ratio of retirees to workers over the next 15 years, as the small cohort born in the 1930s and 1940s reaches retirement, but the baby boom will produce a rapid swelling of the ranks of retirees after about 2010, as the large cohort born in the period from 1946 through 1964 retires.

Gains in life expectancy have been just as dramatic as the decline in fertility but have shown less fluctuation over time. In 1935, when Social Security was enacted and the retirement age was set at 65, life expectancy at 65 was about 12 years for men and 13 years for women (Chart 3–2). Today those figures are 15 years and 19 years, respectively, and by 2070 they are projected to be 18 and 22. The probability that a young adult just entering the workforce will survive to collect benefits has also risen dramatically. In the mid-1930s the probability of a 20-year-old man surviving to age 65 was only 58 percent, and that for a woman 66 percent. By the mid-

1990s these fractions had increased to 77 percent and 87 percent, respectively, and by 2070 they are projected to rise to 86 percent and 92 percent.

Chart 3-2 **Life Expectancy at Age 65**
Life expectancy has risen steadily and substantially throughout the 20th century. This rise is expected to continue.



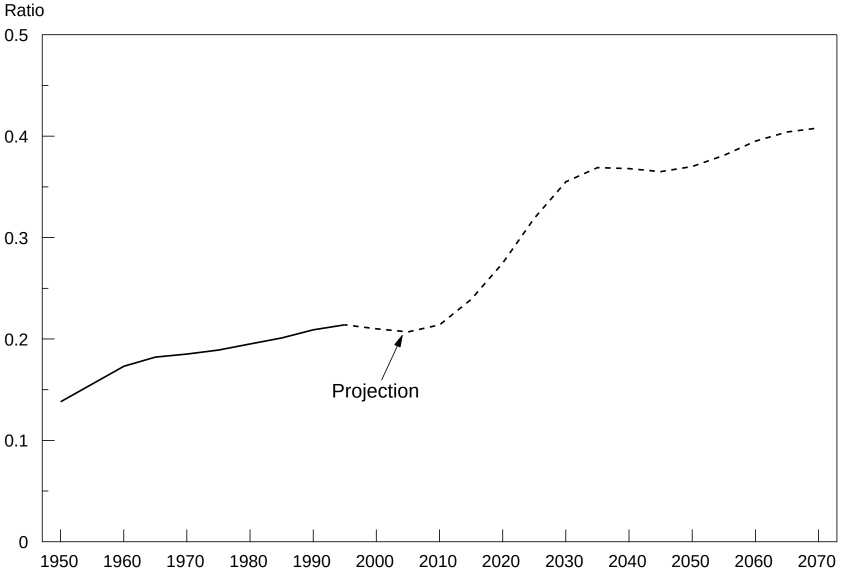
Sources: Data prior to 1995: Department of Health and Human Services; 1995-2070: Social Security Administration.

Declining fertility and mortality together produce a permanent increase in the elderly dependency ratio (Chart 3–3). Most of the increase in this ratio occurs by the time the last of the baby-boomers retires around 2030; the ratio drifts only slightly higher thereafter.

THE IMPACT OF DEMOGRAPHICS ON NATIONAL SAVING

Demographics can affect future national saving through effects on personal saving and on public saving. The first effect is captured in the simple life-cycle model. In this model younger people are expected to save some of their income in anticipation of retirement, and older people are expected to dissave—that is, to spend more than their income. According to this theory, the shift in the elderly dependency ratio should produce a dramatic increase in dissavers relative to savers, substantially reducing national saving. Even if the elderly do not dissave but only save at a lower rate than the

Chart 3-3 **Dependency Ratio of the Aged**
The ratio of retirees to individuals of working age will remain roughly constant through 2010, rise rapidly until 2030, and then increase slightly thereafter.



Note: The dependency ratio is population age 65 and over divided by population age 20-64.
Source: Social Security Administration.

working-age population, these demographics would be expected to affect national saving.

Given the already low U.S. saving rate, this prediction of the life-cycle model is a source of concern. The evidence, however, suggests that demographics may not be as important a determinant of saving patterns as the theory suggests. For example, several studies of individual behavior have been unable to document dissaving among the elderly. And during the 1980s the aggregate saving rate was quite low, even though the life-cycle model says that it should have risen because the increase in the proportion of the population in its prime saving years swamped the increase in the proportion that was old. Some simulations predicted that the personal saving rate should have been as high as 12.8 percent in the 1980s; instead it averaged 4.3 percent. Economists have been at a loss to explain much of the behavior of personal saving during the 1980s. (In fact, it is difficult enough to explain variation among households at a given point in time. One study using a variety of variables and models was able to explain only 7 percent of the total variation in the level of saving among households reported in the Federal Reserve's Survey of Consumer Finances.)

However uncertain the impact of demographics on *private* saving, its likely impact on *public* saving—unless significant changes are made in programs for the elderly—is clear. Growing deficits in the

Social Security program and the increasing costs of Medicare and Medicaid will tend to raise Federal outlays—that is, they will reduce government saving for any given level of revenue. Some economists have argued that lower government saving might cause an offsetting rise in private saving, as individuals anticipate an eventual rise in taxes due to the government's chronic failure to save. However, evidence for such a large offset is lacking. Thus, the most likely effect of demographically driven expenditure increases would be a net reduction in national saving.

THE IMPACT OF DEMOGRAPHICS ON THE BUDGET

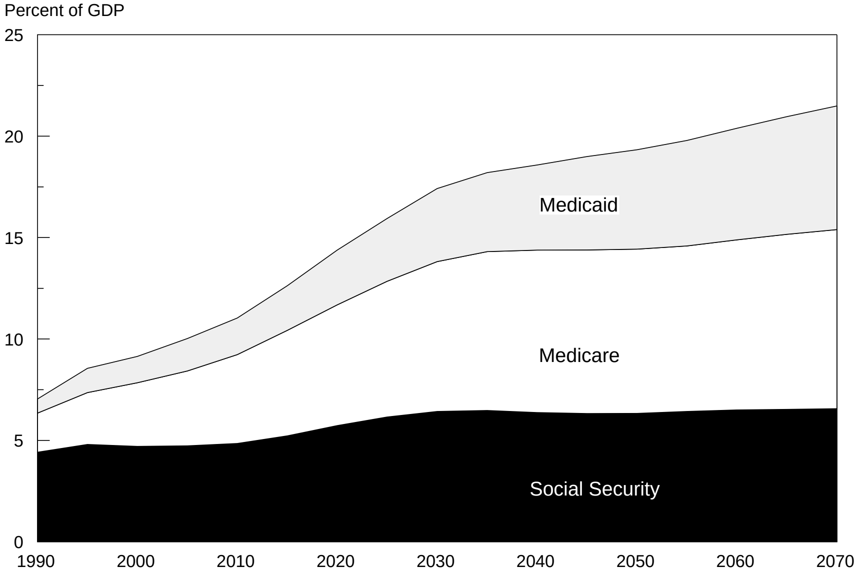
Without changes in policy, the costs of government programs that provide the elderly with retirement income and insure their health and nursing home care will rise rapidly as the number of elderly increases. In addition, social insurance taxes and contributions are likely to be pinched somewhat, because the number of people working—and paying taxes—will be growing more slowly.

The largest increases in programs benefiting the elderly are projected to be for Medicare and Medicaid. The Trustees of the Medicare program project spending to increase from 2.7 percent of gross domestic product (GDP) in 1996 to 8.1 percent in 2050. The Office of Management and Budget projects that under current policy Federal Medicaid outlays will rise from 1.2 percent of GDP to 4.9 percent over the same period. And the Social Security Trustees estimate that spending will grow from 4.7 percent of GDP to 6.3 percent between 1996 and 2050. This is a smaller increase, both absolutely and relative to current levels, than that projected for the health programs. Nevertheless, in combination, these forecasts suggest a more than doubling of expenditures on these key programs, from under 9 percent of GDP to roughly 19 percent in 2050 (Chart 3–4). By 2070 expenditures for the three programs are expected to reach 22 percent of GDP.

By contrast, Federal revenues have historically been around 18 percent of GDP. Hence, absent any changes, expenditures on Social Security, Medicare, and Medicaid could consume all government revenues by 2050 and exceed them thereafter.

The effect of these rising expenditures on the unified Federal deficit—the broadest measure of the deficit, which includes these programs and all other revenues and spending—is even more powerful than these numbers suggest: deficits in the early years must be funded with borrowing, and the interest on that borrowing will require even larger outlays in later years. Most long-term budget projections based on current policy show the deficit mounting to around 20 percent of GDP by 2050, while the debt held by the public reaches a level somewhere between two and three times GDP.

Chart 3-4 **Growth in Entitlement Spending**
Federal expenditures on Medicare and Medicaid are projected to increase rapidly over time as a percent of GDP, with slower projected growth in Social Security spending.



Note: Medicaid expenditures after 2050 are projected by the Council of Economic Advisers.
Sources: Social Security Administration, Department of Health and Human Services, Office of Management and Budget, and Council of Economic Advisers.

In fact, no one believes that the economy could withstand such large deficits and increases in debt, with their adverse effects on interest rates and growth. Something will be done before the deficits and debt reach these levels. The only questions are what will be done, and when. Delay has two consequences. First, as already noted, borrowing to cover shortfalls in the near term boosts later deficits as interest charges accumulate. Second, any reform that is adequate to the problem will need to be phased in gradually, to allow citizens time to adjust their personal financing plans accordingly. Thus, the most useful exercise is to examine the financial situation of each individual program separately and explore the various approaches to restoring balance.

SOCIAL SECURITY

Of the several financing problems to be solved, that of Social Security is the most tractable. Without changing current law in any way, Social Security can pay full benefits well into the next century. Thereafter, without any changes in the structure of the program, funding will be sufficient to cover about 70 percent of benefits even 75 years from now. Nevertheless, the program faces a funding gap over the 75-year projection period and permanent imbalance after 75 years. The challenge is to restore balance to the program, raise national saving, and allow Social Security to continue to fulfill its many missions.

For almost 60 years, Social Security has provided elderly Americans with a basic level of retirement security. Currently, about 90 percent of "aged units"—married couples one of whom is aged 65 or older, and nonmarried persons aged 65 and over—get Social Security benefits. These benefits are the only form of retirement pension for about half of these households. Social Security is particularly important for the low-income elderly. For example, more than three-quarters of the money income (which includes earnings from work and interest, as well as retirement benefits) of households in the bottom two income quintiles comes from Social Security benefits. The comparable shares are about a quarter for the highest income quintile and about half for the second-highest.

Social Security benefits keep some 15 million people above the poverty line and millions more from near poverty. As recently as 1959, when these data began to be collected, the poverty rate among the elderly was more than twice that for the rest of the adult population. Since then this rate has trended lower and is now slightly below that for other adults. Social Security has been a key factor behind this drop. Moreover, although the benefit schedule is progressive and some benefits are subject to partial taxation, Social Security benefits are not subject to an explicit means test. The lack of means testing allows many people to add other resources to their Social Security benefits and achieve a level of income not too far below that when they were working.

Social Security also provides protection against loss of family income due to disability or death. Roughly 5 million disabled adults and 3 million children receive monthly benefits; about half the children receiving benefits have lost one or both parents. In short, Social Security is an extremely valuable program that has raised the living standards of millions of Americans and markedly increased their sense of economic security by providing fully indexed annuities in the event of retirement, disability, or death of a breadwinner.

THE SIZE OF THE PROBLEM

In their annual report, the Trustees of the Social Security system publish projections of the system's revenues and outlays for the next 75 years. Three sets of projections are made, corresponding to three sets of assumptions about future levels of system costs. The intermediate cost projections in the 1996 report show that, from now through 2011, the Social Security system will bring in more money than it pays out. That is, payroll tax receipts plus receipts from income taxation of Social Security benefits will exceed outlays.

By that time the baby-boomers will have begun to retire, and growth in the labor force will slow, reflecting the decline in the fertility rate that occurred after 1960. The resulting increase in the ratio of retirees to workers will cause the outlays of the system to rise above taxes. In the relatively short period from 2012 through 2018, the annual interest income on assets in the Social Security trust funds will, together with tax receipts, produce enough revenues to cover benefit payments. After that, if no action is taken, total income will fall short of benefit payments, but the shortfall can be covered by drawing down trust fund assets until the funds are exhausted in 2029. Of course, the exhaustion of the trust funds does not mean the end of Social Security benefits. Even if no changes are made on the tax or the benefit side of the equation, payroll and benefit taxation at current rates will provide enough money to cover 75 percent of promised benefits in 2040 and nearly 70 percent in 2070.

The financing of Social Security is projected to put increasing pressure on the Federal budget before the trust fund balances are exhausted, however. In the near term, Social Security reduces the annual unified budget deficit. The amount of that reduction and the number of years it encompasses depend on the budgetary treatment of interest payments from the Treasury to the Social Security trust funds. For example, Social Security income, excluding interest, exceeded Social Security outlays by $30 billion in fiscal year 1996. Thus, the effect of Social Security's *current* operations was to lower the deficit by $30 billion. This operating surplus remains at about that level for about a decade, then drops sharply. As noted earlier, by 2012 Social Security outlays exceed taxes. However, in 1996 the Treasury also paid more than $36 billion in interest to the Social Security trust funds, and this interest can be viewed as payments that the Treasury would have had to make to the public were it not for *past* Social Security surpluses. If they are included in the calculation, one can say that the current and past operations of the Social Security system shaved $66 billion from the unified budget deficit in fiscal year 1996. By this measure, the deficit-reducing effect of Social Security is projected to rise to more than $100 billion in less than a decade, remain above that level for more than 10 years, and then drop rapidly. Regardless of the treatment of intragovernmental transfers, by 2019 outgo exceeds income. Between 2019 and 2029, the subsequent shortfalls can be met by drawing down the investments in the trust funds, but this puts pressure on the unified deficit. This pressure gets progressively worse over time. Using the broader measure of Social Security's contribution to the unified deficit, Social Security currently reduces the deficit by nearly 1 percent of GDP, but by the time the trust funds are exhausted in 2029 it will boost the deficit by nearly 1.5 percent of GDP.

When the Social Security surpluses in the early years are combined with the deficits in the later years, projected income falls short of projected benefit payments over the 75-year forecast period as a whole. Projecting the size of this shortfall over such a long horizon is very difficult. One measure provided by the Social Security Trustees, based on their intermediate assumptions, is that the 75-year deficit amounts to 2.19 percent of taxable payroll over that period. One way to think about a deficit of this magnitude is in terms of the hypothetical tax increase that would be required to eliminate it. That is, if the gap over the next 75 years were to be financed solely by raising taxes, today's combined employee-employer tax rate of 12.4 percent would have to be raised to 14.6 percent right away. No one proposes to meet the deficit in this way, but it provides a way to think about the solvency problem.

Social Security's long-term financing problem is somewhat more complicated than just described. Under current law the tax rate is fixed while costs as a percentage of payroll are rising, and this pattern produces surpluses now and large deficits in the future. As a result of this profile, each passing year adds another year with a large projected deficit to the 75-year projection period. Assuming nothing else changes, this phenomenon increases the projected 75-year deficit slightly (by 0.08 percent of taxable payroll with today's projected deficits) each year.

How Reliable Are the Projections?

Projecting costs for the next 75 years is necessarily an uncertain exercise. Imagine actuaries and economists in the Harding Administration trying to project fertility rates, life expectancies, wages, and so on from 1922 until the present. They would have had no idea about the coming Great Depression, World War II, or a host of other demographic, economic, and social developments. Nevertheless, such long-range planning is a useful exercise. Precisely because Social Security is such a long-run program, major demographic trends are important factors in its solvency. Short-run fluctuations in, say, fertility or mortality rates will not fundamentally alter the long-run financial picture. The usefulness of the exercise depends crucially, however, on the reasonableness of the underlying assumptions and on the ability to modify them as new information becomes available. The actuaries' calculations involve numerous variables, but two demographic assumptions and one economic relationship are key.

On the demographic side the primary issues are fertility and mortality; fluctuations in immigration and emigration are expected to have only modest effects. Fertility tells us how many people will be in the labor force paying taxes, and mortality how many people will be receiving benefits and for how long. As already noted, the total fertility rate is currently about 2.0 children over a woman's lifetime. Demographers generally believe that U.S. fertility rates, like those in most other industrialized nations, will remain low. The intermediate estimates in the 1996 Trustees' report are based on the assumption that the total fertility rate in the next 75 years will be 1.9 children per woman, slightly below its recent level. The consensus is that mortality will continue to decrease; the question is how fast. For the 75-year projection, life expectancy at 65 is projected to reach 18.4 years for men by 2070 and 22.2 years for women.

On the economic side the important variables relate to changes in wages and prices. The system operates more or less on a pay-as-you-go basis, whereby taxes currently received from workers are used to pay old-age, survivors, and disability insurance (OASDI) benefits to current beneficiaries. In 1997, workers and their employers each pay taxes of 6.2 percent on the first $65,400 of earnings. Benefits are calculated by applying a progressive benefit formula to an average of the beneficiary's historical earnings, which have been indexed to reflect overall increases in average wages. After benefits are awarded, they are adjusted annually to keep up with inflation. In this type of pay-as-you-go system, a key relationship is the difference between the rate at which tax revenues rise (which, assuming no change in tax rates, is equivalent to growth in covered wages) and the rate at which benefits increase after retirement or disability (that is, the rate of increase in the consumer price index, or CPI). This difference is called the real-wage differential.

The assumption about the size of the real-wage differential is often viewed as the most controversial in Social Security forecasting, as the actual value has varied dramatically over time. During the 20-year period before 1973, when productivity growth was high, the real-wage differential averaged 2.2 percentage points. From 1973 to the present, however, it has averaged 0.3 percentage point. The question is how much weight to put on recent years as compared with the pre–1973 period. The Trustees have roughly split the difference and adopted a long-run assumption of 1.0 percentage point. What if they are wrong? By how much would a real-wage differential of 0.6 percentage point (the average for the 1980s and 1990s), rather than the assumed 1.0 percentage point, raise the 75-year deficit? Sensitivity analysis shows that such a miscalculation would increase the 75-year deficit by roughly 0.5 percent of taxable payroll. In other words, a relatively large error in this assumption, taken in isolation, would worsen long-term Social Security financing by a relatively modest amount during the next 75 years.

Of course, if a large number of assumptions all turn out optimistic, or all pessimistic, their cumulative effect could be quite large. The Trustees' reports show the results for two extreme cases: a "high-cost" alternative in which all of the main assumptions take pessimistic values, and a "low-cost" projection that assumes optimistic values. According to the 1996 report, under the high-cost alternative, the 75-year balance is in deficit by 5.67 percent of taxable payroll, more than twice the 2.19 percent deficit under the intermediate assumptions. In contrast, the balance under the low-cost assumptions is a small surplus of 0.46 percent of taxable payroll.

These two projections give a sense of the level of uncertainty about the long-term projections. Nonetheless, a 1994–95 Technical Panel to the Quadrennial Advisory Council on Social Security evaluated each individual assumption and concluded that, "The 'intermediate' projection . . . for the OASDI program provide[s] a reasonable evaluation of the financial status. Although the Panel suggests that modifications be considered in various specific assumptions, the overall effect of those suggestions would not significantly change the financial status evaluation."

In 1983 the Congress enacted legislation based on the recommendations of the National Commission on Social Security Reform. The Commission's reforms were intended to keep the Social Security system solvent for 75 years, with positive trust fund balances through 2060. Only a year later, however, the Trustees began to project a small deficit. The projected deficit has grown more or less steadily since then, to its current level of 2.19 percent of taxable payroll. How did this happen?

Three factors account for most of the projected increase in long-range costs. The first one was discussed earlier. That is, as time passes, the 75-year valuation period ends in a later year, so that more of the higher cost outyears are included in the projections. Including more deficit years raises the 75-year deficit. The second is that the disability caseload grew much faster than anticipated, primarily because of legislative, regulatory, and judicial action that made it easier for individuals to qualify for disability benefits. The third source of the post–1983 deficit reflects the net effect of one-shot changes in the methodology used in the projections.

Changes in economic and demographic assumptions are not on balance responsible for the reemergence of the deficit since 1983. Most of the discussion of Social Security's financing problems is couched in terms of the demographic shifts that will occur as the baby boom ages. Indeed, the numbers are impressive: whereas today 3.3 workers support each retiree, by 2040 that number drops to 2.0; it stabilizes around 1.8 in 2070. The problem with this story is that the projected decrease in the ratio of workers to retirees, frequently cited as the cause of the emerging deficit, is little changed from 1983. This decrease was fully incorporated in the estimates at that time. Demographic developments since 1983 have been, if anything, positive—at least from the program's perspective. Life expectancy is lower and birth rates have been higher than were assumed in 1983, thereby reducing long-range costs. The positive impact on long-range costs from changing demographic assumptions was roughly offset, however, by changing economic assumptions. In particular, the Trustees gradually lowered the assumed rate of real wage growth as it became clear that the slower trend in productivity growth was likely to continue. On balance, the economic and demographic changes have roughly offset one another.

RECOMMENDATIONS OF THE QUADRENNIAL ADVISORY COUNCIL

The Quadrennial Advisory Council on Social Security was charged in 1994 with finding ways to eliminate the current deficit in the OASDI program. It released its report in January 1997 after more than 2 years of deliberations. Instead of offering a single set of consensus recommendations, this 13-person panel split and presented three very different visions for the future of the Social Security system.

All three are designed to restore 75-year balance, stabilize the trust funds in the 76th year, and address the decline in the rate of return to Social Security contributions that has occurred as the system has matured. It is important to remember that, although the Advisory Council distilled these three specific sets of options, many alternatives are possible. The report characterizes the three alternatives as the "Maintenance of Benefits," "Individual Accounts," and "Personal Security Accounts" proposals. The following descriptions are summaries of the three proposals and should not be viewed as endorsements of particular approaches.

The Maintenance of Benefits Proposal

The Maintenance of Benefits (MB) plan is designed to eliminate the Social Security deficit without altering the basic nature of the program. Roughly half the savings comes from long-discussed—but never accepted—proposals. These include extending coverage to State and local government employees hired after 1997 who under current law would not be covered by Social Security; making Social Security benefits taxable to the extent that they exceed worker contributions (this would make the program comparable in that respect to other contributory defined-benefit plans); lengthening the averaging period for the Social Security benefit calculation from 35 years to 38 years; and incorporating technical corrections in the CPI made by the Bureau of Labor Statistics in 1995 and 1996, which reduced the upward bias in measured inflation by about 0.2 percentage point per year. These proposals are expected to eliminate about half of the 75-year deficit.

To reduce the rest of the financing gap MB proponents suggest three new proposals. The first is to explore the possibility of investing 40 percent of trust fund assets in corporate equities on a graduated basis beginning in 2000. The implications of such a change are discussed in greater detail below. Second, the plan would redirect into the OASDI fund the share of revenues from the taxation of Social Security benefits that are currently paid into the Medicare hospital insurance trust fund, phasing in the change between 2010 and 2019. Finally, to correct the tendency of the fund to drift out of balance, this plan would, if necessary, increase the payroll tax by 0.8 percentage point each on employers and employees starting in 2045.

The Individual Accounts Proposal

The Individual Accounts (IA) plan has two components: it would make certain changes to balance the existing program, and it would create a system of supplementary required savings accounts for all participants. The first part of the plan begins with three proposals that are also in the MB plan: coverage of newly hired State and local government employees, taxation of benefits that exceed contributions, and incorporation of the CPI changes. In addition, the IA plan would raise the normal retirement age to 67 faster than under current law and index it to longevity thereafter. Finally, benefits for middle- and upper-income recipients would be cut by roughly 20 percent to allow the current 12.4 percent payroll tax rate to cover the program's 75-year cost.

The mandatory savings portion of the IA plan would increase the employee's payroll contribution by 1.6 percentage points to fund government-administered individual accounts, beginning in 1998. Proponents of the IA proposal recommend that the funds in these accounts be allocated by workers to a relatively small number of government-managed index funds, which would provide a variety of investment alternatives at low cost. At retirement, the savings would be paid out as an annuity, with payouts adjusted for inflation, and added to the regular Social Security benefit. Total retirement benefits would thus depend on the returns achieved by the savings accounts.

Supporters of the IA plan argue that it would directly boost funding for retirement (although they acknowledge that individuals might reduce their non-Social Security saving to some extent). In terms of national saving, they view it as superior to increased funding through the Social Security trust funds because they fear that annual surpluses in the trust funds would simply be used to cover deficits in the non-Social Security part of the budget. They also believe that adding an individual account component is a way to introduce equity investments without raising all the issues associated with direct investment of Social Security in stocks, as suggested in the MB plan. It should be noted that under the proposal the accounts would be held by the government, and the government would constrain the range of investment alternatives in the individual accounts.

The Personal Security Account Proposal

The Personal Security Account (PSA) plan calls for a more extensive change in the structure of the system, phased in over a period of time. It would divert 5 percentage points of the 12.4 percent payroll tax into mandatory "personal security accounts." Unlike the individual savings accounts described above, which would be held by the government and annuitized upon retirement, these accounts could be placed with private investment companies, and individuals would have broader choice over how the savings are paid out during retirement. The remaining 7.4 percentage points of the payroll tax would pay for a flat retirement benefit for full-career workers equivalent to $410 a month in 1996 (and indexed for future wage growth beginning in 1998) and for reduced disability and survivor benefits. The $410 flat benefit by itself would provide an income about one-third below the poverty line for an elderly person living alone; the proceeds of the personal accounts would supplement the flat benefit.

The plan also would reduce the financing gap through many of the same features as the MB and IA proposals: it would expand coverage to newly hired State and local government workers, alter the taxation of benefits, speed up the increase in retirement age and index it to longevity (as in the IA proposal), and incorporate adjustments made to the CPI.

Social Security has, for the most part, operated on a pay-as-you-go basis, with benefits coming from workers' current contributions rather than from accumulated trust fund savings. Therefore moving to personal accounts to the extent provided for in the PSA plan would require the handling of substantial transition costs. Today's younger workers not only would have to support those already retired or nearing retirement, but would also have to contribute to a savings account for themselves. The PSA plan spreads these costs over 72 years, paying for them with a tax equal to 1.52 percent of payroll during this period. Because a level tax rate is used to finance the transition, the plan is underfunded in the early years and overfunded in the later years. This smoothing of the transition costs requires that the trust funds borrow roughly $2 trillion in 1995 dollars from the Treasury between now and 2035, repaying this debt with the proceeds of the 1.52 percent tax thereafter.

Supporters of the PSA proposal claim three main advantages over the others. First, their proposal would lead to greater national saving and investment by fully funding in advance a major component of the Social Security system. Second, it would avoid the potential for politicizing the investment decisions that they believe could arise with direct trust fund investment in equities. Third, they believe that private accounts would increase confidence in the system.

ISSUES FOR FURTHER STUDY

The Advisory Council's three proposals differ on a variety of dimensions and raise a host of issues that need to be considered. These issues include:

- the social insurance that Social Security provides in addition to retirement benefits
- the issue of defined benefits versus defined contributions
- the effect of Social Security on national saving
- the desirability of further changes in the normal retirement age
- the rate of return on Social Security contributions (the "money's worth" issue), especially for younger workers
- the risks and benefits of investing a part of the Social Security trust funds in equities
- the relative importance of other structural features of the Social Security system, and
- other considerations.

Social Insurance

Social Security plays an important role not only in providing retirement pensions but also in offering social insurance features that are of great value to both individual households and the Nation. The design of the reforms will determine the extent to which the system can continue to provide progressive benefits and other social insurance components.

At the beginning of our careers none of us know whether we will be financially successful or will have to struggle to make ends meet, or whether we will die early and leave behind a family, or become disabled, or live long into retirement. Social Security has an important redistributive dimension, whereby those with low lifetime incomes receive higher returns on their contributions than their higher paid counterparts. Social Security was intended to free the elderly from poverty, and in that it has made great progress (see Chapter 5). Social Security also offers protections against other risks. For example, it provides income for disabled workers and benefits to deceased workers' families. Public attitudes toward maintaining these protections will play an important role in evaluating the Advisory Council's proposals and other options.

Defined Benefits Versus Defined Contributions

The current Social Security system is a defined-benefit plan, whereby the insurer—in this case the government—guarantees a benefit based on a prescribed formula. Under the MB proposal Social Security would continue to be a defined-benefit plan, but under the IA plan, and to an even larger degree under the PSA plan, a portion of Social Security would become a defined-contribution plan. A defined-contribution plan is one in which the insurer prescribes periodic contributions, and the size of the benefit depends on the size of the contributions and the returns they earn.

Proponents of a move toward a defined-contribution arrangement cite several possible advantages. First, they assert individuals would be more directly involved in the investment of their funds, which may allow them to make investment choices that more closely match their preferences for risk and other investment features. Second, they believe that by creating a more direct link between contributions and benefits, defined-contribution plans may alleviate some labor market distortions of the current system. Finally, proponents argue that giving workers ownership rights over their contributions reduces political uncertainty surrounding the future level of benefits.

Critics of this approach claim that the primary result of a shift toward defined-contribution plans would be to transfer risk from the government to the individual. Payments under this system would depend on the performance of the investments selected. Individuals might opt for all low-yielding investments and end up with much less than anticipated, or load up with high-risk assets and be forced to claim benefits at a market low. In addition, critics claim that returns on contributions would be hurt by relatively high administrative costs: the Advisory Council estimates that administrative costs for PSAs would be about 1 percent of invested assets annually, as opposed to just 0.1 percent for the IA plan accounts and less than 0.01 percent for the MB plan. Some critics are also concerned that, if participants are not required to annuitize their withdrawals, some might underestimate the amount of money they need over their retirement years and use the funds for other purposes. Private annuities should help alleviate this problem, but so far the market is underdeveloped, in part because of adverse selection problems (see Box 3–1 later in this chapter). Finally, one of the major arguments cited in favor of defined-contribution plans in the private sector is portability, but Social Security already follows workers from employer to employer.

The Effect of Social Security on National Saving

When thinking about the impact of the Social Security system on national saving, it is useful to consider three time periods: the system's startup phase, the current mature system, and the future.

The Startup. The Congress enacted the Social Security legislation in 1935. Payroll taxes were first collected in 1937, and the first monthly benefits were paid in 1940. In 1939 the Congress made a series of decisions that slowed the buildup of reserves, and the system has operated mostly on a pay-as-you-go basis since then.

This meant that the first generation of retirees received benefits far in excess of their tax payments. According to the life-cycle model, whereby individuals or households plan to consume all their income and wealth over their expected lifetimes, such an increment to lifetime income would increase consumption and reduce saving. That is, workers would perceive that they have received a wage increase in the form of a future annuity, and they would choose to consume part of that increase in the present. To increase their current consumption, they would have to either reduce saving or increase borrowing. Lower personal saving, without any offsetting accumulation of reserves within the Social Security system, would be expected to reduce national saving and leave future generations with a lower capital stock than they otherwise would have had.

A great many other things were happening in the economy at the same time Social Security was introduced; therefore isolating the program's effect on national saving is a daunting task. This might explain in part why a thorough review of the literature shows no compelling evidence of a sharp decline in saving in the wake of the introduction of Social Security. On the other hand, several plausible explanations are possible for the lack of any impact on saving. The first is that Social Security may have changed retirement expectations at the same time that it increased lifetime income. That is, before Social Security workers may have expected to work until they died, but *after* Social Security was enacted retirement at age 65 became the norm. To the extent that Social Security encouraged people to retire earlier, they may have chosen to save over a shorter working life for a longer retirement. This retirement effect would have increased personal saving. Similarly, before Social Security most elderly people lived with their children; after Social Security they were in a position to maintain their own households. The increased demand for independent living in old age could also have increased saving. Finally, many individuals save little or nothing at all, with or without Social Security. The only way they could have increased current consumption in response to the program's introduction would have been through borrowing. But these same individuals are likely to have had low or moderate incomes; as such, they may have been unable to borrow enough to achieve their ideal distribution of consumption over time. For such individuals, the introduction of Social Security would have left savings unaffected, dampening the effect on aggregate saving.

The Mature Pay-As-You-Go System. The existence of a mature pay-as-you-go Social Security system is one of many factors influencing the national saving rate. The permanent effect of a pay-as-you-go system on saving is determined primarily by its initial impact on saving and the capital stock; that impact then tends to be perpetuated through time. The permanent effect on the saving rate is thus likely to be small if the initial effect was small; similarly, the permanent effect is likely to be substantial if the initial effect was large. In addition, there is no reason to believe that the effect—whatever its size—will be exacerbated over time. Of course, it is still the case that a transition from a pay-as-you-go to a funded system could be expected to lead to some increase in the national saving rate and the capital stock.

The Future. Although the introduction of a pay-as-you-go Social Security system may not have had a discernible effect on national saving or the capital stock because of a variety of mitigating factors, moving toward a funded system could increase saving. This increase would reflect the lowered consumption of workers in the "transition generation," who pay the taxes to support benefits for the elderly while also saving for their own retirement. Even though the resulting increase in the saving rate is temporary, the higher capital stock is permanent. Once the transition to a fully funded system is complete, the saving rate is likely to drop back to near its level before the shift.

Prior to the question of whether particular changes in the Social Security system will increase national saving, however, is a more basic question: is this the best way to raise saving, or should it be done through other means—for example, through reductions in the non-Social Security budget deficit? Even if it is determined that changes to the Social Security system are the best way to boost national saving, that decision does not resolve the issue of how best to structure the program. The effect on national saving results from shifting Social Security further from a pay-as-you-go toward a funded system. This can be done through the trust funds—net of any offsetting effect on the non-Social Security portion of the Federal budget—or through individual accounts.

Raising the Retirement Age

Under current law, the normal retirement age is scheduled to increase in two steps from 65 to 67 years. It will rise gradually to age 66 for workers who attain age 62 in 2005, remain at age 66 for 11 years, and then start rising again to 67 for workers who reach 62 in 2022. Two of the Advisory Council's three proposals would raise the normal retirement age to 67 more quickly than scheduled under current law and then index it for increases in longevity thereafter.

The rationale for this change is that, since life expectancy has increased, so should the length of the work life. As was noted earlier, since Social Security was enacted in 1935, life expectancy at age 65 has increased by 3 years for men and 6 years for women. Moreover, these life expectancies are projected to rise by a further 3 years for both men and women by 2070. Proponents of a more rapid rise and indexation of the normal retirement age argue that a portion of these increases in longevity should be matched by additional years in the workforce. Increasing the retirement age would ease the pressure on Social Security financing by offsetting some of the increase in the elderly dependency ratio caused by the aging of the population.

Opponents of raising the retirement age offer two main arguments. First, greater longevity has not so far been accompanied by an increase in years worked; indeed, people are retiring earlier and earlier. Therefore, we should wait to see how people accept the currently scheduled increase to age 67. Second, opponents are concerned that accelerating the change in the retirement age would hurt those who are forced by poor health or lack of employment opportunities to retire before 65. The law already provides for an actuarial reduction in benefits of 20 percent for those who retire at age 62; this reduction will rise gradually to 30 percent with the scheduled increase in the normal retirement age to 67. Increasing the retirement age beyond 67 would reduce the age–62 benefit further still.

Two key issues emerge here. The first is empirical: how many people who retire at age 62 would find it a serious hardship to extend their work life? A preliminary analysis of early retirees shows them falling into two groups. One consists of relatively prosperous individuals with some wealth, who tend to be in good health. The other is made up of less wealthy, less healthy individuals, some of whom have irregular preretirement work histories. Raising the retirement age for the first group creates few problems; raising it for the second may well produce hardship. The second issue, therefore, is how to protect low-income individuals with no work possibilities. Those who cannot work because of physical disability might be eligible for disability insurance. Of course, a shift of early retirees to the disability insurance program would reduce the savings realized from the higher normal retirement age. A variety of options are possible, but any proposal to increase the retirement age should consider those unable to work the additional years.

The Rate-of-Return Issue

All three of the Advisory Council's proposals rejected an increase in current and future tax rates sufficient to establish long-term balance. In part this alternative was rejected because it would increase the costs of the program for current workers relative to the benefits that they will receive. Current workers already face the prospect of making greater Social Security contributions relative to their lifetime earnings than was required of workers in the past without a fully compensating increase in their benefits. The consequent decline in the ratio of benefits to costs (commonly referred to as the "money's worth" ratio) is primarily the consequence of the maturation of a pay-as-you-go system. Workers retiring early in the program's history had only a few years of wages subject to the Social Security payroll tax. Over time, new retirees had more and more years of wages subject to taxation, and the additional tax payments sharply reduced the rate of return. The situation is actually somewhat more complicated in that benefit levels were raised several times over the period. Analytically, these increases in benefits can be seen as introducing new pay-as-you-go programs on top of the old, temporarily boosting returns. But the essence of the story is the maturation of a pay-as-you-go system.

In a mature pay-as-you-go system financed by a fixed tax rate on wages, the rate of return on payroll tax contributions depends on the rate of growth of aggregate real wages. Slower growth in aggregate real wage income, owing to slower population and productivity growth, has reduced the return that can be obtained from a mature pay-as-you-go system. Looking forward, with a constant or slow-growing working-age population, the rate of growth of aggregate wages will depend primarily on the rate of growth of productivity.

To address the problem of declining rates of return, all three plans at least consider allowing individuals to have some of their Social Security contributions invested in equities. Proponents of the Maintenance of Benefits approach suggest further study and evaluation of having the Social Security trust funds invest directly in equities. In the Individual Accounts proposal equity investments would be done through newly created private accounts, and the assets would be held by the government. In the Personal Security Account proposal individuals could invest in equities through individually owned and privately managed accounts. Because equities on average earn higher returns than other financial assets, proposals that produce the largest equity holdings yield the highest projected returns on Social Security contributions. Investment in equities also raises concerns about risk, as noted in the discussion of defined-benefit versus defined-contribution plans above, and in the following section.

Investing the Trust Fund in Equities

Proponents of the MB proposal suggest giving serious consideration to investing a share of the trust funds in equities. They argue that such investments are necessary to increase the return on the funds, which are currently invested entirely in Treasury securities. Both private pension plans and many State and local systems invest a substantial portion of their assets in stocks. The Advisory Council estimates that investing 40 percent of the trust funds in equities could raise the ultimate projected return on trust fund assets from 2.3 percent to 4.2 percent. Proponents note that, if the higher returns on equities over long holding periods that have prevailed in the past continue, the change in investment strategy would extend the life of the trust funds, perhaps substantially.

Critics point out that investing a portion of the trust funds in equities would increase risk as well. Eight times in the last 70 years, a broad index of equity returns has declined by more than 10 percent over 1 calendar year; on three occasions the drop over a year or two was more than 35 percent. Such declines could cause anxiety among both retirees and those nearing retirement, undermine public confidence in the system, and possibly even lead to pressure to divest equities after a substantial drop. Proponents respond to this concern by arguing that, at least based on historical experience, the Social Security system is in a good position to wait out fluctuations in market value, particularly as the trust funds increase in size. Critics argue that the past may not be prelude and just as the last 15 years have seen an eightfold increase in the market, it is conceivable that the market could experience a dramatic multiyear decline. (For example, a broad index of Japanese stock prices fell more than 50 percent during the 1990–92 period.) Any proposal for equity investment must consider the consequences when markets fall.

Another criticism of allowing the trust funds to invest in equities is that such investments would primarily represent a reallocation of assets between those held in the trust funds and those held—either directly or indirectly—by households. It could improve the financial position of the trust funds, because of equities' historically higher average returns, but for a given level of saving it would not increase the returns for the Nation as a whole. Investing a portion of the trust funds in equities would raise the price and lower the return on equities, and lower the price and raise the return on Treasury securities. Higher Treasury yields would raise Federal interest costs and, all else equal, the non-Social Security portion of the deficit. No one can say with any certainty by how much interest rates on Treasuries would rise, and therefore what would be the likely impact on the deficit. (It should be noted that the MB plan incorporates other measures that do increase national saving; as a result, the net effect of that plan on the interest rates paid by the Treasury is ambiguous.) The analysis is complicated because the initial effects on rates of return could be moderated as corporations restructured their finances to take advantage of cheaper equity financing, and as international buyers increased their purchases of now-higher-yielding Treasury securities. The size of these feedback effects is an important issue that would have to be explored in a thorough assessment of any equity investment proposal.

An additional set of issues involves the practical operation of the trust funds. For example, critics claim that political interference in investment decisions could hurt returns. Proponents argue, however, that this problem could be addressed by having the trust funds hold a broad portfolio whose performance mimics an index of the overall market. They suggest that an expert board could select, through competitive bidding, one or more private sector managers to achieve this end. An obvious concern, however, is that although such an arrangement could be implemented as part of a reform package, changes could be made later that would allow much political influence on investment policies. Another issue is how the government should vote the shares it holds. Proponents of the MB plan suggest that once the portfolio shift was complete, the trust funds' equity holdings would still be less than 5 percent of the market, but such projections are uncertain, and the actual share could well be higher. In any case, advocates of equity investments contend that so long as legislation provided that government shares were either not voted, or voted in the same pattern as other common shareholders, government ownership could be structured so as to not affect private control. Critics respond that, because this policy could be changed in the future, government-owned shares could allow the government to influence firms regardless of the protections in existing law. It is clear that the administrative aspects of investing in equities would require solving some tough problems.

Investing a portion of the Social Security trust funds in equities would be a dramatic departure from current procedure. All the considerations discussed above demonstrate that such a proposal would require careful scrutiny.

Structural Issues

Although the Advisory Council focused most of its attention on the financing aspects of the Social Security system, it recognized that the structure of the program also raises some equity and efficiency issues.

Household Composition. Under current law, Social Security benefits for spouses are equal to either the amount that they could receive on their own, or 50 percent of the benefits of the primary earner, whichever is greater. When the primary earner dies, the surviving spouse receives 100 percent of the primary earner's benefit. Married couples with a single earner do better under this system than unmarried single earners or two-earner married couples with similar earnings. The spouse's benefit was introduced at a time when most wives stayed home and cared for children; today, however, married couples in which both husband and wife work make up the majority of families. The Advisory Council's IA and

PSA proposals include reductions in benefits for nonworking spouses and increases in survivors' benefits when one member of a couple dies.

Effect on Labor Supply. As already noted, some Advisory Council proposals would increase the retirement age, but in general, issues of labor supply were not a focus. Social Security is thought to have little effect on the labor supply of younger workers for two reasons. First, although economists profess a range of views, most believe that labor supply generally is not very sensitive to changes in after-tax wages. Thus, to the extent that Social Security is viewed as a tax, the substitution effect, by which the lower after-tax wage discourages work in favor of leisure, is roughly offset by the income effect, whereby lower after-tax wages require individuals to work more to maintain their consumption. Second, to the extent that individuals view their Social Security taxes as a form of forced saving, those taxes exert even less of the modest disincentive effects usually associated with a tax.

It is possible that Social Security, in combination with private pensions and nonpension wealth, encourages retirement at age 62, the age of first eligibility. Economists remain divided, however, concerning the size of this effect. Most previous research has found little evidence to suggest that even substantial changes in the structure of Social Security would have much effect on the average retirement age as long as benefits continued to be available at age 62. Critics of this research argue, however, that it is difficult to capture the impact of large benefit changes with existing models. They also cite the increased generosity of Social Security benefits and the expansion of private pension benefits as a major reason for the shift toward age–62 retirement.

One Social Security provision that formerly provided an incentive to withdraw from the labor force was the sharp decline in the lifetime value of benefits for those who retire after age 65 as compared with the lifetime value for those retiring at age 65 or earlier. Although benefits have long been fully actuarially reduced for retirement *before* age 65, until 1983 no parallel provision was made for retirement *after* 65. The 1983 amendments will eventually raise the delayed retirement credit to a full actuarial adjustment of 8 percent a year for each year benefits are postponed after age 65; that credit will be phased in completely by 2008. Although the increase in the credit will increase the system's costs somewhat, it will remove a disincentive for postponing retirement beyond 65.

Other Considerations

The economic analysis presented earlier makes it clear that the impact of the Advisory Council's three proposals on national saving depends primarily on how benefits and contributions are changed. That is, the impact depends on how far the proposal would move

Social Security from a pay-as-you-go toward a funded system. Whether the accumulated reserves are held by Social Security trust funds or by individuals should, according to economic theory, have little impact on overall national saving. Therefore, the economics alone cannot explain why proponents of the various positions argue their cases so vehemently. Although the *Economic Report of the President* generally focuses on the economic aspects of issues, in this case some additional considerations raised in the Advisory Council's report need to be noted in order to understand the debate.

Proponents of individual accounts argue that economics is only half the story. They contend that "The IA plan provides...new saving and the MB plan does not." Since the MB plan does boost funding, this argument must be based on the assumption that either the public is unwilling to see large surpluses build up in the public sector or, if such surpluses emerge, they would be used to cover deficits in the rest of the budget. This has occurred since 1983, and IA supporters may view it as likely to continue in the future. Therefore, they conclude, the only way to increase national saving is to fund retirement saving through individual accounts.

Supporters of the PSA proposal also contend that investing the Social Security trust funds in equities would be harmful to the economy: "We believe that with the accumulation of such vast equity holdings...the pressures to use the funds for socially or politically 'desirable goals' would be tremendous, putting at risk not only workers' taxes and retirees' benefits, but also the allocation of capital in the economy."

Proponents of the MB proposal put much less weight on these arguments and instead focus on what they see as the dangers of moving toward individual accounts. First, in addition to the economic arguments advanced above, they foresee a good chance that funds in the IA and PSA accounts will not be held until retirement: "If the money is seen as belonging to the individual as it builds up during the worker's career, he or she will feel aggrieved if access to the funds is denied." They believe that "[E]xceptions will undoubtedly be sanctioned, and in many cases the individual's PSA funds will have been reduced or exhausted before retirement, with the individual left to rely on the low-level flat benefit." Second, they contend that even the more modest IA proposal contains the "seeds of dissolution": "...[A]s the plan developed over time, with beneficiaries doing less and less well under the reduced Social Security plan compared to individual accounts (at least those of the more successful investors), there would be every reason for many average and above-average earners, particularly, to press for further reductions in contributions to Social Security in order to make more available for their individual accounts. Thus, the IA plan is inherently unstable, and could lead to the unraveling of the redistributional provisions that are so integral to Social Security and so crucial to its effectiveness."

Whatever weight one assigns to these political economy considerations, they help explain the strength of feeling about the future direction of Social Security.

CONCLUSION

Social Security retirement and disability benefits now equal 4.7 percent of GDP. According to the intermediate assumptions in the 1996 Trustees' report, outlays will amount to 6.6 percent of GDP in 2070. Although this is a substantial increase, it can be explained entirely by the growth in the elderly as a share of the total population. With no changes to current law, the Social Security system will be able to meet all of its obligations well into the next century, and a large portion of those obligations indefinitely. Nonetheless, the Social Security program is running a deficit over a 75-year projection period and faces a permanent imbalance thereafter. These long-term challenges to Social Security need to be addressed in a bipartisan manner, as was done in 1983. A variety of approaches should be considered, but any possible changes must also ensure that the benefits of reduced poverty and increased economic security for the aged and disabled are not put at risk.

MEDICARE

Medicare is the largest public health program in the United States. It covers virtually all Americans age 65 and older and most recipients of Social Security disability benefits. Since its enactment in 1965 it has contributed substantially to the health and well-being of older and disabled Americans. Medicare operates with relatively low administrative costs and enjoys widespread public support. Today, however, Medicare faces serious financing problems and continues to have important gaps in coverage. This Administration has taken significant first steps to address Medicare's short-term financing and has proposed additional reforms to strengthen Medicare's trust fund to 2007. This will provide more than enough time to establish a bipartisan process to develop additional reforms to guarantee the strength of the program for future generations.

Medicare presents a much greater challenge than Social Security, both in the magnitude of the projected deficits and in the complexity of the issues. Unlike with Social Security, reform involves not simply selecting among a list of plausible options, but rather figuring out how to control long-run costs and ensure the efficient delivery of quality care in one component of a very complicated health care system.

Medicare is composed of two parts. Part A (hospital insurance) covers inpatient hospital services, care at skilled nursing facilities, home health care, and hospice care. Part B covers primarily physician and outpatient hospital services. Part A is financed by a 2.9 percent payroll tax, shared equally by employers and employees. Like their Social Security counterparts, the Medicare Trustees project the status of the hospital insurance trust fund over a 75-year period. These projections are highly uncertain given the time horizon and the difficulty in estimating future medical costs. Nevertheless, they constitute the best available estimate of the status of the Part A portion of Medicare. The projected 75-year deficit in Part A is more than twice the Social Security deficit in absolute terms, and many times larger relative to the size of the program. As a fraction of GDP, Part A expenditures are projected to triple over the next 75 years, from 1.7 percent in 1996 to about 5 percent in 2070.

Medicare Part A is also facing a pressing short-term problem. If no action is taken, the Part A trust fund is projected to be exhausted by 2001, and the gap between revenues and benefit payments widens very rapidly thereafter. Medicare reforms proposed by this Administration would extend the life of the Part A trust fund well into the next decade. Enacting these reforms is an absolutely necessary first step, but none of the current proposals completely solves the long-run problem.

Medicare Part B is financed primarily from general revenues and enrollee premiums. In 1996, premiums contributed about 25 percent of Part B income, with most of the remainder from general revenues. Although spending from this fund has grown rapidly, insolvency is not an issue, since general revenues are required to cover any shortfalls. However, the growth in Part B spending increases Federal expenditures and contributes directly to the unified deficit.

Reforming Medicare will require slowing the growth in health care prices and utilization. Since either Medicare or private insurance pays for most health care expenditures for the elderly, individuals have little incentive to seek out the most cost-effective delivery of medical care. Moreover, fee-for-service payment still dominates the Medicare market. Approximately 90 percent of Medicare beneficiaries have fee-for-service care, compared with fewer than 30 percent of the nonelderly. Hence, some Medicare providers may have an incentive to supply costly services that offer uncertain medical benefits. This potential misalignment of incentives is reinforced by the fact that the relative effectiveness of alternative treatments is often poorly understood, and consumers generally rely on providers' recommendations.

For the nonelderly, any tendency toward overuse of medical services is increasingly kept in check by employers and their insurers. The dramatic movement toward managed care (discussed below) reflects determined efforts to ensure that health care is delivered in a cost-effective manner. Some working individuals may also have incentives to keep costs down because they face substantial out-of-pocket payments. These incentives may be muted for retirees, who frequently have virtually complete insurance coverage on a fee-for-service basis for an array of services.

In short, incentive issues are likely to be more important for Medicare than for Social Security. Any changes in incentives, however, must recognize the system's important advantages, such as the wide array of choices available to beneficiaries and their ability to continue longstanding relationships with physicians and other providers.

Moreover, altering incentives is not a call to reduce benefits. Discussions of Medicare are often framed as if the program were excessively generous and the problem one of cutting back. In fact, Medicare's coverage is less comprehensive in some ways than much private sector insurance. For example, Medicare does not cover prescription drugs and provides only very limited mental health benefits. Nor does Medicare place an upper bound on cost-sharing responsibilities for hospital stays, skilled nursing care, or physician services. As a result, participants who have long and complicated illnesses and lack insurance (called medigap insurance) to cover what Medicare does not may incur tens of thousands of dollars of out-of-pocket expenses. Thus, the challenge is not only to control the costs of the benefits currently provided by Medicare, but also to create some room for improvement in the benefit package.

SOURCES OF THE FINANCING PROBLEMS

The easiest way to understand the nature of Medicare's financing problems is to contrast Social Security with Medicare. Both programs provide a defined benefit—the one cash, the other insurance for a package of medical services—to roughly the same population: the aged and disabled. In recent years the Congress has not changed significantly either the population covered or the benefits provided under either program. (The 1988 Medicare Catastrophic Coverage Act added a drug benefit, limits on out-of-pocket expenditures, and an income-related premium to the program, but those provisions were repealed shortly after enactment.) Yet whereas Social Security is expected to remain solvent for more than 30 years and faces a relatively modest 75-year deficit, Medicare's hospital insurance trust fund, as already noted, is projected to be exhausted in 2001 and to deteriorate rapidly thereafter, if no action is taken.

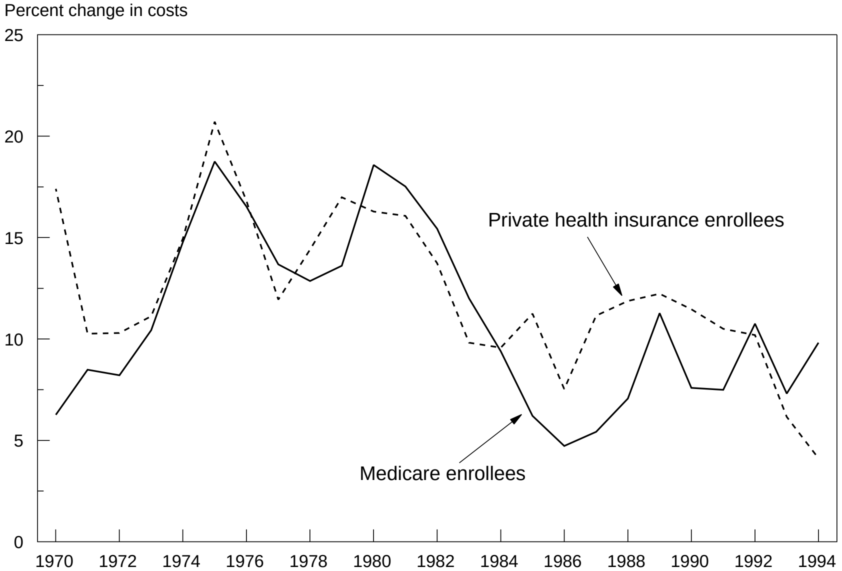
This very different outlook can be explained by two factors. First, whereas the cost of Social Security is precisely defined by the benefit provided, the cost of Medicare's bundle of health services depends on health care prices in the economy at large and the volume and intensity of services used by Medicare beneficiaries. Thus, even though the types of services reimbursed by Medicare have remained substantially unchanged, outlays have soared, as overall health care costs per capita (not just those paid for by the government) have risen at twice the rate of inflation. Second, as a result of these accelerating costs, Medicare financing has been aimed at staving off short-term insolvencies; Social Security, in contrast, was put in projected long-run actuarial balance in 1983. As a result, Social Security tax rates were set taking into account the upcoming retirement of the baby-boomers, while Medicare's Part A tax rates were set only to cover short-range outlays, and no prefinancing is provided for Medicare Part B. The result is that the demographic shifts looming after the turn of the century, when the baby-boom generation retires, have a much more profound impact on the long-run outlook for Medicare than for Social Security.

For most of Medicare's history, the increase in outlays per capita reflected the general rise in health care prices and a general increase in the volume and intensity of health services, rather than a particular problem with Medicare. As Chart 3–5 shows, Medicare and private health insurance costs per enrollee have tracked each other closely since the early 1970s, despite considerable year-to-year fluctuations. On a per-beneficiary basis, Medicare's average annual growth rate was actually lower than that of the private health insurance market between 1969 and 1994 (10.9 percent versus 12.2 percent).

For the last few years, however, health spending per capita in the private sector has slowed. One reason is rapidly increasing enrollments in managed care plans, but the slowdown is not limited to these plans. The growth of expenditures in private fee-for-service plans has also declined, as these providers have responded to the greater competition from the managed care segment of the market. Medicare spending has not slowed commensurately, in part because the current system for setting managed care payments probably raises rather than lowers program costs. Program costs have also been pulled up by rapid growth in services such as home health care that private insurance often does not cover.

Two other factors complicate Medicare reform. First, more players are involved than with Social Security. Social Security has two main stakeholders: taxpayers and current beneficiaries. Besides these two groups, Medicare must deal with health care providers—

Chart 3-5 **Growth in Per-Enrollee Costs of Health Care**
Since the early 1970s, health care costs per enrollee have generally risen at similar rates for Medicare beneficiares and persons with private health insurance plans.



Source: Department of Health and Human Services.

doctors and hospitals—and, to some extent, the private insurance industry. More players mean more decisionmakers and more sets of incentives and disincentives to consider.

Second, adverse selection plays a far more important role in the Medicare program than it does in Social Security (Box 3–1). For any structure of premiums, insurers have a strong incentive to cherry-pick the healthiest individuals. Healthy beneficiaries also have an incentive to opt for low-cost programs, since they pay a low price and still get all the health care they need. Although government can *reduce* adverse selection through risk-adjustment mechanisms, which peg the payment made by the government to the health status of the individual, risk adjustment is currently, and is likely to remain, very imperfect. Any proposed reform, therefore, must limit the extent to which insurers can cherry-pick and to which individuals can select health plans based on their health status.

SHORT-TERM OPTIONS

As explained above, until recently Medicare's short-run problems were caused mostly by the same factors that were increasing health expenditures in the private sector. The long-run problem, discussed in the next section, is driven both by the projected continuing rise in expenditures per capita and by demographic factors

Box 3–1.—The Problem of Adverse Selection

Adverse selection is a potentially serious problem for many types of insurance markets. It commonly occurs when the purchasers of insurance have more information about their risks than do insurance companies. Those who expect to incur losses are more likely to buy insurance than those who do not. This raises average expenses per beneficiary and forces insurance companies to raise premiums. Higher premiums discourage persons with lower risks from buying insurance. A cycle of increasing insurance premiums and decreasing participation could ultimately make the insurance unavailable. This is one justification for public provision of some types of insurance.

Adverse selection problems are likely to be particularly severe for health insurance, and there they may take several forms. When employers offer a number of different insurance plans, healthier workers are likely to choose less generous plans than workers who expect to require more health care. Similarly, if public health insurance programs such as Medicare offer more than one type of coverage, with rebates going to those choosing lower cost plans, sicker individuals (or households) will probably choose policies with more comprehensive coverage, whereas those with lower anticipated risks are likely to select less generous plans. As a result, those with higher risks will incur higher costs or may lose coverage altogether. Conversely, if the total premium expense is the same for all types of insurance, plans will have strong incentives to seek out those individuals expected to have relatively low health expenditures. Plans that are less able to select beneficiaries with low expected costs are then likely to be left with those with high average expenses. Adverse selection may also occur over time. For instance, individuals may select a relatively low cost insurance plan with limited coverage when they are healthy, but then to switch into a more comprehensive plan when they get sick.

Adverse selection can be eliminated if all individuals are placed into a common insurance pool. However, doing so reduces or eliminates choice and, under some circumstances, may reduce incentives for plans to operate efficiently. Alternatively, the problem could be avoided by risk-adjustment mechanisms that take into account all differences in risk that are known by the individual. However, mechanisms with the required degree of precision do not currently exist and are likely to be extremely difficult to develop.

that will increase the number of beneficiaries. When the demographics kick in, a broad array of options, including changes in eligibility and benefit design, are likely to be considered in a bipartisan context to resolve the program's financing problems. Short-run changes are required immediately, however, to extend the solvency of the hospital insurance trust fund. These changes, which are likely to focus mainly on reimbursement rates and policies, will also help balance the Federal budget. The Administration proposed a set of reforms along these lines last year and has submitted similar reform proposals in its current budget.

Controlling Provider Payments

Medicare's major tool for controlling short-run costs is adjusting payments to providers. Indeed, this represents the primary source of Medicare savings in the 1980s and 1990s. The two important payment innovations during this period were the prospective payment system for inpatient hospital care and the relative value scale for physician services. The prospective payment system substantially altered the incentives of hospitals by providing a fixed payment for an entire episode of care. Since hospitals no longer received additional revenue for additional services, they had a strong incentive to limit lengths of stay and unnecessary procedures. The reform in physician payments based on relative value scales tied physician payments to a schedule, which placed additional limits on the amount they could charge.

These innovations have helped control inpatient costs and physician prices, but they have not succeeded in curbing total Medicare spending, because they have little effect on the volume and intensity of certain services and because the types of services provided change rapidly. Also, spending on the portions of the Medicare program not yet subject to reform—outpatient services, skilled nursing facilities, and home health care—has risen at a rapid pace. Several factors may explain this outcome. First, many of these services, particularly home health care, differ from traditional medical services in ways that may make demand for them more sensitive to price and raise uncertainty regarding the medically appropriate level of care. Moreover, the supply of home health care providers is virtually limitless given that they do not require extensive training as do doctors and other medical personnel. Second, improvements in technology have made it easier to substitute outpatient care for hospitalization. Finally, spending controls on physician and inpatient hospital services create incentives for providers to substitute other types of services in order to maintain their incomes.

As noted above, most previous efforts to hold down price increases have been aimed at inpatient hospital care and physician services. Partly as a result, these are now the two slowest-growing components of Medicare. Some additional savings are achievable in these areas, but squeezing down on prices has its limits. If prices become too low, physicians and hospitals might eventually become less willing to accept Medicare patients. Moreover, as already noted, it is hard to curb expenditures by focusing on prices alone. For example, the introduction of the Medicare fee schedule in 1992 placed additional limits on the reimbursements physicians could receive for services to Medicare beneficiaries. Yet until the last year or so Part B spending continued to increase markedly, in part because of higher volumes and new technologies.

The limit to how much Medicare can save by controlling payments to hospitals and physicians is likely to be determined by what happens in the private sector. Historically, Medicare payment-to-cost ratios have been well below those of private payers. However, as employers have turned to managed care in order to constrain costs, this gap has narrowed considerably: between 1991 and 1994, the private insurer-Medicare differential for hospitals fell from 48 percent to 28 percent. The reduction in the gap between public and private sector payments makes providing care to Medicare beneficiaries relatively more attractive than in the past. On the other hand, even if Medicare were able to hold down fees, total expenditures could rise if the volume of services provided increased. Moreover, if Medicare remains the primary insurer of fee-for-service care, cost containment efforts in the private sector may tempt providers to supply extra services to Medicare enrollees in order to maintain their incomes.

Expanding Prospective Payment—Getting Providers to Control Costs

Medicare has paid for inpatient hospital care on a prospective basis since 1983. Acute care hospitals receive a fixed fee for most inpatient episodes, regardless of how long the patient stays or how many services are performed. The fixed payment encourages hospitals to control the costs of treatment and has been credited with reducing Medicare inpatient costs. Despite concerns that prospective payment might lead to too little treatment, evidence suggests that hospitals have not compromised quality in their efforts to reduce costs. However, the prospective payment system may encourage hospitals to transfer patients quickly out of the acute care hospital and into a skilled nursing facility or long-term care hospital, which continue to be paid on a fee-for-service basis. This incentive could be contributing to the high growth rates of Medicare spending in these areas.

Some have suggested bundling more services together as a method of combating these perverse incentives and controlling costs. In general, the broader the set of services in the bundle, the stronger the incentive to reduce costs and the greater the scope for trading off treatment alternatives in a cost-effective manner. Some analysts advocate, for example, incorporating services for care following hospitalization into the fixed amount provided under the prospective payment system. Hospitals would be paid a fee for both the hospital stay and for all related medical services for a limited period of time thereafter. This might lower costs by preventing premature discharges that move patients from prospective payment hospitals into fee-for-service facilities. Bundling acute and postacute care, however, raises a number of challenges. For instance, it may be more difficult to set the reimbursement rate appropriately when a more diverse set of services is covered. Also, the need for postacute care may depend on factors beyond the hospital's control, such as the quality of care available at home, and this may place some hospitals at financial risk, unless appropriate adjustments can be made in the payment rate.

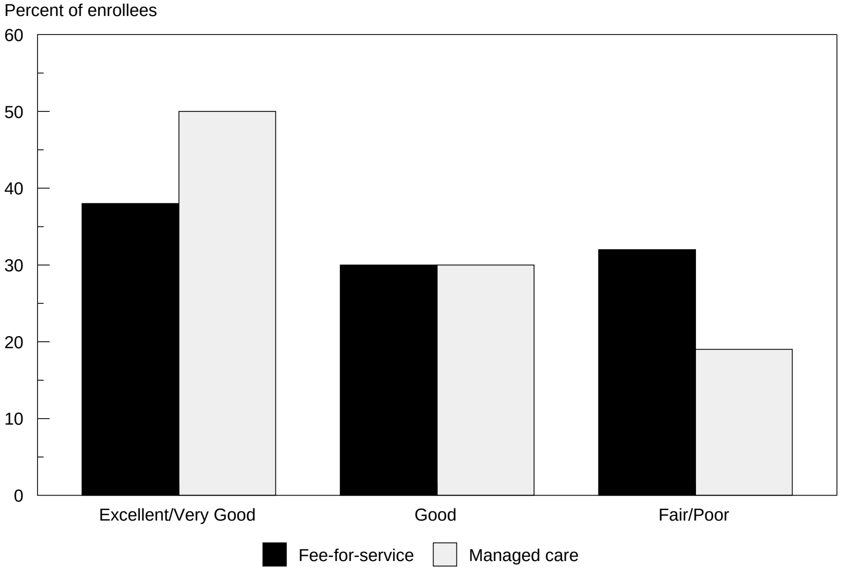
An alternative to bundling is to extend some type of prospective payment to those areas of Medicare where costs are increasing most rapidly. As already discussed, prospective payment reduces or removes the financial incentive for providers to supply additional services, and so may reduce costs. The Administration has proposed significantly expanding the use of prospective payment for Medicare services. New long-term care hospitals (defined as those with average stays of more than 25 days), which are currently paid on a fee-for-service basis, would become subject to the hospital prospective payment system. Skilled nursing facilities would also be moved quickly to prospective payment. Similarly, a prospective payment system would be established for home health services, one of the fastest growing areas of Medicare expenditure. Finally, a prospective payment system for hospital outpatient services is proposed, with implementation around the turn of the century. One challenge associated with reimbursing these services prospectively is that the episode of care, on which the fixed payment is based, may be harder to define than for hospital visits.

Improving Medicare Managed Care

The dominant form of Medicare managed care is the health maintenance organization (HMO), which receives a fixed payment for each covered beneficiary. The government's payment to a Medicare HMO is 95 percent of fee-for-service Medicare spending per capita in the same county, adjusted for a limited number of risk factors. Only about 10 percent of Medicare beneficiaries are enrolled in managed care plans, compared with 74 percent of workers in large companies, and the evidence suggests that those Medicare beneficiaries who do switch to managed care probably cost, rather than save, the program money. Part of the reason is flaws in the reimbursement formula, which exacerbate the problem of adverse selection, and part relates to the inherent difficulty of preventing adverse selection.

HMOs tend to enroll relatively healthy people at low risk of requiring expensive care (Chart 3–6). The payment made to HMOs for Medicare patients should reflect the lower costs associated with serving this relatively healthy population. To the extent it does not, Medicare payments may be higher than if the patients were in fee-for-service plans. Previous health history is a good indicator of future health expenditures, and one study indicates that the medical expenses of seniors shifting into HMOs were 25 to 30 percent lower than those of the average Medicare enrollee in the year or so immediately prior to their enrollment in the plan. Another analysis estimates that the introduction of managed care has increased Medicare costs by 7 percent per HMO beneficiary.

Chart 3-6 **Self-Described Health Status of Medicare Enrollees**
Medicare beneficiaries in managed care plans typically report better health than those in the traditional fee-for-service program.



Source: Department of Health and Human Services.

The selection problem is exacerbated by two additional factors. First, if healthier individuals migrate into managed care, average costs in the fee-for-service sector will rise. Since the reimbursement rate for managed care is based upon fee-for-service costs, this will drive up the HMO per capita payment. Second, HMOs have an incentive to offer coverage in counties with high reimbursement rates and to avoid counties in which the per capita payment is low. The current reimbursement formula results in payments that are almost four times larger in some counties than in others. By contrast, local input prices (labor and supply costs) vary by only a factor of two.

HMOs' incentives to cut costs may be limited somewhat because they are not allowed to earn higher profit margins on plans covering Medicare beneficiaries than on those for their private sector enrollees. In cases where the allowed per capita payment would generate a higher rate of profit, the HMO has the option of providing coverage not normally included in Medicare, such as for prescription drugs, or waiving some or all of the premium that it could otherwise charge. Thus, profit margins will not directly increase if HMOs develop or implement more cost-effective methods of providing care for Medicare beneficiaries. However, total profits may increase because of larger numbers of plan participants or economies of scale that raise profits on private sector enrollees.

To address selection bias, the Administration has proposed reducing the size of local variations in per capita payments, testing new risk-adjustment methodologies aimed at linking reimbursements more closely to predicted expenses, and making the reimbursement formula less generous. The use of more-uniform payment rates should lessen the tendency of HMOs to locate mainly in high-cost areas. But the likelihood of identifying risk-adjustment mechanisms accurate enough to eliminate the remaining selection bias is poor. The best currently available risk-adjustment mechanisms are likely to account for only a fraction of the variation in annual health care spending that individuals or insurers can anticipate. A less generous reimbursement formula further recognizes and attempts to take account of the remaining tendency of HMOs to enroll relatively health people.

To provide better incentives for cost reduction, the Administration has proposed some experimentation with competitive price setting and with the creation of partial payments, whereby plans would be paid on a fee-for-service basis but would also share in any cost savings achieved beyond some minimum threshold. The Administration has also proposed to broaden the range of managed care plans available to Medicare beneficiaries by adding options for coverage by preferred provider organizations, provider service networks, and for expanded availability of point-of-service plans, all of which are increasingly popular in the private sector. The goal in offering these new plans is both to expand the choices available to beneficiaries and to encourage plans to compete on the basis of quality of care rather than risk selection.

Increasing Part B Premiums

When Medicare was enacted, Medicare enrollees were required to pay a premium equal to 50 percent of the costs of Part B. The costs of physician services rose so quickly, however, that legislation in 1972 limited premium increases to inflation. As Medicare costs soared, the premium dropped rapidly to 25 percent, and would have fallen further had legislation not been enacted to maintain this level. Most Medicare beneficiaries also pay a premium for their supplemental medigap policies. These premiums plus copayments and deductibles bring total out-of-pocket expenses to about 20 percent of family income for the typical elderly household and cover about 40 percent of their total costs of medical care. Proposals to increase Part B premiums have included both across-the-board increases and income-related options.

Shifting the Financing of Home Health Care

Since 1981 home health care has been financed under Medicare Part A. The rapidly increasing expenditures for these services are therefore contributing to the deteriorating financial condition of the hospital insurance (Part A) trust fund. The Administration proposes to continue reimbursing under Part A the first 100 visits following a hospital stay of 3 days or more, but shift the payment for all other home health care services to Part B. This change is consistent with the notion that Part A should be dedicated to hospital-related services, and Part B to expenditures for ambulatory care. Although this shift would not reduce total Medicare spending, it would extend the life of the hospital insurance trust fund, without excessive reductions in payments for hospitals, physicians, or other providers, and would restore the apportionment of home health care payments between Part A and Part B to that existing in law before 1980. It would not affect the Part B premium.

Global Budget Caps and Medical Savings Accounts

Two options sometimes considered for reforming Medicare are global budget caps and medical savings accounts (MSAs). In a global target system, the budget cap would limit total Medicare spending per enrollee at a congressionally mandated amount. Typically, separate spending targets would be established for HMO and fee-for-service Medicare expenditures. Projected spending (for example, in the fee-for-service category) would then be calculated by using estimated services and allowable prices. If total spending exceeded the sector target, prices for all services in the sector would be reduced proportionately to achieve the target level of spending.

MSAs combine a high-deductible insurance policy with a tax-advantaged savings account to cover expenditures below the deductible. A fixed dollar amount would be allocated to each beneficiary, out of which Medicare would then pay the premium for the high-deductible insurance policy and deposit any remaining funds into the beneficiary's savings account. Withdrawals from this account could be made for qualified medical expenses on a tax-free basis—or for other types of consumption as taxable income. Since individuals covered by MSAs would be responsible for all medical expenses up to the deductible, MSA proponents say they would have incentives to avoid care in circumstances where the costs exceed the benefits.

Global targets and MSAs have some attraction, but both also have potentially serious problems. In particular, unless risk-adjustment methodologies become much more sophisticated, selection bias could create grave difficulties under either approach, especially (for the former) if a separate budget cap were established for fee-for-service and managed care plans. If relatively healthy persons enrolled in managed care in disproportionate numbers, and the risk-adjustment methods failed to capture fully the differences in expected costs, fee-for-service spending per capita would rise relative to that in managed care. The fee-for-service budget cap would likely be reached, leading to relatively large reductions in prices. Pressure on providers would be likely to lead to lower quality of service and would encourage more beneficiaries to enroll in managed care. This process could continue in a vicious cycle, until only the sickest individuals remained in the traditional Medicare program, and the allotted prices might then be far too low to address their medical needs. The end result could be, in effect, more limited choice for most individuals and, if prices were too low, queuing for some types of medical care, as some providers became less willing to provide services to Medicare enrollees.

MSAs have a similar problem. Relatively healthy individuals may have a strong incentive to opt for the MSA, since payments into their savings accounts would exceed their expected medical costs. This would leave the less healthy in the fee-for-service part of Medicare, raising costs there. Higher costs might encourage further shifts to MSAs and could set up a dynamic similar to that created by the global caps. In addition, individuals in MSAs who fell ill might want to switch back into the fee-for-service program. Thus, Medicare would be likely to pay higher costs for the healthy individuals who accept the MSA option than it would if they stayed in fee-for-service, but the program would still have to pay the high expenses of sicker individuals. For example, in 1996 the Congressional Budget Office projected that one Medicare MSA proposal would have increased Medicare spending by $5 billion over 7 years.

LONG-RUN OPTIONS

Incremental changes in Medicare such as those outlined earlier can provide substantial budget savings in the short term, create incentives for more efficient delivery of health care, and extend the life of the hospital insurance trust fund. Nonetheless, in the long run, the combination of demographic developments and continued cost pressures resulting from improvements in medical technology and increased volume of services will require additional reforms.

The President has proposed policies to address Medicare's short-term financing and has called for a bipartisan process to develop solutions for Medicare's long-run challenges.

The remainder of this section briefly reviews some of the approaches that analysts outside this Administration have proposed to improve the long-term financing of Medicare. None of them is a magic bullet; claims of spectacular benefit from any single approach should be viewed with skepticism. Some combination of policies is likely to be needed to meet the long-run challenges. All raise issues that must be examined and resolved in a bipartisan fashion.

Increasing the Age of Eligibility

Some have suggested raising the age of first eligibility for Medicare in order to reduce the number of beneficiaries and cut expenses. Retirees are now eligible for Medicare benefits at age 65; some have suggested raising this to 67 to reflect the scheduled increase in Social Security's normal retirement age. As with Social Security, this is likely to pose few problems for those persons who retire early because they have considerable wealth, good pensions, and retiree health insurance from their former employers. Others, however, have low incomes, poor job prospects, and poor health.

Denying health care coverage to this latter group could produce considerable hardship, because some elderly people may not have access to any protection other than Medicare. Unless other measures were taken in tandem, raising the eligibility age would probably increase the number of uninsured, and at least some of those losing coverage would be likely to have high medical costs. To reduce these problems, persons retiring before the age of 67 would have to be guaranteed some way of getting health insurance. One possibility would be to extend existing continuation-of-coverage provisions, whereby individuals who leave jobs are able to purchase group health insurance through their previous employer for a limited period. This could allow persons retiring at age 62 or later to maintain continuous coverage until they become eligible for Medicare. However, since individuals using this option would pay the full coverage premium plus a small administrative charge, the costs of obtaining health insurance might be quite high. Employer health expenses would also rise if older and less healthy individuals were added to the insurance pool.

Alternatively, some have suggested that Social Security beneficiaries between the ages of 62 and 67 could be allowed to buy Medicare coverage at unsubsidized rates. Although this would improve access to insurance, Medicare might still lose money on these beneficiaries, since persons in poor health would have particularly strong incentives to enroll. Some provision would also have to be made to reduce the burden on low-income individuals, probably through Medicaid, which might reduce the financial savings and introduce other complexities.

Increasing Cost Sharing

The annual Medicare deductible for physician services is $100, whereas that for inpatient hospital care is $736. The former is relatively low by historical and private sector standards, but the latter is relatively high, especially when combined with substantial copayments for lengthy hospital stays. Home health care coverage has no deductibles or copayments of any kind. This means that Medicare has very high cost sharing on those services where inappropriate use is unlikely—namely, inpatient hospital services—and very low cost sharing where individuals have a lot of discretion—namely, physician visits and home health care. Since one goal of cost sharing is to give individuals the incentive to use services carefully, the current structure might at first glance seem in need of immediate reform.

The difficulty is that Medicare does not operate in isolation. Approximately three-quarters of senior citizens have some type of medigap coverage, either provided by their former or current employer or purchased directly. Medigap insurance pays for some or all of the cost-sharing requirements of Medicare and often covers services not included in Medicare, such as prescription drugs or preventive care. In addition, some 13 percent of enrollees with low incomes have secondary coverage through Medicaid. For those individuals with the lowest incomes, Medicaid covers all Medicare copayments and deductibles, as well as the entire Part B premium. Those with slightly higher incomes can also have their Part B premiums paid through Medicaid but are responsible for the other types of cost sharing.

Since so many beneficiaries have secondary sources of insurance, changes in Medicare cost-sharing arrangements may be unlikely to reduce total medical expenditures unless accompanied by changes in the structure of the supplemental coverage. The most likely effect would be merely to shift some of the expense away from the Federal Government and onto individuals (in the form of higher medigap insurance premiums) or State governments (in the form of higher Medicaid expenses).

Secondary Insurance Reform

Because medigap policies and Medicaid provide first-dollar coverage for most services, they shield individuals from the incentive effects of cost sharing. When individuals are not responsible for any of the costs, they tend to consume more health care and incur higher expenses. Thus, medigap policies and Medicaid coverage are likely to raise Medicare costs.

Several reforms have been suggested to avoid the problems associated with current medigap policies. One possibility would be to require any medigap policy to cover Medicare's basic package as well as any supplemental coverage. The insurance company would receive a payment from Medicare equal to the expected costs of the basic package and would bear any additional cost caused by incentives for overuse. This approach is quite similar to that currently used in Medicare's managed care plans, which frequently combine Part A and Part B coverage with additional insurance, and is fully consistent with efforts to increase the use of managed care arrangements. However, adverse selection may again be a problem since the health plans would have incentives to cherry-pick the healthiest beneficiaries.

Alternatively, some have argued that medigap policies could continue to be used as a supplement to Medicare but with a payment assessed to compensate for the overuse caused by first-dollar coverage, or with restrictions to prevent the policies from covering the initial copayments or deductibles for some types of services. Were this done, new types of medigap policies would presumably emerge that would mitigate the adverse incentives in the current system while providing some of the types of protection found in current policies. The challenge would be to find the right balance between incentives and protection.

Others have suggested that Medicare require at least some cost sharing for Medicare beneficiaries who also receive Medicaid. They argue that even modest deductibles are associated with significant reductions in health expenditures for individuals with average incomes. Deductibles and copayments for Medicaid beneficiaries could perhaps be set at levels considerably below those faced by other Medicare enrollees. Even low levels of cost sharing may be sufficient to induce more careful use of services among those with limited incomes. But they also might place some persons with low incomes at additional financial risk or deter them from seeking medically necessary care.

Switching from a Defined-Benefit to a Defined-Contribution Plan

Medicare currently offers a defined package of services to all enrollees. This places the government at significant risk for any rise in the cost of these services, whether it is related to changes in technology, prices, or volumes. Some have suggested that the government could limit future expenses by guaranteeing a specified contribution toward health insurance expenses for the elderly, while leaving the choice of the specific insurance plan to the individual.

For such a proposal to have any chance of being viable, the size of the fixed payment would have to be carefully determined. If the amount were set in a base year and simply indexed thereafter, it could quickly become inadequate (if, for example, technological improvements led health expenditures per capita to rise faster than the rate of inflation) and place the elderly seriously at risk. To surmount this problem, some advocates have proposed asking health plans in a given geographical market to bid on the cost of insuring a minimum package of services and then using the average of the bids to set the dollar payment for each Medicare beneficiary in that market. Beneficiaries who wanted lower deductibles or copayments could then use their own money to buy more expensive policies, whereas those who wished to save money could join cheaper plans and receive the difference between the fixed payment and their premium contribution. The competitive bidding process is likely to tie the average payment somewhat more closely to costs. Success, however, would depend crucially on defining the market appropriately: defining it too large might result in considerable heterogeneity in medical costs within the region, whereas defining it too small could lead to inadequate competition in the bidding process.

Switching to a defined-contribution system has a number of other potential problems, the most serious of which is selection bias. Unless sophisticated risk-adjustment methods, which currently do not exist, could be used to vary the government payment rate with the level of expected medical expenses, market forces would put those in poor health at particular risk. Healthy individuals would have incentives to take policies with low premiums and limited coverage, which would drive up costs in the more comprehensive plans favored by less healthy persons. Better risk-adjustment mechanisms are needed. But solutions should be constructed with an understanding that our ability to adjust for risk is currently quite poor and may be inherently limited.

CONCLUSION

The conclusion that emerges from this brief overview of Medicare's financing problems is that, whereas short-term savings are currently achievable, long-run viability will require consideration of innovative reforms that will need to be agreed upon in a bipartisan process. Bold but thoughtful efforts to solve some of the issues raised here could lay the foundation for addressing one of America's greatest long-run challenges.

The most constructive approach would be to implement the structural reforms and savings proposals included in the President's budget and to continue the Administration's use of demonstration projects to explore different approaches to reining in costs and ensuring protection. Efforts are also needed to develop risk-adjustment mechanisms to alleviate the adverse selection problems. The Administration's proposals to extend the life of the Part A trust fund and to control Part B spending should buy enough time to allow careful evaluation of a range of alternatives in a bipartisan process. With more evidence under its belt, the Nation will be able to proceed with more confidence.

MEDICAID FINANCING OF LONG-TERM CARE

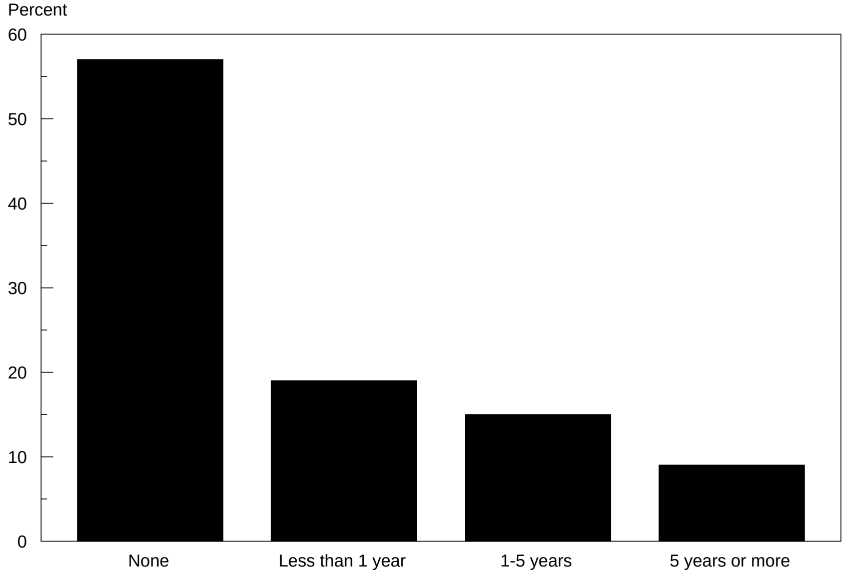
Medicaid was enacted, along with Medicare, in 1965 to provide health and custodial care for people with extremely low incomes. It continues to finance much of the medical care for the worst off in our society. Medicaid also pays for nursing home care for those who have low incomes and few assets. Since nursing home residents are typically quite old, the program provides significant financial support to the sick elderly. In 1995 roughly one-third of total Medicaid expenditures went to those aged 65 and over; the remaining two-thirds were split about equally between people with disabilities and the nonelderly, nondisabled poor. About half of all nursing home expenditures are paid for by Medicaid.

Medicaid expenditures have been growing rapidly over time, as a result of rising numbers of beneficiaries combined with higher costs for each. The nursing home component of Medicaid has also increased rapidly over the last 25 years, although at a slightly slower pace than other program expenses.

The aging of the population will significantly increase the number of people needing long-term care assistance. Not only will the number of older people increase, but so will the average age of those over 65. People over 85 made up about 10 percent of the elderly population in 1994; the Census Bureau projects that by 2050 this figure will be almost 24 percent. The very old are much more likely to reside in nursing homes: in 1993, about 25 percent of those 85 and older were in nursing homes, compared with just 5 percent of the general population over 65. If this rate of nursing home utilization is maintained, population aging will bring significant increases in the nursing home population and in expenditures on long-term care.

Some analysts suggest that one way to hold down future Medicaid nursing home outlays is to shift the financing of long-term care to some form of insurance. By its nature, insurance is particularly desirable for events that are rare but expensive. A majority of persons reaching age 65 can expect never to receive care in a nursing home. Of the rest, most are likely to stay a relatively short time. Only 9 percent will spend more than 5 years in a nursing home (Chart 3–7). With the cost of skilled nursing home care averaging over $35,000 per year and rising over time, a lengthy stay can be extremely expensive. Therefore the need for long-term nursing home care is an event for which insurance may be appropriate.

Chart 3-7 **Projected Lifetime Nursing Home Use by Current 65-Year-Olds**
Only a small fraction of the aged will have an extended stay in a nursing home.



Note: Data projected for persons who reached age 65 in 1990.
Source: New England Journal of Medicine.

Yet even though nursing home stays are relatively rare, and the costs high, the market for private nursing home insurance is underdeveloped. Just 3 percent of nursing home expenditures were paid by private insurance in 1994. Several factors are likely to account for the limited importance of private long-term care policies.

First, Medicaid pays the long-term care expenses of persons who have no financial assets or who spend down their assets after entering a nursing home. To the extent that people think government will pick up the tab, they have less incentive either to engage in precautionary saving or to purchase insurance for long-term care.

Second, premiums for private insurance are relatively high. One reason is that the vast majority of long-term care policies are individual rather than group policies, and individual policies have higher administrative costs. Another is that those who do purchase long-term care insurance, especially when they are older, may be less healthy than others their age, and this will be reflected in premiums. This is another example of the familiar problem of adverse selection, discussed above. Finally, premiums will be higher to the extent that people with insurance use nursing home care in situations where they would not if they had to pay the full cost at the time of use.

Third, many disabled elderly persons are currently cared for by family members. Senior citizens who consider nursing homes less desirable than living with family might not be interested in purchasing insurance that reduces out-of-pocket nursing home expenses if, as evidence suggests, this makes their families less willing to care for them.

A limited private insurance market means that most people reaching age 65 remain vulnerable to catastrophic nursing home costs that could potentially wipe out their assets. It also means that Medicaid outlays are larger than they would be if the private insurance market were more extensive. Medicaid outlays are also higher to the extent that seniors needing long-term care are able to find ways to transfer assets to family members, despite provisions in current law designed to prevent this, rather than spend them on nursing home care before becoming eligible for the program.

The proportion of the elderly with long-term care insurance could be increased in a number of ways, although all raise serious issues. One possibility would be for the government to require universal coverage, either directly through Medicare or indirectly through the purchase of private insurance (ideally at a young age and possibly through one's employer). Alternatively, individuals could be provided with stronger incentives to buy insurance within the current voluntary system. To a large degree, the recently enacted Kassebaum-Kennedy legislation (the Health Insurance Portability and Accountability Act of 1996) does so by offering tax advantages for some long-term care insurance expenses similar to (and in some ways more generous than) those previously provided for other medical costs or health insurance premiums. A third possibility would be to increase the ability of individuals to exempt some of their assets from the "spend-down" requirements of Medicaid if they purchase sufficient amounts of long-term care insurance.

Insurance of nursing home care for individuals with a lifetime of low income is a good example of a program that the private sector is unable or unwilling to supply. However, the presence of a safety net for the poor may also reduce the incentives for those who are better off to save for nursing home expenses. Unless people can be encouraged to put aside more money for this purpose, the aging of the baby boom is likely to put an increasing burden on the Medicaid system—and thus on the finances of the Federal Government and the States.

CONCLUSION

Each of the government programs for the elderly discussed in this chapter poses different policy challenges. The costs of providing Social Security benefits are going to increase as the population ages. Although this trend has largely been taken into account through 75-year budgeting, the system needs additional revenue or benefit changes to restore long-run balance. A range of options has already been described and proposed.

The problems facing Medicare, and those facing Medicaid's financing of long-term care, are more complicated and the solutions more elusive. Unless action is taken, the Part A trust fund is projected to be exhausted by 2001, and to face growing deficits thereafter. Adequate provisions have not yet been made for Part B spending increases, or for future Medicaid nursing home outlays. Innovative approaches are needed to provide quality health and nursing care to an increasing number of elderly Americans.

Many of the key elements of any solution are already known. We must improve the incentives for individuals to seek and providers to supply quality care in a cost-effective manner. Better risk-adjustment mechanisms are needed to mitigate adverse selection. Where possible, market-oriented approaches should be used to help determine the size and form of third-party payments.

The various government programs supporting our elderly represent different ways in which each generation of taxpayers offers assistance to its parents. In combination, these intergenerational transfers limit the resources available for other worthwhile purposes. Historically, Federal revenues have averaged around 18 percent of GDP. In 1970, Social Security, Medicare, and Medicaid expenditures were equivalent to 4 percent of GDP; in 1996 they stood at about 9 percent; they are projected to grow to roughly 19 percent of GDP in 2050. These programs as currently structured ultimately could crowd out virtually all other government spending.

Examining how society distributes its resources between the aged and the rest of the population provides one lens through which to view these programs. Economics cannot answer how the allocation should be made, but it does offer the fundamental lesson that society faces choices. The choices are often difficult because the tradeoffs are between two or more worthy objectives. Economics can help illuminate the nature of the choices and provide theoretical arguments and empirical evidence about the impacts of alternative policies. Armed with this information, we must then make the hard decisions within a bipartisan process and with full awareness of the difficult tradeoffs they imply. The choices we make will say a great deal about the kind of society we are and the kind of society we aspire to become.

CHAPTER 4

The Labor Market

THE RECENT STRENGTH OF THE ECONOMY has created a large number of new jobs, and the unemployment rate is low by historical standards. Between January 1993 and December 1996, economic growth produced 11 million new jobs. At the end of 1996 the unemployment rate was 5.3 percent. Jobholding increased dramatically even among groups whose members traditionally have difficulty finding employment.

Economic progress has greatly benefited many American workers, but it poses important challenges as well. New technologies have led to explosive growth in some industries, but to the decline of others. With deregulation and expanding international trade, firms that once enjoyed market power and could share the resulting economic rents with their workers are now forced to compete more aggressively in the marketplace. Technological change and greater competition have eliminated the jobs of some workers, but many others have found new jobs in industries that these same powerful forces are causing to expand. Yet some workers may discover a mismatch between the skills they needed for their old jobs and those required in the newly expanding sectors. These workers are at risk of significant unemployment and may have to accept lower wages when they finally do find work. The benefits that come from an economy that has been strengthened by technological progress and more intense competition should be tempered by the recognition that these same changes may have hurt some working Americans.

To what extent have structural changes in the labor market reduced the well-being of American workers? Some analysts claim that a fundamental change in the nature of employment has taken place. While acknowledging the robust growth in the number of jobs, they maintain that this growth is concentrated in low-paying jobs, that wages overall are falling, that layoffs are increasing despite a growing economy, and that the promise of long-term employment on which many American workers rely can no longer be kept.

Recent studies suggest that these claims are exaggerated. Although it is true, as some critics point out, that the number of low-paying jobs has increased, that of high-paying jobs has increased even more rapidly. It is the jobs in the middle, the ones offering wages close to the median, that have become somewhat scarcer. Layoffs, meanwhile, are not rising: the rate of job loss has actually declined somewhat, although it does appear that certain categories of workers previously less affected by job loss are now more at risk. Real, inflation-adjusted wages have generally been stagnant over the longer term, but standard methods of adjusting wages for inflation may have masked a real rise, and total compensation, including fringe benefits, has increased. Finally, some evidence indicates that the high level of average job tenure first identified in the early 1970s has changed little since then, although other recent research disputes this claim. This chapter examines these and other labor market trends in some detail, describes how workers have responded to these changes, and discusses policy alternatives to address some of the real problems that exist.

TRADITIONAL LABOR MARKET INDICATORS

Traditional indicators of labor market performance point to substantial improvement in the last few years. Perhaps the single most important indicator, the unemployment rate, is as low today as it has been at virtually any time in the last 20 years—and lower than it was through most of the economic expansions of the late 1970s and the mid- to late 1980s (Chart 4–1). The unemployment rate for the whole of 1996, at 5.4 percent, was below the rate for any full year since 1973, except for 1989 when the rate was 5.3 percent. And not only is the overall unemployment rate low, but groups that traditionally have experienced greater difficulty in finding jobs are doing better as well. For example, the unemployment rate for blacks in both 1995 and 1996 was almost a full percentage point lower than in any of the last 20 years.

The unemployment rate measures unemployment as a percentage of the labor force, not of the entire working-age population. It would be little cause for celebration if the unemployment rate has fallen merely because some jobless workers have become discouraged and have stopped seeking work, thus removing themselves from the labor force altogether. Recent data, however, strongly reject this explanation of today's low unemployment picture. Employment gains have been strong over the last 4 years: the employment-to-population ratio indicates that almost as large a share of the population is working now as at any time since annual statistics began to be collected (Chart 4–2).

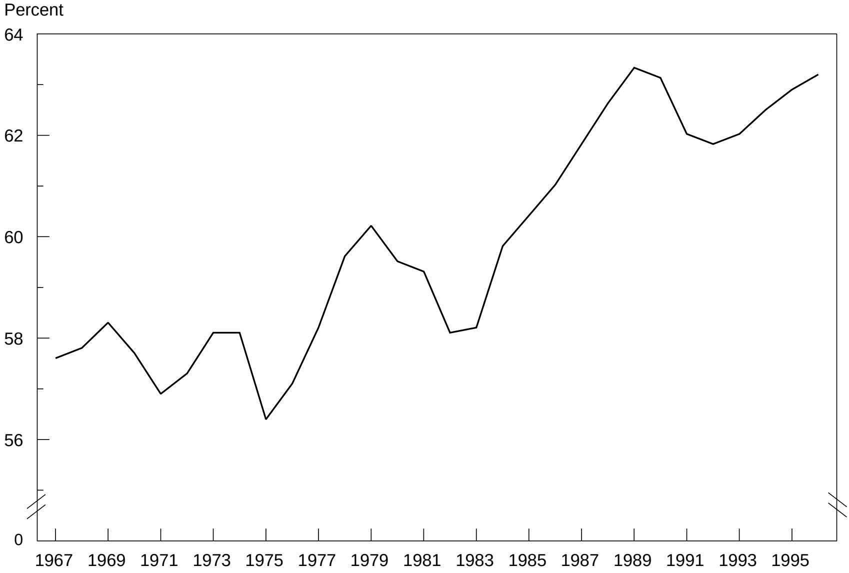
THE QUALITY OF NEW JOBS

A large number of new jobs have been created over the past 4 years, but concerns have been expressed about the quality of these

Chart 4-1 **Unemployment Rate**
The unemployment rate in 1996 was as low as it has been at virtually any time since the early 1970s.

Source: Department of Labor.

Chart 4-2 **Employment-to-Population Ratio**
The percentage of the population employed was near a record high in 1996.



Note: Data adjusted for the Current Population Survey redesign.
Sources: Department of Labor and Council of Economic Advisers.

jobs. Recent research finds that most of the new positions created in the 1990s are "good" jobs. The number of lower paying jobs also increased, however, as employment in the middle of the earnings distribution fell.

JOB GROWTH WITHIN SERVICE-PRODUCING INDUSTRIES

A disproportionate share of employment growth in the current expansion has occurred in service-producing industries. But contrary to the popular notion that service jobs are primarily low-paid positions, jobs in these industries are actually quite diverse, including many high-wage positions in such industries as financial services, health care, and computer and accounting services. For this reason it is important to determine at which end of the wage spectrum the employment growth within services has mainly occurred.

The evidence indicates that managerial and professional occupations have been the main contributors to recent job growth within service-producing industries, accounting for most of the net increase in employment in this sector occurring between February 1994 and February 1996 (1994 is chosen as the base year because the Current Population Survey, or CPS, underwent a major redesign that makes comparisons before and after 1994 difficult; see Box 4–1). Managerial and professional occupations within service-producing industries have been large contributors to employment growth in each of the past three major expansions. But gains in these occupations have been even more important in the current expansion. Employment increases in these generally higher paying occupations may not necessarily translate into high pay for workers immediately, but the greater opportunities for advancement in these jobs promise higher wages in the future.

ECONOMY-WIDE JOB GROWTH

A more detailed picture of recent job creation emerges from an examination of changes in employment within specific industry and occupational categories. A study conducted by the Council of Economic Advisers and the Department of Labor compared full-time employment in February 1994 with that in February 1996 in 45 specific occupations in each of 22 major industries, for a total of almost 1,000 industry/occupation "cells." For each of the 287 cells in which employment was large enough to provide reasonably reliable within-cell wage levels, median weekly earnings as of February 1994 were determined, along with the median wage across all cells in that month. Employment growth between February 1994 and February 1996 in high-wage job cells, defined as those in which median earnings were above the overall median, was then compared with overall employment growth. The study found that 68

Box 4–1.—Effects of the Redesign of the Current Population Survey

The Current Population Survey (CPS), conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics (BLS), is a major source of data regarding the U.S. labor market, including the monthly unemployment rate. In January 1994 the BLS revised the questionnaire to adjust for changes in work patterns and implemented computer-assisted interviewing to improve the quality of data collected.

The BLS estimates that the overall unemployment rate was not significantly affected by the redesign. This finding is contrary to early reports that the new survey produced a slight rise in measured unemployment. The new survey did change the measured composition of unemployment, however. For example, measured unemployment among 55- to 64-year-old workers and workers 65 and older increased by about 12 and 50 percent, respectively.

The breakdown of reported reasons for unemployment was also affected by the redesign. Whereas the old survey asked directly whether the unemployment spell began because of a quit or a lost job, now respondents must first report that they were working just prior to their unemployment spell before that question is asked. Evidently, asking the question directly induced some workers to report that their unemployment spell began for one of these reasons, because the number of workers classified as job losers or job leavers declined using the new survey. In addition, expanding the definition of previous work experience to include part-time work led to more workers being classified as reentrants rather than as new entrants.

The redesign also affected reported unemployment durations, because computer-assisted interviewing allows the interviewer to check whether a respondent's answers are consistent from month to month. Respondents used to overestimate short-term and underestimate long-term unemployment spells. These changes increased the proportion of spells longer than 14 weeks and decreased that of spells shorter than 5 weeks.

Other labor market indicators were also affected. Both the labor force participation rate and the employment-to-population ratio are about half a percentage point higher when measured using the new techniques.

percent of the net growth in full-time employment over this period occurred in these higher paying job categories.

The results of this research were similar to those reported in a BLS study that divided employment into 90 industry/occupation categories and then identified jobs in these categories as either high-, middle-, or low-paying. Between 1989 and 1995, employment in the high-paying and low-paying categories increased by 13 percent and 7 percent, respectively, while employment in the in-between category fell by about 3 percent.

An alternative disaggregation of jobs into extremely detailed occupational categories (also by the BLS) supports these findings. The BLS compiles responses from a full year of CPS data to examine wages and employment growth for almost 500 occupational categories. Between 1994 and 1995, some of the categories with the largest employment gains included sales supervisors and proprietors, electricians, marketing and advertising managers, and electrical and electronic engineers. Consistent with the Council's calculations, occupations in the top half of the wage distribution accounted for 70 percent of net employment growth.

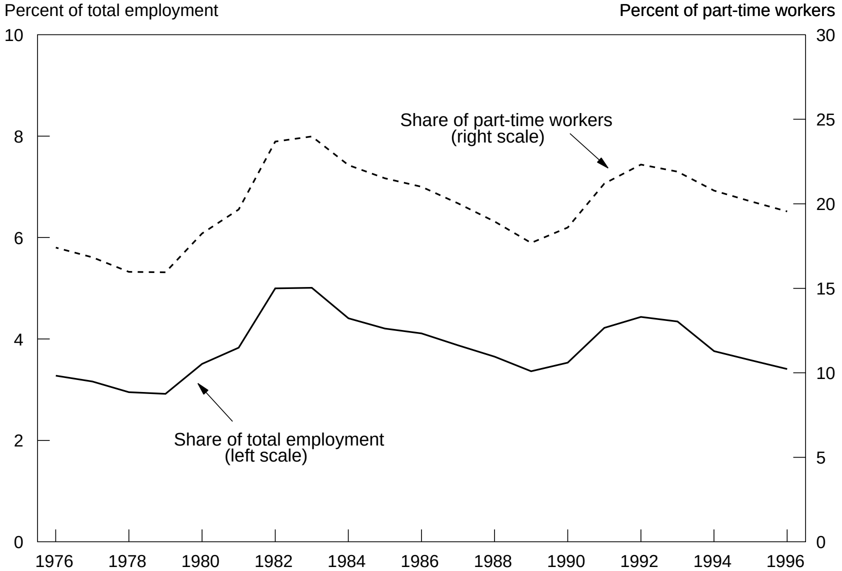
FULL-TIME VERSUS PART-TIME JOBS

Even if today's new jobs are more likely than before to be in the higher paying sectors of the labor market, not all of these jobs provide workers with full-time employment. Data from the CPS provide an opportunity to explore trends in part-time employment. Chart 4–3 depicts the proportions of employed persons reporting that they work part-time for "economic" reasons (i.e., who would prefer a full-time job but cannot find one). Most of those who work part-time seem to do so by choice; moreover, the proportion of part-time workers who do so for "economic" reasons has been declining.

THE LEVEL OF WAGES

The economic growth of the 1980s produced only small real wage gains for workers. Moreover, real wages, when adjusted for inflation by consumer prices, have failed to keep pace with worker productivity since about 1983—a clear departure from the pattern of preceding years. (See Box 4–2 for a discussion of potential biases introduced in measuring consumer price inflation.) Although productivity growth has slowed, from around 2.8 percent per year before 1973 to 1.1 percent per year since, it has not stagnated; it therefore cannot explain these wage trends. After documenting the trends, the following discussion explores two possible explanations for them: changes in the relationship between the consumer price indexes, used for measuring real wages from the worker's perspective, and overall price indexes used for measuring real wages from

Chart 4-3 **Part-Time Employment for Economic Reasons**
The share of part-time workers who work part time for economic reasons and the level of such employment have declined recently.



Note: Data adjusted for the Current Population Survey redesign.
Sources: Department of Labor and Council of Economic Advisers.

the producer's perspective; and changes in the relationship between wages and total compensation, which includes fringe benefits as well as wages.

Box 4–2.—The Influence of Inflation Adjustments on Measured Real Wages and Incomes

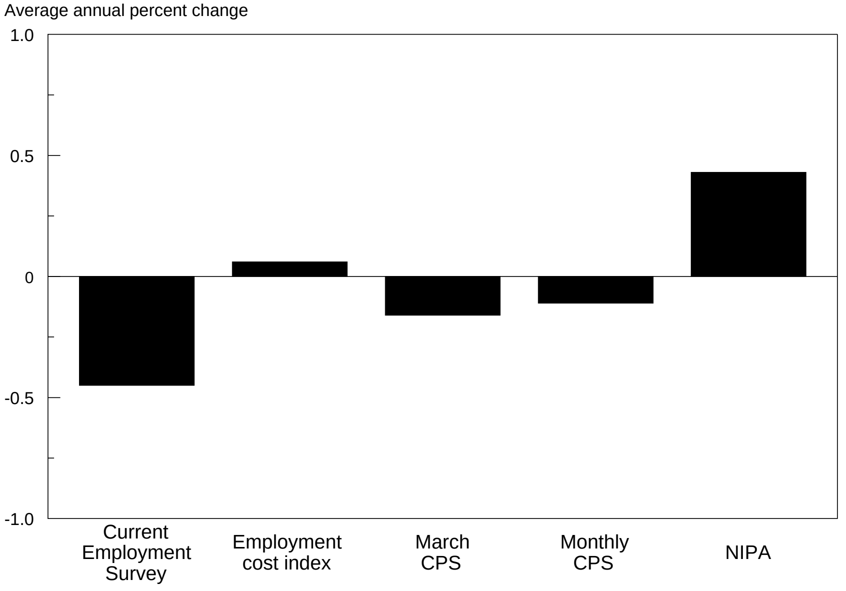
Standard analyses of wage and income trends use the CPI to adjust for inflation. But the CPI is a biased measure of the cost of living because it does not adjust for substitution between goods and may not fully account for changes in their quality—problems that are described more fully in Chapter 2. To the extent that the CPI overstates inflation, adjustments to wages and income using the CPI will understate actual growth in purchasing power.

Chart 4–5 displays trends in wages from the ECI, adjusted by the official CPI and adjusted by CPI inflation less 0.5 percentage point. If the CPI overstates inflation by ½ percentage point, real ECI wages have actually risen by almost 10 percent since the early 1980s. Trends in real income, described in the following chapter, show the same sensitivity to bias in inflation adjustment.

TRENDS IN WAGES

Chart 4–4 shows annualized real changes in wages and earnings over the past decade and a half using five different data sources (Box 4–3) adjusted for inflation by the consumer price index (CPI). For three of the sources, wages were virtually unchanged over the period. Changes in median real weekly and annual earnings for full-time workers, estimated from the monthly CPS and the annual March CPS, were similar to those from the employment cost index (ECI) despite several differences in methodology: the ECI data measure mean rather than median wage changes, compute hourly wages rather than weekly or annual earnings, and include part-time as well as full-time workers. Of the five series, only average hourly earnings, as measured in the BLS's Current Employment Statistics (CES) program, fell noticeably over this period. Unlike the other series, the CES covers only production and non-supervisory workers, who suffered relative wage declines in the 1980s.

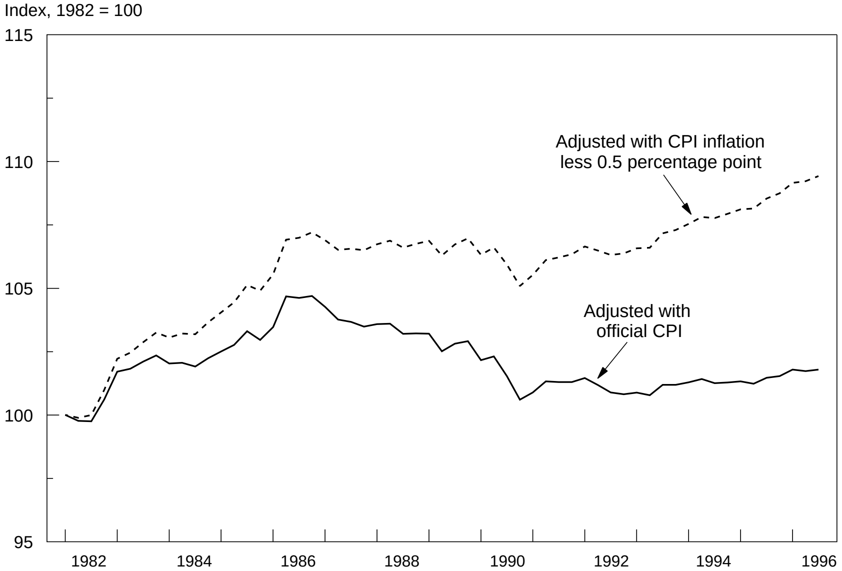
Chart 4-4 **Measures of Annualized Real Wage and Earnings Growth Since 1982**
Most indicators show that real wages have remained relatively flat over the past 15 years.



Note: Series deflated by CPI-U-X1.
Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

An interesting feature of wage trends is that they display no apparent pattern over the business cycle. Economic theory does not offer a clear prediction of how real wages should move over the

Chart 4-5 **Alternative Inflation Adjustments to Wages**
Real wage trends are understated if the CPI overstates inflation.



Note: Wage data are from the employment cost index.
Sources: Department of Labor and Council of Economic Advisers.

cycle. On the one hand, we might expect the greater demand for labor during an expansion to lead to real wage increases. On the other hand, as the economy expands, it puts into production its less efficient capital stock. To induce firms to do this, prices of the goods they sell must rise relative to wages, which means that real wages must fall. Empirically, the fact that aggregate measures of the real wage show little cyclicality may indicate that these two effects are offsetting.

A difficulty in identifying changes in wages over the business cycle, however, is that the pool of employed workers changes. During recessions, lower skilled and less experienced workers are more likely than others to lose their jobs. When the economy recovers, these same workers become reemployed. Therefore, during an expansion the labor force is likely to include more low-paid workers; this depresses the average wage. Research shows that once the composition of the pool of employed workers is controlled for, the wages of male workers are considerably more procyclical than the aggregate wage statistics indicate.

WAGES VERSUS TOTAL COMPENSATION

The discussion so far has mainly focused on wages. However, for many purposes total compensation, which includes fringe benefits, may be a more useful measure. Although real wages have changed

Box 4–3.—Sources of Wage Data

Several data sources can be used to track trends in wages. Five commonly used sources are the following:

- The *March CPS*, conducted by the Bureau of the Census, reports median annual earnings for full-time, year-round workers for the preceding calendar year.
- The *monthly CPS*, conducted by the Census Bureau for the BLS, asks one-quarter of all respondents about their "usual" weekly earnings and hours worked on their main job, in order to estimate the median wage for all full-time workers. Earnings data from this source are reported quarterly.
- The *employment cost index*, produced by the BLS, is based on a survey of wages, salaries, and benefits in approximately 4,700 establishments in the private sector. Firms surveyed are chosen so as to maintain a constant industry and occupational mix of workers, to eliminate the effects of employment shifts between industries and occupations.
- The *Current Employment Statistics* survey, conducted by the BLS, obtains data from nearly 400,000 establishments in private nonagricultural industries regarding earnings and hours worked for all production and nonsupervisory employees. The data can be used to construct a measure of average hourly earnings.
- The wage data in the *national income and product accounts*, produced by the Bureau of Economic Analysis, are based on quarterly earnings records for workers covered by State unemployment insurance. Data on the number of paid hours from the Current Employment Statistics survey are used to translate these quarterly data into mean hourly wage measures, and these data are supplemented by imputation for those workers not represented in that survey.

little in the last decade and a half, total compensation has risen modestly since the mid-1980s. Meanwhile fringe benefits, which comprise roughly 30 percent of total compensation, have risen sharply. This rise is driven primarily by rapid increases in the cost of employer-provided health benefits, which increased over 20 percent in real terms between 1982 and 1994. However, employer health costs have stabilized since 1994, reflecting some combination of slower increases in the prices of medical care services, a shift toward managed care, increased premium cost sharing with employees, and a reduction in the share of the workforce with employer-paid health insurance (Box 4–4). In competitive labor markets, a rise in one component of compensation might be expected to lead firms to reduce another component, so as to keep total compensation in line with worker productivity. This may have happened during the 1980s and early 1990s, as wages remained relatively stagnant to compensate for sharply rising health benefit costs.

Even so, total compensation has risen more slowly than have increases in productivity, when nominal compensation is adjusted for changes in the prices of consumer goods. A possible explanation is that producer prices have fallen relative to consumer prices, largely as a result of the decline in the prices of many industrial goods, such as computers. From the perspective of firms, prices for all output, including investment goods, offer a better method of adjusting trends in compensation. Because firms hire an additional employee only if the cost of doing so is less than or equal to the value of that employee's output, a more appropriate measure to compare with productivity may be compensation adjusted for all output prices. As can be seen in Chart 4–6, changes in real compensation, when deflated by output prices, have tracked changes in total productivity more closely since the mid-1980s than when consumer prices are used for the adjustment.

JOB LOSS

The threat of losing one's job engenders justifiable anxiety, because job loss can result in a lengthy spell of unemployment and a long-lasting reduction in earnings even after a new job is found. Economic expansion creates dynamism in the labor market, with reallocation of workers across sectors, and in such periods growth in new jobs typically is sufficient not only to lower the aggregate unemployment rate and to create jobs for new entrants into the labor force, but also to accommodate those workers displaced from their old ones. Historically, the highest rates of job loss tend to occur during recessions. Some have claimed that it is high today for an expanding economy.

TRENDS IN THE RATE OF JOB LOSS

The Displaced Workers Survey, published by the BLS since 1984 as a biennial supplement to the Current Population Survey, has become an important source of data on job loss. This survey identifies workers who have lost jobs within the 3 to 5 years before the survey date, either because their plant closed or moved, because their position or shift was abolished, or because of insufficient work. The

Box 4–4.—Trends in Employer Health Care Costs

The cost to employers of providing health insurance to their employees rose more rapidly than inflation throughout the 1980s and early 1990s. Since then, however, this trend has reversed: in the past few years firms' health insurance costs have actually fallen in real terms. This turnaround is the result of a combination of factors including slower growth in medical expenditures, employers switching to lower cost managed care plans, declining health coverage of retirees, and, possibly, modest cost shifting to employees.

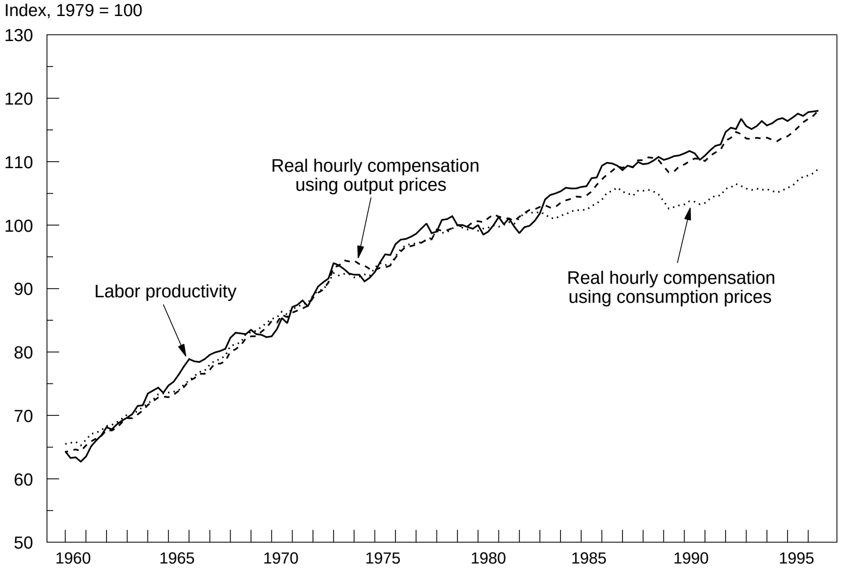
Slower Growth in Medical Spending. Overall private medical expenditures are increasing much more slowly than in the past. Premiums (employer and employee) at medium-size and large firms rose by about 11 percent in 1991 and 1992, but only 2.1 percent in 1995 and 0.5 percent in 1996. The move to managed care may help explain why growth in health costs has moderated so sharply. Not only are managed care plans cheaper, but their expansion may also be forcing the competing traditional plans to become more efficient.

Coverage Trends. Over the past 15 years, employers have reduced the number of workers for whom they provide health insurance coverage. But most of that reduction occurred before the recent slowing in health benefit costs. However, employers have continued to decrease the share of their retirees eligible for health benefits.

Cost Shifting. Employers have tried to hold down rising health benefit costs by shifting more responsibility for premiums and other expenses onto employees. But this trend has moderated recently. Since 1992, the percentage of workers whose employers fully finance their health insurance has changed little. Nor has the average premium contribution that firms require their employees to make been modified much in recent years. Deductibles and out-of-pocket spending have increased little in the same period. One reason is that coverage has shifted dramatically into managed care plans, which typically have low copayments and deductibles.

survey, which is conducted in January or February of every even-numbered year, can be used to examine trends in displacement rates, the characteristics of dislocated workers, and the costs associated with permanent job loss. Most of the results reported in the survey, and all those reported here, reflect job displacement for so-called long-tenure workers: those who were employed in their previous job for 3 or more years. The rationale for this focus is that

Chart 4-6 **Real Compensation and Labor Productivity**
Real hourly compensation when deflated by output prices has risen at the same rate as productivity.



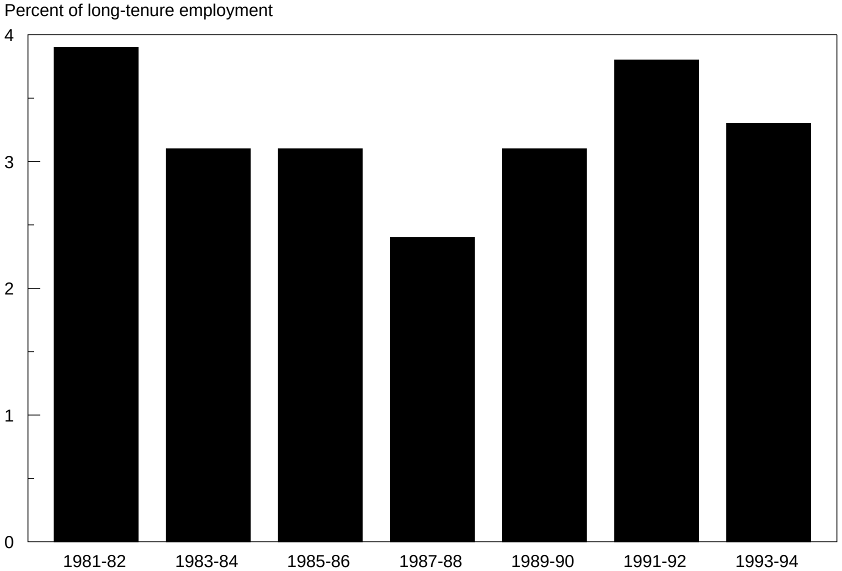
Note: Series refer to nonfarm business sector. Compensation measures are deflated by the consumption deflator for the real consumption wage and by the nonfarm business deflator for the real output wage.
Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

individuals with lengthy job tenure are likely to have the most severe adjustment problems when displaced.

Chart 4–7 shows trends in the rate of job displacement among long-tenure workers since the early 1980s. As one might have expected from the deep recession of 1981–82, job dislocation rates were high during this period. As the economy recovered in the mid-1980s, displacement rates fell. The recession of the early 1990s again saw increasing rates of displacement: job loss in 1991–92 was as prevalent as it had been in 1981–82, even though the earlier recession was much more severe. Although displacement statistics from the 1993–94 period are calculated from unpublished data and may not be directly comparable to earlier years, displacement rates appear to have subsided to the level that prevailed for most of the late 1980s. Displacement rates were quite a bit lower, however, in 1987–88, even though the unemployment rate in those years was close to that in 1993–94. One may infer from these data that some of the problems of job loss are persisting even in the face of a healthy economic expansion.

Other measures, such as the monthly CPS, indicate that the rate of job loss has fallen significantly in recent years. The monthly CPS obtains information not only on labor market status, but also on the reasons why an unemployed worker began looking for work and the length of time spent looking. Job losers who are not on layoff

Chart 4-7 **Displacement Rate Among Long-Tenure Workers**
The rate of job displacement in 1993-94 was roughly comparable to that in most of the mid-1980s except for the 1987-88 period, when it was much lower.



Note: Data after 1989-90 are adjusted for nonresponse and are not strictly comparable with data from earlier years.
Sources: Through 1991-92, Department of Labor. Calculations for 1993-94 are by H. Farber, Princeton University, using Department of Labor data and unpublished data.

may be thought of as "permanent" job losers, even though they may have been fired for cause or have some chance of eventually being recalled. The number of these job losers unemployed for less than 5 weeks is an indicator of the number experiencing permanent job loss. These data are valuable because the CPS is the standard survey of labor market behavior and because the data are available on a regular basis. However, displaced workers who find a new job without an intervening spell of unemployment are not captured by this measure. Chart 4–8 shows that job loss by this measure has declined over the last few years and is currently comparable to the rates observed throughout much of the late 1980s.

Initial unemployment insurance (UI) claims provide another measure of job loss. Initial UI claims have declined throughout the current expansion: weekly claims have fallen by about one-third since the 1990–91 recession. Although the share of unemployment spells that are compensated has declined over time, recent trends fairly accurately reflect changes in the number of workers who have lost jobs or been laid off. These data are obtained from the administrative records of the UI system and represent a complete count of layoff activity that leads to a UI claim, rather than a sample. The weaknesses of these data are that they include temporary as well as permanent job loss and that they do not capture job losses that do not lead to a UI claim.

Chart 4-8 **Permanent Job Losers Unemployed Less Than 5 Weeks**
The percentage of unemployed workers who recently experienced a permanent job loss was low in the mid-1990s.

Note: Data adjusted for the Current Population Survey redesign.
Sources: Department of Labor and Council of Economic Advisers.

The distribution of job displacements has apparently changed over time. Workers in service-producing industries and white-collar occupations have become more vulnerable to job displacement, whereas blue-collar and manufacturing workers have become relatively less prone to lose their jobs. Thus, whereas service-producing industries accounted for about a third of all long-tenure displaced workers in the 1979–84 period, this sector's share has recently climbed to over one-half. Similarly, white-collar workers represented about 40 percent of those displaced in the early 1980s but now constitute more than half of job losers. Older and more educated workers also are exposed to greater risk of displacement than in the past. The bottom line is that the risk of job loss is now spread over a wider cross section of employees.

THE COSTS OF JOB LOSS

The costs of losing one's job include lost wages during any subsequent unemployment and any wage reduction or loss of fringe benefits that results when a new job is obtained. Displaced workers are now finding new jobs more quickly than in the past, thus reducing the first of these costs. Among workers displaced in the 1979–83 and 1981–85 periods, 60 percent and 67 percent were reemployed by 1984 and 1986, respectively. In contrast, 68 percent and 74 percent of workers displaced in the 1991–93 and 1993–95 periods were reemployed by 1994 and 1996, respectively, even though the shorter time period should have produced lower reemployment rates. The shift in the composition of displacement, from less educated to more educated workers, may explain some of the increase in reemployment probabilities, as more schooling generally helps ease workers' adjustment into alternative career paths.

Dislocated workers who find new full-time jobs often suffer a lingering decline in real earnings. Some evidence indicates that 6 or more years after displacement, the median displaced worker's earnings remain roughly 10 percent below what that worker might otherwise have expected to earn. That figure does not appear to have changed much over time. More educated workers appear to face smaller displacement costs, as their earnings losses are smaller than those of less educated workers. Furthermore, currently almost 15 percent of reemployed workers who had health insurance at their old jobs receive no such coverage from their new employers. However, this represents a considerable improvement from the early 1980s, when over one-quarter of previously insured displaced workers did not receive health insurance at their new jobs. Nevertheless, the costs of displacement are substantial for a large number of workers.

Taken as a whole, these results suggest that any sense of greater vulnerability to job loss is likely to be the result of a broadening of the risk of job displacement to groups of workers who had been relatively immune. Among those who do lose their jobs, the adjustment difficulties that follow job displacement are actually modestly less than in previous years.

JOB STABILITY

A number of prominent U.S. firms that used to maintain policies of "lifetime employment" for their workers have recently abandoned those policies. These well-publicized reversals may have led to the widespread perception that jobs in general are less stable than they used to be. However, jobs at these firms probably never comprised more than a very small share of national employment. To arrive at a more accurate picture of job stability in the United States, one needs to examine the evidence for the labor market as a whole.

One well-known study that explored job duration in the 1970s found that many workers could reasonably look forward to "lifetime jobs." A significant proportion of workers held their jobs for 20 years or more. A more recent investigation shows that lifetime jobs are just as prevalent in the 1990s as they were during the 1970s. For instance, in 1993 the median 45- to 54-year-old male worker and the median 55- to 64-year-old male worker had been employed at their current jobs for about 12 and 14 years, respectively, and over one-quarter of both groups had held their jobs for 20 years or more. These statistics are virtually identical to those obtained in several different surveys throughout the 1970s and 1980s (Chart 4–9), refuting the notion of a widespread reduction in employment stability.

Chart 4-9 **Median Job Duration for Males by Selected Age**
Job attachment between firms and workers has changed little over time.

Source: Unpublished calculations by H. Farber, Princeton University.

Job durations have changed for certain demographic groups, however. In particular, the trend toward greater female labor force participation is likely to have contributed to greater job tenure among currently employed women. Conversely, employment stability appears to have declined for high school dropouts.

A study conducted by the National Commission on Employment Policy, however, reported potentially contradictory evidence regarding job stability for the workforce as a whole. Using a method similar to the study just discussed, this study also found no change in employment stability. It also implemented an alternative method, using longitudinal data for each year of the 1970s and 1980s and examining respondents' answers to the question, "Did you have another main employer during the previous 12 months?" It found that the share of workers reporting having had another main employer two or more times in that period had increased between the two decades. Because these data pertain to other main jobs, they do not necessarily provide direct evidence for job stability on the first job when workers hold multiple jobs.

WORKER ANXIETY

How have workers responded to the changes facing them in the labor market? Press reports suggest that a prevailing general sense of economic uncertainty has led workers to worry about their own prospects in the labor market. Researchers can get a reading of workers' anxiety over their economic circumstances in at least two ways. Public opinion polling directed at workers' sense of job security is one approach. Another is to examine aspects of worker behavior that are linked to feelings of security.

PUBLIC OPINION POLLS

For more than two decades, a leading nationwide opinion research organization has been asking workers, "How likely is it that you will lose your job over the next 12 months?" The proportion of respondents who believed that they were "not at all likely" to lose their jobs was lower in 1996 (51 percent) than in 1991 (about 60 percent), even though the economy was suffering through a recession in the earlier year. In fact, the low proportion of workers with this strong sense of job security in 1996 is similar to the unusually low level reached in 1983, shortly after the unemployment rate peaked at nearly 11 percent during the worst recession since World War II. However, the decline in the share of respondents who considered job loss "not at all likely" has been mirrored by an increase in the share saying that it was "not too likely." The share saying that it was "very or fairly likely" that they would lose their jobs has changed little. Accordingly, these polls suggest that more people than before are feeling a moderate, but not a high, risk of job loss.

At the same time, workers also express a perception that jobs are readily available. For many years a national business association has surveyed individuals about their views on the availability of jobs. The pattern of their responses has closely matched trends in unemployment. Another survey of consumer sentiment, conducted by the University of Michigan, also shows that consumer perceptions about the job market are consistent with economic conditions prevailing at the time. Appropriately, the current low level of unemployment is reflected in recent results from both these surveys, which indicate that workers are not overly concerned about job availability.

QUIT BEHAVIOR

Workers do appear to have changed their behavior in ways that are consistent with feelings of increased anxiety about their jobs. In particular, workers have become more reluctant to quit their jobs. Typically, during periods of prosperity, workers employed in jobs they feel are a bad match for them often quit to look for new work for which their skills would be more appropriate. Quits generally fall during recessions, when new jobs are harder to find. For any two comparable points in the business cycle, a lower overall quit rate may indicate greater worker anxiety, because it suggests that workers fear they will not be able to find or keep a new job if they quit their current one.

One measure of how many workers are quitting their jobs to look for new work is provided by the CPS, which reports the percentage of the labor force that has become unemployed within the previous 5 weeks because of having quit. Chart 4–10, which plots this measure, shows the expected strong cyclical pattern to quit behavior. The current expansion is no exception, although the rise is less sharp than that in the previous expansion, and quits fell slightly last year. Five years into the current expansion, quits are still considerably less prevalent than in the 1970s or 1980s—a finding that is consistent with lingering worker anxiety.

Chart 4-10 **Job Leavers Unemployed Less Than 5 Weeks**
The percentage of unemployed workers who quit their jobs in the last 5 weeks was relatively low in the mid-1990s given the length of the expansion.

Note: Data adjusted for the Current Population Survey redesign.
Sources: Department of Labor and Council of Economic Advisers.

POLICIES TO MITIGATE THE COSTS OF ECONOMIC CHANGE

The Federal Government has many policies and programs at its disposal to reduce the costs that economic growth and change impose on some workers. The main policy instrument that addresses some of the immediate needs of workers who lose their jobs is the unemployment insurance system. Other policies, such as mandatory advance notice of layoffs, may provide short-term benefits as well. Still other policies, including education and training programs, are vital for improving the longer term fortunes of those hurt by economic change. These are discussed briefly here and in more detail in Chapter 5.

UNEMPLOYMENT INSURANCE

Created in 1935 as part of the Social Security Act, the UI system has two main goals: to work as an economic stabilizer, expanding consumer spending during periods of heavy job loss, and to provide economic security for workers through income maintenance. The Federal Government maintains control over the broad design of the UI system, but States have considerable autonomy in tailoring the program's features within their jurisdictions. UI provides weekly benefits to workers who have been laid off or who have lost their jobs for reasons other than misconduct or a labor dispute. Only workers with a sufficiently long employment history (usually two calendar quarters of significant employment) are eligible. Benefits are a fraction of average weekly earnings on the job that was lost, up to a maximum dollar amount, and paid up to 26 weeks in most States. This fraction, called the replacement rate, is typically between 50 and 70 percent. Benefits are financed, in most States, by a payroll tax levied on firms.

UI benefits help workers weather periods of unemployment, since the benefits allow workers to maintain consumption patterns closer to those observed prior to the job loss. Another potential benefit of the UI system is that it may improve the match between workers and firms upon reemployment: UI may provide individuals the financial resources to prolong their job search until they receive an offer appropriate to their skills. However, little empirical evidence supports the proposition that longer search periods translate into better job matches, as measured by higher future earnings.

Although the UI system has benefited millions of workers over the years, these benefits do not come without costs. In particular, a significant body of evidence supports the contention that higher UI benefits lead to longer unemployment spells. Providing benefits to unemployed workers reduces their incentive to search intensively for a new job. Research suggests that a 10-percentage-point increase in the replacement rate of UI benefits leads to an additional 1 to 1.5 weeks of unemployment, when an insured unemployment spell typically lasts roughly 15 weeks. Job-finding rates also increase somewhat as the exhaustion of benefits approaches.

Some States and the U.S. Department of Labor have investigated whether changes in the UI program can reduce unemployment durations and improve subsequent employment outcomes in a cost-effective manner. The research was undertaken in the form of controlled experiments. Workers were randomly assigned to treatment and control groups; those in the control groups received benefits under the rules of the existing program, while treatment-group participants were subject to an alternative, experimental set of rules. With random assignment, members of the different groups can be assumed to have similar characteristics, so that any differences in outcomes can be attributed specifically to the difference in policy.

The first set of experimental policies included job search assistance. Treatment-group members were eligible for services such as instruction in how to find a job, and for periodic meetings with employment counselors. These programs were generally found effective both in reducing unemployment durations and in increasing earnings during the first year or two following reemployment. One difficulty in interpreting the results, however, is that one cannot be sure whether the favorable effect was caused by the job search services themselves or by the more rigorous monitoring of worker search activities that accompanied them. Nevertheless, the apparent success of these experiments led the Congress to pass a law in 1993 requiring States to institute job search assistance for workers identified as likely to be hard to place.

States have also experimented with paying reemployment bonuses to workers who find jobs within a certain period after filing a UI claim; self-employment assistance programs with UI payments as support; and training programs targeted at dislocated workers. Of these, only the self-employment assistance programs yielded generally positive results. The proportion of unemployed workers starting their own businesses roughly doubled, although it remains quite low. Over an 18-month follow-up period, failure rates for these businesses were no different from those observed for businesses started by control-group members.

The reemployment bonus experiments yielded mixed results: in some but not all cases the savings in reduced UI benefits exceeded the costs of bonus payments and additional administrative expenses. It is also possible, however, that a more widespread use of bonuses would increase the share of workers filing UI claims.

Short-term training programs generally have not been as successful as other policies in improving the labor market outcomes of dislocated workers—a result that contrasts with the findings of similar programs targeted at low-income, low-skilled workers. Programs to support longer term training—for example, those that provide funding for higher education—may yield significant benefits, but no formal, controlled experiment has so far examined such programs.

Changes in the economy have also had profound effects on the UI system. Most notably, the share of unemployed workers who received UI benefits has fallen dramatically since the early 1980s. This reduction has been attributed to demographic shifts in the workforce, a reduction in union membership, regional shifts in employment, and tightened State eligibility requirements. Payment of extended benefits during recessions (beyond the regular maximum duration) has been less likely, because the trigger that starts these payments is tied to an *insured* unemployment rate that now is a less reliable indicator of economic conditions. As a consequence, during the last two recessions the Congress authorized temporary emergency programs that did not depend on the extended benefits triggers. Such ad hoc adjustments may not be well timed to the beginnings and ends of recessions. The question of which is the correct trigger to use for this program has resulted in changes in the law, which now authorize States to adopt a *total* unemployment rate trigger for the extended benefits program if they so desire.

In addition, inflation has significantly eroded the value of the taxable wage base, upon which UI taxes are imposed. The Federal wage base, currently set at $7,000, is not indexed for inflation and has fallen dramatically in real terms. (Although many States have a higher base, it is less than $10,000 in most larger States.) Early in the life of the UI system, in the late 1930s, the taxable wage base was set at $3,000 (over $35,000 in 1996 dollars), and only relatively small, infrequent adjustments have been made since then. Such a low base makes the UI tax similar to a head tax that is disproportionally levied on firms that employ low-wage workers. The nominally rigid taxable wage base, combined with the fact that UI benefits are indexed in many States and increased regularly in others, requires periodic adjustments in State UI tax rates.

ADVANCE NOTICE

Another way to reduce the costs of job loss is to require firms to give advance notice to workers about to be displaced. Prenotification has a variety of potential benefits. It gives individuals time to search for a new position while still working, which may shorten unemployment spells or prevent them altogether. Other types of adjustment assistance (e.g., job counseling, skills retraining, or outplacement assistance) may also be more effective and easier to administer if individuals are still reporting for work.

Finally, if the notice is given sufficiently far in advance, workers may be able to switch their human capital toward skills that are likely to be useful to their future employers. Although legislation requiring advance notice has been enacted, a variety of exemptions limit the number of firms required to provide notice. It is unclear whether the legislation has increased the share of workers who are actually notified.

For those displaced workers who receive it, advance notice does appear to reduce adjustment problems. Recent studies suggest that individuals receiving at least 2 months of advance notice are out of work up to 1 week less and earn around 10 percent more in their new jobs than do those receiving no notice. Despite only modest reductions in joblessness, pay might increase through at least two mechanisms. First, employers who provide advance notice may also tend to provide other forms of readjustment assistance that might lead to wage gains upon reemployment. Second, notified workers remain jobless almost as long as other workers, but may find new jobs that better match their skills and qualifications. The available evidence lends support to both of these possibilities.

REFORMING TRAINING AND REEMPLOYMENT SERVICES

Both the Administration and the Congress have proposed consolidating many of the roughly 100 separate education and training programs now administered by the Departments of Labor and Education and reforming the overall system. Some of the proposed reforms are intended to help dislocated workers. A crucial element is the establishment of one-stop career centers where workers can find out about employment opportunities and training programs and apply for unemployment benefits. These centers are already being established in many States.

PORTABILITY OF PENSION AND HEALTH CARE BENEFITS

The costs of job transition are higher than they need to be in part because of the frictions involved in transferring pension and health care benefits. This is a significant cause of "job lock," in which workers are reluctant to leave their current jobs because they fear they will not be able to transfer their benefits. Many of these frictions can be eliminated, and recently some important strides down this path have been made. The minimum wage legislation passed in August 1996 contained a pension simplification initiative aimed at making portable pensions more available. New Internal Revenue Service regulations seek to do the same. Another recent success is the enactment of the Health Insurance Portability and Accountability Act of 1996 (the Kassebaum-Kennedy bill), which ensures continued health care coverage for workers with preexisting conditions who lose or change their jobs. The Administration has also proposed continuing health insurance for unemployed workers. Such a policy would further the goal of reducing the frictions associated with changing jobs.

CONCLUSIONS

Over the long run, sound economic policies that lead to low levels of unemployment and high rates of economic growth are likely to produce gains for most workers. Technological change and an increasingly competitive marketplace also help promote the conditions necessary for such growth. Most of the available evidence suggests that the U.S. labor market is quite robust, with significant job growth in the higher paying sectors, some evidence of reduced job loss, and a level of job stability that probably is no different today from what it was 20 years ago.

Nevertheless, some costs have been incurred. Government has a role in lessening the burden that economic growth causes for some workers. Some policies have been put in place, and others have been proposed, that should help reduce these costs without sacrificing growth in the economy.

One important potential cost of economic growth that this chapter has not addressed is increased inequality: the danger that those at the bottom of the earnings distribution will find themselves falling ever further behind the rest. Chapter 5 explores issues of inequality in far greater detail.

CHAPTER 5

Inequality and Economic Rewards

IT WAS OVER 30 YEARS AGO that President John F. Kennedy said, "A rising tide lifts all the boats." The decade preceding his Presidency and the decade thereafter supported this optimism. Tremendous economic growth raised the incomes of American families at all levels, including the poor, and income inequality fell dramatically. Beginning in the late 1970s, however, this broad tide of equalizing growth turned, and inequality began to increase. The gap between rich and poor continued to widen through the 1980s and into the early 1990s, regardless of economic conditions. In the last few years some signs have begun to emerge that inequality may be stabilizing and perhaps even declining slightly, but the gap in economic rewards between rich and poor is still much larger than it was 20 years ago.

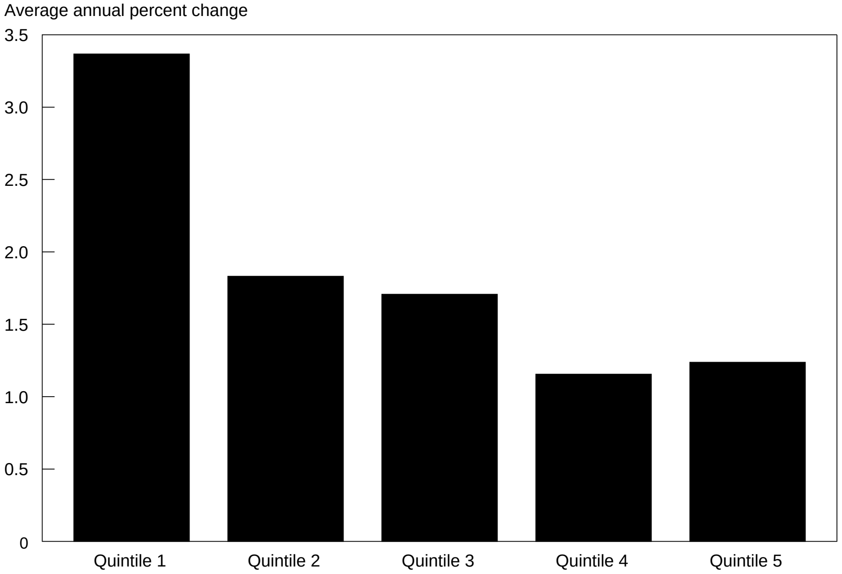
Economic inequality has several different dimensions. We begin by looking at trends in earnings inequality across and among workers as grouped by age, sex, and level of education. Earnings inequality is an important indicator in its own right, because it helps characterize the structure of the labor market. It is also an important contributor to inequality in household incomes, a broader measure of economic well-being that aggregates the resources of all household members and incorporates other income flows besides earnings. Finally, we consider some alternative measures of inequality that may better address differences in lifetime income across households.

Concerns with inequality are inseparable from concerns about the well-being of the poor, but a rise in inequality does not necessarily mean the poor are worse off. A rise in inequality is consistent with a scenario in which the circumstances of the poorest are improving, but the richest are experiencing even greater gains. Such a state of affairs is less troubling than one in which those at the top prosper while the living standards of those at the bottom stagnate or decline. It makes a profound difference to our understanding and to our policies which of these depictions of rising inequality is the correct one. Therefore, in addition to documenting trends in inequality, this chapter will focus specifically on the well-being of those at the bottom of the distribution.

RECENT TRENDS IN INEQUALITY

Before addressing longer term trends in inequality, we briefly explore the record of the recent past. Although it is too soon to tell whether a break in the long-term trend toward greater income inequality has occurred, income statistics over the past few years do show some reduction. From 1993 to 1995, income gains were observed throughout the income distribution, but the percentage increases were the largest for low-income households. One way to view these changes is to separate households into five equal groups based on their income (called quintiles) and estimate the increase in income received by each quintile. Chart 5–1 displays the results of such an analysis for the 1993-95 period. It shows that this period has seen gains for each quintile, which were largest for the lowest quintile and smallest for the highest.

Chart 5-1 **Real Household Income Growth by Quintile from 1993 to 1995**
Poor households experienced the largest income gains from 1993 to 1995.



Note: Household income adjusted by CPI-U.
Source: Department of Commerce.

The "rising tide" theory might have predicted such results, given the ongoing economic expansion. Yet recent historical experience indicates that expansions do not always reduce inequality. Consider, for example, three years—1979, 1987, and 1995—when economic performance was similar: in all three years gross domestic product (GDP) grew by about 2 to 3 percent, the unemployment rate was about 6 percent, and the economy had been expanding for a few consecutive years. Yet whereas the percentage of the population living in poverty (i.e., the poverty rate) fell by 0.7 percentage point in 1995, it actually rose by 0.3 percentage point in 1979 and fell by only 0.2 percentage point in 1987. The Gini index of household income inequality (which ranges from 0, indicating perfect equality across income quintiles, to 1, which would indicate that all income is going to the top quintile) rose in both 1979 and 1987, but fell in 1995. Recent data show that inequality has been reduced beyond what would have been predicted by cyclical factors.

Although these results are encouraging, it is too soon to tell whether the longer term trends of increasing inequality have been reversed. The remainder of this chapter focuses on these longer term trends.

EARNINGS INEQUALITY

The incomes of most people consist mainly of earnings from labor. A large component of income differentials across households can be attributed to differences in the earnings of individuals. An examination of earnings is also facilitated by the individual nature of the measure: it is not necessary to adjust for the changes in household composition that so complicate discussions of household income. This section documents trends in earnings inequality in general, trends across workers with different characteristics, and trends across workers with similar characteristics, before attempting to identify the factors that can help explain the observed rise in inequality over time.

DOCUMENTING TRENDS IN EARNINGS INEQUALITY

Because earnings are a function of both the wage rate and the number of hours worked, we concentrate here on full-time, year-round workers so as to abstract from any biases due to changes in working hours over time. Men's earnings are the focus of this analysis, because the increasing labor force participation of women over time may have altered the composition of the female workforce in ways that might distort the results. For instance, if women with higher earnings potential have entered the labor market at a faster rate in recent years, measured inequality would appear to have increased, even if the underlying distribution of wages for women continuously employed has remained unchanged. After examining earnings inequality among men, we briefly examine trends among women.

For male workers we examine two ratios that compare earnings between workers at different points in the earnings distribution. One of these is the ratio of the earnings of a male worker at the

90th percentile (i.e., one whose wages exceed those of 90 percent of all male workers) to those of a male worker at the 50th percentile (i.e., the median male worker). This ratio is called the 90/50 earnings ratio. The other ratio, called the 50/10 earnings ratio, is that between the median worker and a worker who earns more than only 10 percent of workers. Estimating both these ratios is more useful than the common alternative of estimating the 90/10 ratio alone, because the 50/10 ratio provides more information on the well-being of those at the bottom of the distribution. Because the median male worker's wages have fallen somewhat in real terms, an increase in the earnings ratio between the 50th and the 10th percentiles indicates a larger reduction among those with low earnings. In 1995, annual earnings at the 10th, 50th, and 90th percentiles were $12,920, $31,497, and $70,314. (Note that the 90th-percentile figure is well below the huge salaries paid to top corporate executives; see Box 5–1.)

Trends in the 90/50 and the 50/10 earnings ratios for full-time, year-round male workers are shown in Chart 5–2. These data reveal that the male worker at the middle of the earnings distribution earned about 2.4 times the wages of the worker at the 10th percentile in 1995, compared with 2.2 times in 1979. The 90/50 earnings ratio rose by a similar amount, from about 1.9 in 1979 to 2.2 in 1995. The overall trend in both ratios is upward over most of this period, indicating increasing inequality across the wage spectrum.

Another way to document increasing wage inequality is to calculate the percentages of the workforce falling in each of several different earnings categories at different points in time. Chart 5–3 shows that a larger proportion of workers earned less than $15,000 in 1995 than in 1979 (when earnings are measured in constant 1995 dollars); at the other end of the distribution, a larger share of the workforce earned in excess of $75,000 in 1995 than in 1979. (The consumer price index, or CPI, is used in both calculations to adjust for inflation; potential biases introduced by using this index are described in Chapter 2.) These increases at the top and bottom of the distribution are offset by a reduction in the share of workers earning between $35,000 and $75,000.

BETWEEN-GROUP INEQUALITY

The trend in inequality may be better understood by first grouping workers according to certain key characteristics (educational attainment and age are two that are commonly used) and then separating observed wage differentials into two components: the differential observed between workers so grouped (between-group inequality) and the differential observed among workers in the same group (within-group inequality). Taking first the education dimen-

Box 5–1.—Executive Compensation

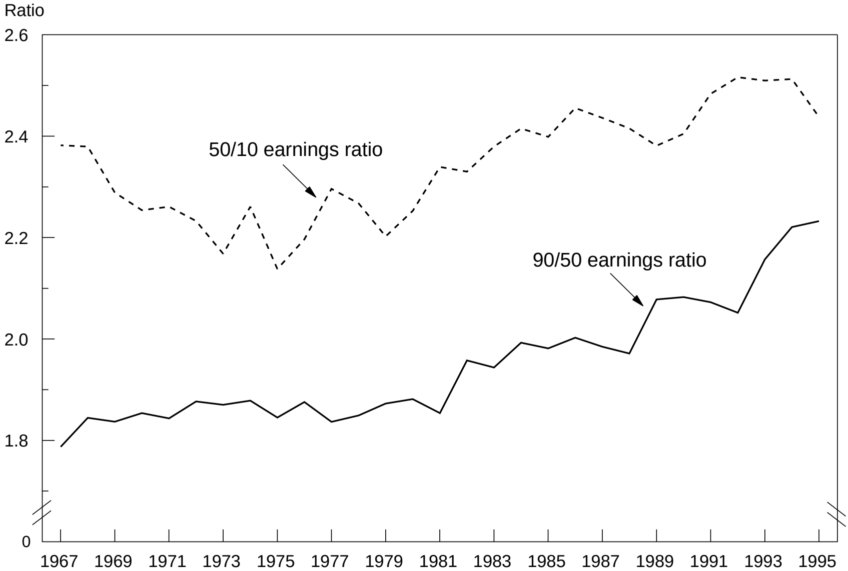
One much-publicized aspect of earnings inequality has been the extraordinarily high level of compensation of top corporate executives. In 1995 the average compensation package for chief executive officers (CEOs) in a sample of 362 of the largest 500 U.S. firms was $1.5 million, and some CEOs received more than $10 million that year. Defenders of current corporate pay scales argue that today's executive compensation packages, with their moderate base pay and generous stock options, encourage high-level management to act in the shareholders' interests by providing greater rewards for good long-run performance. Critics respond that it is unclear in practice how much executive compensation is even designed to be "performance-based." For example, compensation in the form of stock options rewards executives for share price increases even when these are attributable to market-wide price gains rather than the executives' own actions. In addition, such compensation practices may have adverse effects on worker morale, when, for instance, a firm pays its top management very high salaries at the same time that it is laying off workers.

However this debate is resolved, the effect of high executive compensation on measured earnings inequality throughout the economy is minimal, because top executives represent only a tiny fraction of the workforce. As we saw in Chart 5–2, earnings disparities have been growing even when measured by the 90/50 earnings ratio. The executives whose compensation is the subject of this controversy receive a level of earnings that places them well above the 90th percentile, and therefore even a doubling of their salaries would have no impact on trends in this measure. And executive earnings obviously have no influence at all on the 50/10 ratio, which has been increasing as well.

sion, Chart 5–4 shows the trend in the ratio of the earnings of the median male college graduate to that of the median male high school graduate. The chart reveals that returns to education grew tremendously during the 1980s and early 1990s. In 1980 the median male college graduate earned roughly one-third more than the median male high school graduate, but this wage premium grew to over 70 percent by 1993. Since then that trend has slowed, and the ratio even declined slightly in 1995.

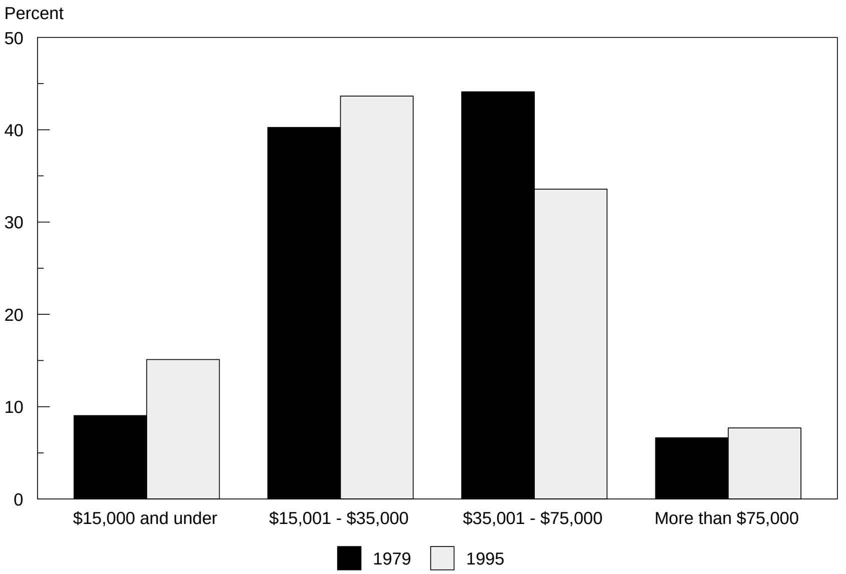
Experience on the job is another important dimension in studying inequality. The premium paid to more experienced workers has also been increasing over the past two decades or so. As shown in

Chart 5-2 **Earnings Ratios for Male Full-Time, Year-Round Workers**
Two measures show that earnings inequality for men has risen since the late 1970s.



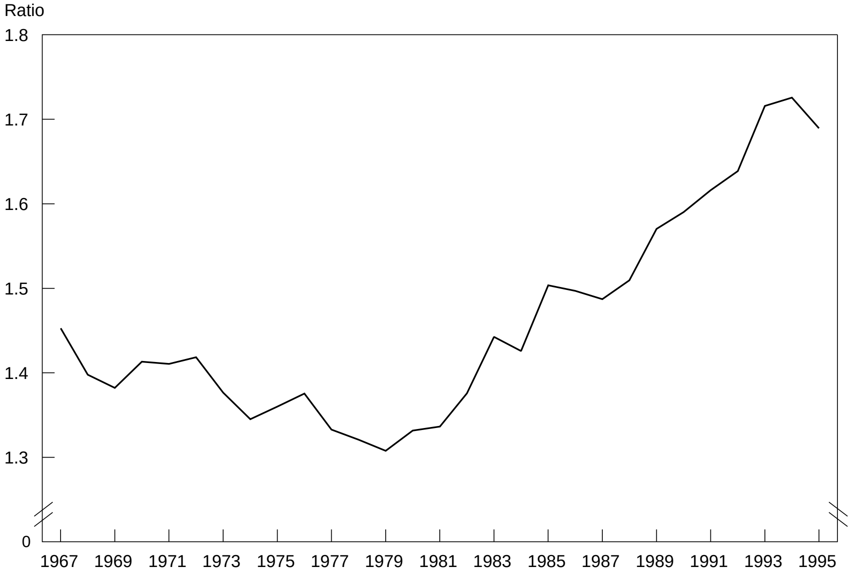
Source: Council of Economic Advisers tabulations of the March Current Population Survey.

Chart 5-3 **Male Full-Time, Year-Round Workers by Real Earnings Range**
The share of male workers earning $15,000 and under increased dramatically between 1979 and 1995.



Note: Earnings in 1995 dollars, adjusted by CPI-U-X1.
Source: Council of Economic Advisers tabulations of the March Current Population Survey.

Chart 5-4 **College/High School Median Earnings Ratio for Male Full-Time, Full-Year Workers**
The earnings premium associated with college attendance has risen dramatically for men since the late 1970s.



Source: Council of Economic Advisers tabulations of the March Current Population Survey.

Chart 5–5, the median 45- to 54-year-old male worker earned roughly 50 percent more than the median 25- to 34-year-old worker in 1995, compared with a difference of less than 20 percent in 1979. The main reason for the increase is that young workers were paid less in 1995, not that older workers were paid more.

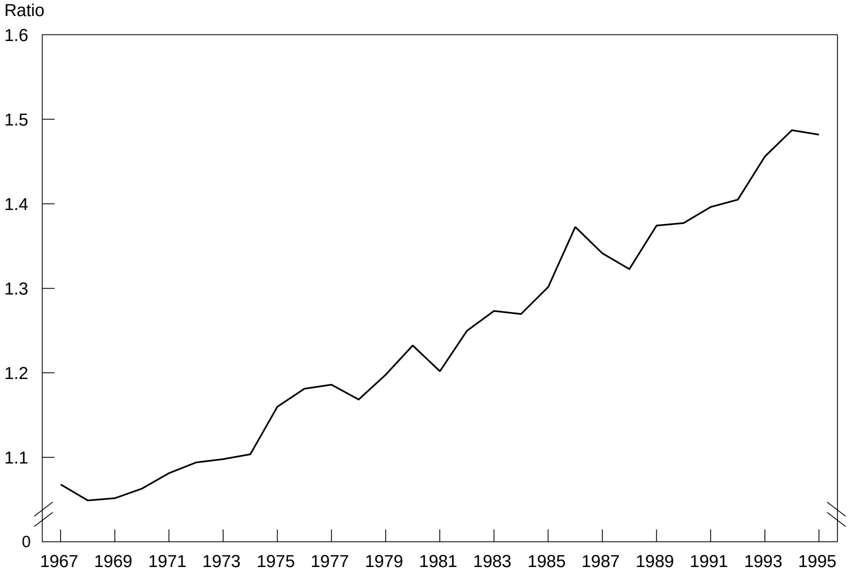
WITHIN-GROUP INEQUALITY

Within-group inequality is also on the rise and in fact accounts for about two-thirds of the total increase in earnings inequality. For instance, among male high school graduates both the 90/50 and the 50/10 earnings ratios have risen since about 1970 (Table 5–1). Although the upward trend in the 50/10 ratio apparently stopped in the late 1980s, that of the 90/50 ratio continues. Similar findings emerge for groupings of workers by age. Table 5–1 also shows the 90/50 and 50/10 ratios for 25- to 34-year-old full-time, year-round male workers. Within this group, the 90/50 ratio increased from about 1.6 to about 1.9 between 1979 and 1995.

EARNINGS INEQUALITY AMONG WOMEN

Women have experienced increases in earnings inequality similar to those of men. The 90/50 and 50/10 ratios of earnings for women working full-time, year-round began rising in the late 1970s and have continued upward through the 1980s and 1990s, as have

Chart 5-5 **Ratio of Median Earnings of Males Age 45-54 to Those of Males Age 25-34**
The wage advantage of a 45- to 54-year-old man relative to a 25- to 34-year-old man has increased virtually continuously, particularly since the mid-1970s.



Source: Council of Economic Advisers tabulations of the March Current Population Survey.

those for men. The results presented in Charts 5–2 through 5–5 and Table 5–1 for men, with respect to overall, between-group, and within-group inequality, generally find parallels in the patterns for women. For instance, the wage premium received by college-educated women roughly doubled between 1978 and 1995, from 38 percent to 70 percent.

EXPLANATIONS FOR INCREASING EARNINGS INEQUALITY

Alternative explanations for the observed increase in earnings inequality can be categorized into three broad groups: supply-side factors, demand-side factors, and institutional factors. (A provocative alternative hypothesis is presented in Box 5–2.) Although no clear consensus has emerged regarding the relative strength of these alternatives, demand-side explanations play a large role.

A simple model of the labor market for more skilled, usually higher paid workers and for relatively low paid, less skilled workers will help clarify the role of supply- and demand-side factors. Supply-side factors can increase inequality if they cause the supply curve in the market for less skilled workers to shift outward by relatively more than the supply curve in the market for more skilled workers. As shown in Chart 5–6, such shifts would lead wages to fall by a greater amount in the less skilled labor market than in

TABLE 5–1.— *Earnings Ratios for Male High School Graduates and 25– to 34–Year–Old Male Full-Time, Year-Round Workers*

Year	Male high school graduates		25– to 34–year–old male workers	
	90/50 ratio	50/10 ratio	90/50 ratio	50/10 ratio
1967	1.62	1.89	1.64	2.03
1968	1.57	1.86	1.58	2.01
1969	1.61	1.76	1.64	1.84
1970	1.61	1.80	1.65	1.81
1971	1.64	1.85	1.65	1.85
1972	1.62	1.91	1.65	1.91
1973	1.66	1.90	1.65	1.92
1974	1.68	1.94	1.66	1.97
1975	1.62	1.89	1.64	1.82
1976	1.59	1.89	1.65	1.83
1977	1.62	1.99	1.63	1.98
1978	1.61	2.02	1.64	1.94
1979	1.60	1.98	1.65	1.94
1980	1.62	2.00	1.68	1.88
1981	1.63	2.02	1.68	1.98
1982	1.69	2.08	1.72	1.98
1983	1.69	2.12	1.73	2.03
1984	1.69	2.13	1.72	2.10
1985	1.74	2.16	1.81	2.09
1986	1.73	2.22	1.83	2.08
1987	1.71	2.21	1.81	2.12
1988	1.71	2.17	1.84	2.15
1989	1.79	2.18	1.87	2.11
1990	1.79	2.15	1.83	2.16
1991	1.77	2.19	1.84	2.17
1992	1.78	2.19	1.91	2.16
1993	1.87	2.11	1.96	2.13
1994	1.88	2.17	1.96	2.14
1995	1.83	2.16	1.93	2.16

Source: Council of Economic Advisers tabulations of the March Current Population Survey.

the more skilled labor market, increasing inequality. What might cause such an asymmetry? The increasing numbers of immigrants in the labor market, and the increasing labor force participation rates of women, who tend to have less work experience, could have led to a disproportionate supply shift in the market for less skilled workers.

In analogous fashion, demand-side factors could have influenced the relative wages of more and less skilled workers if they caused the demand curve in the market for more skilled workers to shift outward by more than that in the market for less skilled workers, or (especially) if the demand curve in the latter shifted inward. As shown in Chart 5–7, these changes would increase wages in the more skilled labor market and reduce them in the less skilled labor market, increasing inequality. Technological developments favoring skilled workers (called skill-biased technological change) could have led to such shifts. The integration of new production technologies may have increased firms' demand for workers capable of using these technologies. Evidence indicates, for instance, that workers

Box 5–2.—Earnings Inequality and the Winner-Take-All Society

One provocative hypothesis offered to explain part of the increase in within-group inequality is the expansion of "winner-take-all" markets, where top performers reap far greater rewards than do others whose ability is only slightly inferior. For example, it is not uncommon to see a star professional athlete making millions of dollars a year while another, only slightly less talented athlete earns far less. It has been argued that markets such as these have become more pervasive in the American economy, with the result that ours is increasingly a winner-take-all society.

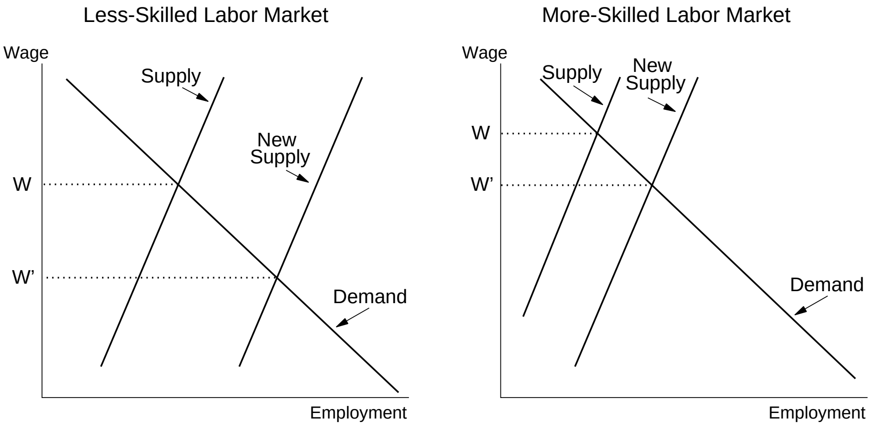
Huge wage premiums for small differences in performance may now be observed in law, medicine, investment banking, academics, and other professions. Windfalls to the top producers in these fields have become increasingly common as computing and telecommunications technology have advanced, facilitating the flow of information, and as transportation costs have been reduced, increasing mobility. These factors increase competition to hire the best performers, increasing their wages. How large a share of the observed increase in earnings inequality may be attributed to the expansion of winner-take-all markets remains unknown.

who use a computer on the job earn significantly more than those who do not.

The expansion of international trade could also have produced the hypothesized shifts in demand curves. Because import industries tend to employ relatively less skilled workers, it is argued that the wages of less skilled American workers are coming under pressure either from direct job loss or from more intense wage bargaining with their own employers, who are now forced to compete internationally. Of course, the demand and supply shifts just described may occur simultaneously, compounding the effect on earnings inequality.

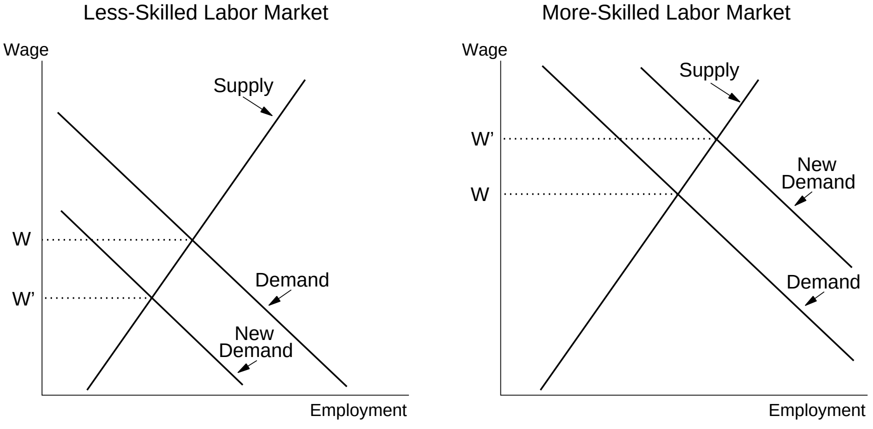
Within this framework, demand shifts appear to play the larger role in explaining growing inequality. Trends in the returns to education provide perhaps the most accessible evidence of the influence of demand shifts, if the assumption is valid that more education translates into higher levels of skill. The returns to a college education rose throughout the 1980s, as noted earlier, even though the college enrollment rate among recent high school graduates grew dramatically over this period. If relative demand for more and less skilled workers had remained constant, the greater supply of college-educated workers should have led to a decline in the college wage premium. The fact that the college wage premium instead

Chart 5-6 **Increase in Inequality Due to Supply Shifts**
Increasing inequality may occur because of shifts in the supply curve in the less-skilled and more-skilled labor markets.



Source: Council of Economic Advisers.

Chart 5-7 **Increase in Inequality Due to Demand Shifts**
Increasing inequality may occur because of shifts in the demand curve in the less-skilled and more-skilled labor markets.



Source: Council of Economic Advisers.

rose sharply suggests that demand shifts must have more than outweighed any concurrent supply shock. This framework is useful in explaining within-group inequality as well, because skill differentials will remain within broad demographic categories.

Evidence shows that skill-biased technological change is probably the main contributor to these demand shifts (many experts support this view; see Box 5–3). Some evidence suggests that international trade may be responsible for only a relatively small share of the increase in inequality. For example, even manufacturing firms whose products face little foreign competition have reduced their demand for less skilled workers. Nevertheless, direct evidence of the importance of skill-biased technological change in explaining trends in within-group inequality is difficult to come by. Some studies avoid this difficulty by treating technological change as a residual, attributing rising inequality to this factor when their findings have excluded all other likely candidates.

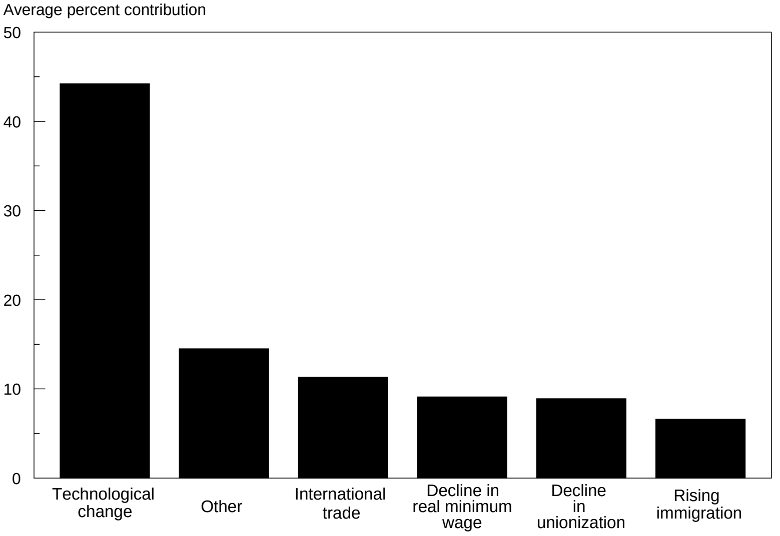
A final set of explanations suggests that changes in institutional arrangements in the labor market, such as the declining influence of unions and a reduction in the real value of the minimum wage, have led to lower returns for workers in the lower tail of the earnings distribution. Unions have long provided wage premiums to such workers. But the share of employed workers belonging to unions has eroded from a peak of roughly 30 percent through much of the 1950s and 1960s to about 15 percent in 1995. Although research indicates that the decline of unions may indeed have played some role in increased earnings inequality, it probably can explain only a small share of the increase. This finding is consistent with the fact that inequality also increased among groups of workers, such as college graduates, who are unlikely to belong to unions.

The eroding value of the minimum wage also could contribute to earnings inequality. A minimum wage truncates the earnings distribution at its lower end. If more than 10 percent of workers receive the minimum wage, inequality on such measures as the 50/10 earnings ratio will be less than it would be otherwise. Inequality on this measure could even be reduced if the fraction receiving the minimum were less than 10 percent, if "ripple effects" exist whereby workers who would otherwise earn slightly over the minimum instead receive higher wages because of greater competition for their labor. The decline in the real value of the minimum wage through the 1980s is similar in its timing to that of the increase in inequality. It is unlikely to be a leading explanation of rising inequality, however, because inequality also increased within groups of workers, such as older workers, who are unlikely to be affected by the minimum wage.

Box 5–3.—The Experts' Consensus on Earnings Inequality

Possible explanations for the observed rise in earnings inequality during the 1980s and early 1990s include skill-biased technological change, trade liberalization, demographic shifts, declining unionization, and rising immigration. Although the relative importance of each of these is difficult to determine precisely, some leading economists generally agree as to which are the main culprits. Participants at a recent colloquium on this topic at the Federal Reserve Bank of New York—a group that included many prominent labor economists—viewed technological change as the strongest contributor.

Some Contributors to Rising Inequality



Source: Federal Reserve Bank of New York.

INCOME INEQUALITY

Household income is a broader measure of economic well-being than individual earnings, because it aggregates the incomes of all household members and incorporates other flows of income besides earnings. Although labor earnings are typically its largest component, household income also includes interest and dividend receipts, cash transfer receipts, and rental payments. Household size and composition are clearly important factors in determining observed household income. In this section we document the increase in inequality since the late 1970s and explore its possible causes.

DOCUMENTING THE INCREASE IN INCOME INEQUALITY

One way to trace changes in income inequality is to separate households into income quintiles and estimate the share of income received by each quintile. (Box 5-4 discusses some problems in income measurement.) Increasing inequality would be manifested by a fall in the share of income going to the lowest quintile and a corresponding rise in the share going to the highest quintile. Chart 5–8 shows just such a pattern in household income quintiles for 1979 and 1995: since 1979 the shares going to the bottom four quintiles have declined, while the share going to the highest quintile has increased.

Changes in income shares over time may mask how well those at the bottom of the income distribution are doing. For instance, if the richest quintile is getting richer but the incomes of all other quintiles are holding constant, the shares of total income received by the lower quintiles would fall, misleadingly suggesting that they are becoming worse off. An alternative approach to documenting changes in the distribution of income, one that examines levels of income for those in different segments of the distribution, may prove beneficial.

Chart 5–9 displays this sort of information for 1979 and 1995. Households are divided into four categories: those with incomes less than $15,000, those between $15,000 and $35,000 (roughly the median in 1995), those between $35,000 and $75,000, and those over $75,000. Incomes are converted into 1995 dollars using the CPI. The chart shows that the share of households in the highest income bracket increased from 10.9 percent to 14.8 percent between 1979 and 1995, while the share in the lowest income bracket remained unchanged. These statistics suggest that some middle-income households have moved up into the higher income categories, but the number of households toward the bottom of the income distribution has remained nearly constant.

This approach may be misleading, however, because the unit of analysis is the household, not the individual. Because household composition has been changing over time, the observation of an unchanged number of households lying below a particular income cutoff may overlook the reality that more people are residing in these households.

One way to focus more directly on the well-being of individuals near the bottom of the income distribution is to examine trends in the poverty rate. Throughout the 1960s and early 1970s the poverty rate fell dramatically, from 22.2 percent in 1960 to 11.1 percent in 1973. (Chart 5–10 shows the trend since 1967.) It remained low throughout the 1970s, ranging from 11.1 percent to 12.6 percent over the decade. In the 1980s the poverty rate rose dramati-

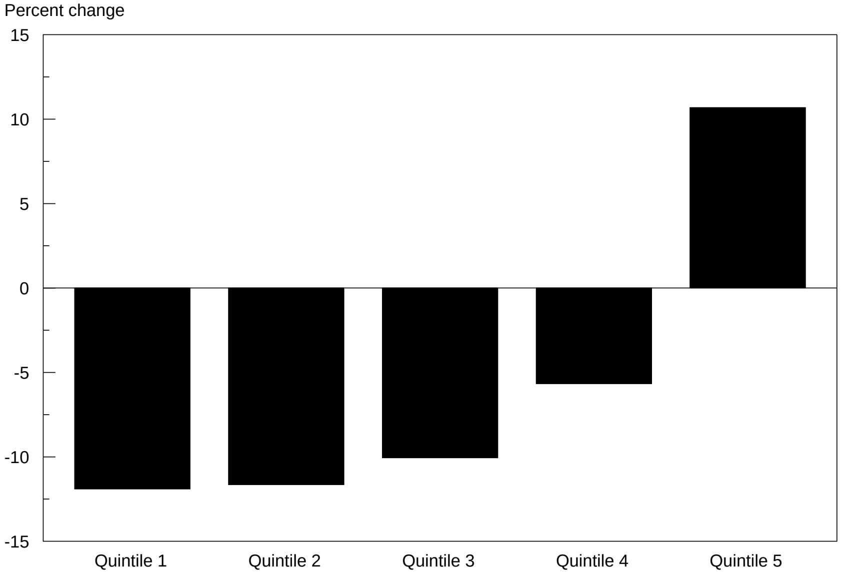
Box 5–4.—Shortcomings of Household Income Measures

Household income is a useful indicator of economic well-being because it is relatively easy to measure and interpret. It has its shortcomings, however. For instance, it does not incorporate taxes or payments made in kind, such as food stamps and housing subsidies. To the extent that the tax system is progressive and that in-kind transfers are means-tested, use of an after-tax-and-transfer definition of income would reduce the measured level of inequality. Although some analysts have adapted the standard income-based measures to include the value of in-kind income, economists have not agreed on the best method for doing so. Some value in-kind benefits according to the cost of providing them, and others according to what an individual would be willing to pay to receive the benefit. In any case, research incorporating taxes and in-kind payments shows trends in inequality that are similar to those reported by standard measures.

Another problem is that differences in household size will lead to different assessments of the economic well-being of individuals with the same household income. Attempts to abstract from differences in household size have proceeded by developing "equivalence scales" that adjust household income for the number of household members. Other approaches scale the incomes of larger households by progressively smaller amounts for each additional member. Even after making these adjustments for differences in household size, however, income inequality appears to be increasing.

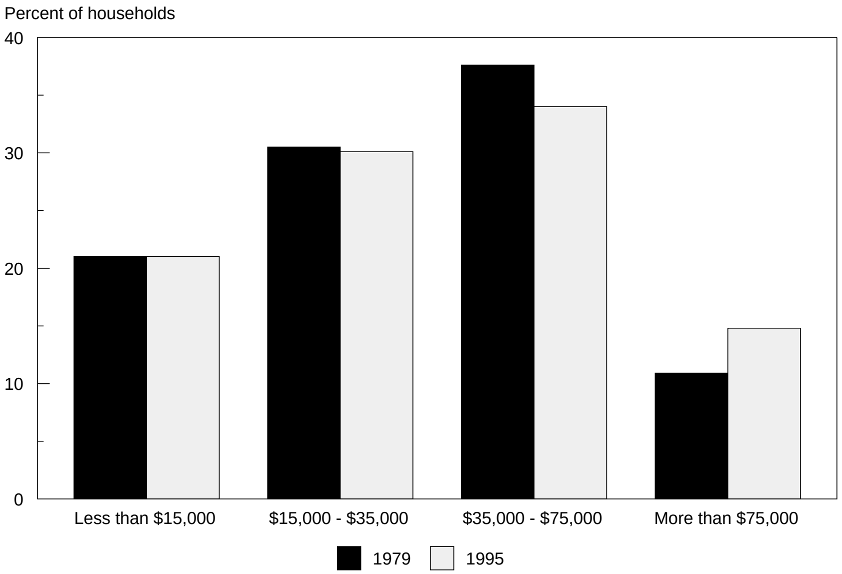
Despite these obstacles, alternative measures of income are being tested by the Bureau of the Census, and others have been proposed by the National Academy of Sciences (NAS). The Census Bureau produces a series of 17 experimental estimates of income in an attempt to gauge the effects of various noncash government benefits and taxes on income levels and on poverty. The NAS proposes another definition of income to be used in the measurement of poverty that adds noncash benefits to money income and subtracts taxes, some work expenses, some child care expenses, child support payments, and medical out-of-pocket expenses. It would also adjust the equivalence scale currently used in poverty calculations. Measures such as the Census experimental series and those proposed by the NAS are intended to reflect the effects of government policy initiatives. Nevertheless, no clear consensus exists regarding certain complex methodological issues, including valuation of some benefits such as medical and child care.

Chart 5-8 **Change in Share of Income Received by Each Quintile from 1979 to 1995**
The share of money income going to the top 20 percent of all households increased between 1979 and 1995 at the expense of all other households.



Source: Department of Commerce.

Chart 5-9 **Share of Households by Real Income Range**
In 1995, a larger proportion of households had incomes over $75,000 (in 1995 dollars) than in 1979.



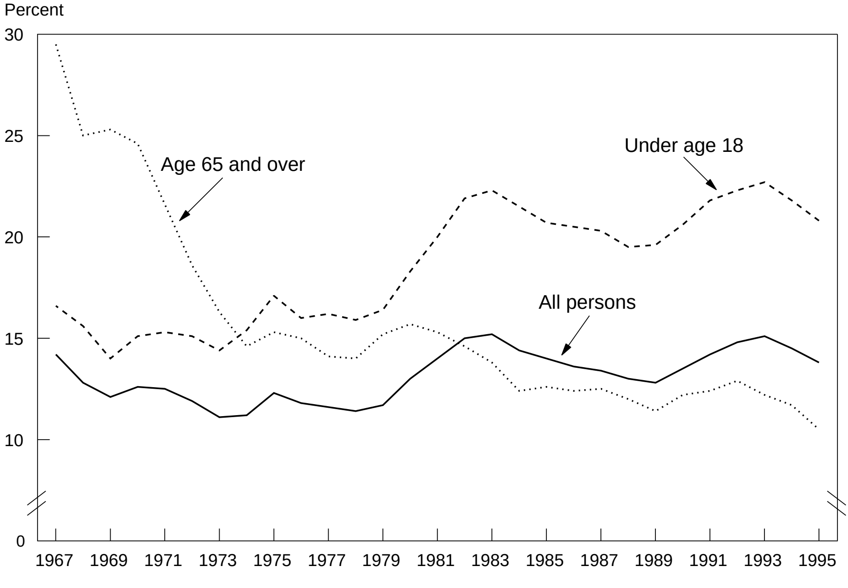
Note: Income adjusted by CPI-U-X1.
Source: Department of Commerce.

cally and has fallen below 13 percent only once since then, in 1989 following 6 years of economic expansion.

The composition of the impoverished population has also changed over time, especially with respect to age. The percentage of children living in poverty rose from 14.4 percent in 1973 to 22.7 percent in 1993, but has fallen somewhat since then. On the other hand, the poverty rate for those over 65 used to be considerably higher than that for the population as a whole (24.6 percent compared with 12.6 percent in 1970), but mainly because of the Social Security system, poverty among this group has actually fallen below the overall poverty rate since 1982. The elderly poverty rate reached an all-time low of 10.5 percent in 1995, falling significantly below that for the 18- to 64-year-old population for the first time ever.

Chart 5-10 **Poverty Rates**

The overall increase in poverty since the 1970s comprises an increase in poverty among children but a decrease in poverty among those age 65 and older.



Source: Department of Commerce.

The transition from a poverty population that is disproportionally elderly to one that is more heavily weighted toward households with children suggests that the household size of the low-income population has increased over time. This is consistent with the coexistence of a rising share of low-income individuals and a constant share of low-income households. The effect of changes in household composition on income inequality is explored more fully below.

EXPLANATIONS FOR INCREASING INCOME INEQUALITY

Because measurements of income inequality incorporate all sources of a household's income, including labor market earnings, it should come as no surprise that a major contributor to increasing income inequality across households is rising earnings inequality across workers. In fact, about half of the increased inequality in household incomes over the 1980s can be explained by trends in earnings inequality among men.

Part of the remaining share can be attributed to changes in household composition and, in particular, to the increase in female-headed households. The share of family households headed by women has risen rapidly, from just over 10 percent in 1970 to about 18 percent in 1995. These households are more likely to receive lower incomes because they lack a second wage earner, because women earn less on average than men, and because some of these women do not work at all. Therefore the growing share of this type of household has worsened income inequality. In fact, the rise in the percentage of children in poverty over the past 25 years is strictly due to the increase in the number of children residing in female-headed households, whose poverty rates are higher than those for children living in other circumstances. The poverty *rate* among children in female-headed households has actually decreased over time.

Research suggests that the rapid rise in female labor force participation has also contributed to growing inequality. This finding is not obvious, however, because in some ways a rise in the number of working women serves to reduce inequality. For instance, the distribution of women's earnings is more compressed than that of men, so that increasing female labor force participation should reduce overall earnings inequality. If all men and women lived alone, this reduction in earnings inequality and the reduction in the number of people with zero earnings (because of increased employment) would also reduce income inequality.

Inequality may nonetheless increase in response to greater female labor force participation because people tend to marry persons whose earnings potential is similar to their own. For example, more educated men may be more likely to marry more educated women. The increase in employment among married women could therefore increase household inequality in one of two ways. First, if women in high-income households are joining the labor force in greater numbers than women from low-income households, their earnings will push their household incomes even further beyond the middle of the distribution, and income inequality will increase. This hypothesis is not supported by the data, however, as labor force participation rates for women have risen roughly equally across households ranked by the husband's earnings level. Second, for working couples, rising earnings inequality will be compounded at the household level if men with high earnings are married to women with high earnings. Taken as a whole, the evidence suggests that women's increasing labor force participation has contributed somewhat to growing income inequality during the 1980s.

Income inequality can also be affected by changes in unearned income across households. The source of the unearned income determines whether or not it increases or decreases the income inequality that would occur from earnings alone. For example, property income is more likely to be received by individuals with higher earnings, and therefore an increase in property income would tend to worsen inequality. Transfer payments are more likely to go to individuals with lower earnings, and an increase in transfers would therefore tend to reduce inequality. Research suggests that, on balance, nonlabor income tended to increase inequality during the 1980s. The effect of these changes is still significantly less than that caused by growing earnings inequality, however.

ALTERNATIVE MEASURES OF INEQUALITY

This discussion, like much of the economic literature on inequality, has focused on inequality in annual earnings and household income. However, appropriate borrowing and saving behavior can smooth year-to-year fluctuations in income, making consumption less variable, provided households have appropriate access to credit markets. Therefore differences in lifetime income across households may offer a more valuable perspective on differences in well-being.

Of course, one cannot reliably measure lifetime income when much of that income has yet to be received. Lifetime income is thus an inherently unmeasurable concept, and analysts must resort to using related measures as a basis for estimating it. One such measure is consumption, on the theory that households set consumption levels according to their own assessments of their lifetime income. A potential problem here is that a household may have large asset holdings, indicating the potential to raise its consumption in the future, but choose to limit its consumption for the present. Therefore, another indicator used to examine lifetime income inequality across households is household wealth.

Another way to address differences in lifetime income across households is to examine income mobility—the extent to which households move across the income distribution over time. Increasing annual income inequality is more meaningful as an indicator of lifetime income differences across households if income mobility does not increase as well.

CONSUMPTION INEQUALITY

If consumption decisions are based on households' assessments of their lifetime income, then inequality in consumption can be used as a proxy for inequality in lifetime income. For example, a middle-income household that suffers a brief spell of reduced income will not change its consumption habits much, whereas a household with regularly low income will consume considerably less. Therefore we can expect to see less inequality in consumption than in annual income.

Some evidence supports this proposition: studies have found that the distribution of consumption is more concentrated than that of income. In other words, individuals do appear to prefer to smooth their consumption levels across their lifetimes through borrowing and saving. One difficulty in comparing the distributions of income and of consumption is that income is measured before taxes and in-kind transfers, whereas consumption is based on after-tax income and includes in-kind transfers. To the extent that taxes and in-kind transfers reduce inequality (an issue that is discussed below), one would expect consumption inequality to be less than income inequality. During the 1980s, consumption inequality rose along with income inequality, but in the early 1990s the two diverged. Between 1989 and 1993, consumption inequality leveled off while income inequality continued to rise. Some demographic groups, particularly households headed by a high school graduate or dropout, experienced large declines in consumption inequality over the period. No obvious explanation for the timing of the turnaround in consumption inequality or its comparison to income inequality exists.

WEALTH INEQUALITY

Another shortcoming in using annual income as a measure of differences in economic well-being is that it does not capture the purchasing power of a household's asset holdings. Therefore differences across households in terms of net wealth (which consists of cash savings, financial assets, and the value of physical assets such as a house or a car, less any outstanding debt) provide an alternative indicator of inequality.

Data on wealth are limited, but one source, the Survey of Consumer Finances, sponsored by the Federal Reserve Board does provide comparable data for 1983, 1989, and 1992. Over these years median family net wealth (estimated at $52,000 in 1992) has been fairly stable. Wealth is concentrated in the hands of a small number of families, and the degree of that concentration has remained fairly constant. The wealthiest 10 percent of families have owned roughly 67 percent of total net wealth since the early 1980s. The top 1 percent of families did increase their wealth holdings from around 30 percent of total net wealth in 1983 to 37 percent in 1989, but their share fell back to 30 percent by 1992. The stock market boom of the 1980s might have led one to predict increasing concentration, but stock ownership has become more widespread over time. In addition, home values increased over the period, and home ownership is far more common than stock ownership.

MOBILITY

If a household's income varies widely from year to year, annual measures of inequality may provide a very inaccurate picture of lifetime inequality. If the increase in annually measured income inequality over the past 20 years or so has been accompanied by an increase in income fluctuations, it is possible that lifetime incomes have been unaffected. For instance, if new labor market entrants make less than previous entrants, but their wages grow more rapidly as they gain experience, then annual measures of income inequality will be greater, as will income mobility, but lifetime income may be unchanged. Therefore the degree of mobility through the income distribution is another means of examining the difference between annual and lifetime income. (A related issue of mobility between parents and children is explored in Box 5–5.)

Studies of mobility have compared household incomes over varying periods, such as 1 year, 5 years, and 10 years. One-year changes in income are likely to reflect short-term changes, such as temporary job loss, as well as measurement errors in reported income that are not perfectly correlated between years. Longer term changes will also incorporate these events but are more likely to identify more permanent changes in incomes, which are particularly large among younger households. Therefore one might expect mobility over longer periods to be greater than that from year to year.

A standard approach in estimating income mobility is to rank households by their income in each of two years, separate them into quintiles in each year according to their rank, and then see to what extent households have moved from quintile to quintile between the two years. Results from these studies indicate a reasonably high degree of mobility over time. One study finds that about 3 out of every 10 households move between quintiles from one year to the next. As one would expect, mobility is greater over longer periods: almost two-thirds of households change income quintiles over 10 years. These mobility rates do not appear to be increasing over time. The probabilities of making a transition between income quintiles over periods of varying lengths have remained roughly

Box 5–5.—Intergenerational Mobility

Another issue relating to income mobility is the extent to which income is transferred between parents and children. If the correlation between parents' income and their children's income as adults is high, then a child is likely to experience a level of economic well-being similar to that of his or her parents (i.e., intergenerational mobility will be low). If the two generations' incomes are not correlated, children will have no greater probability of ending up in one income quintile than in another. Early studies found a low correlation: intergenerational mobility was quite high. The son of a high-income father would have the same probability as anyone else of residing at any given point in the income distribution after only two generations.

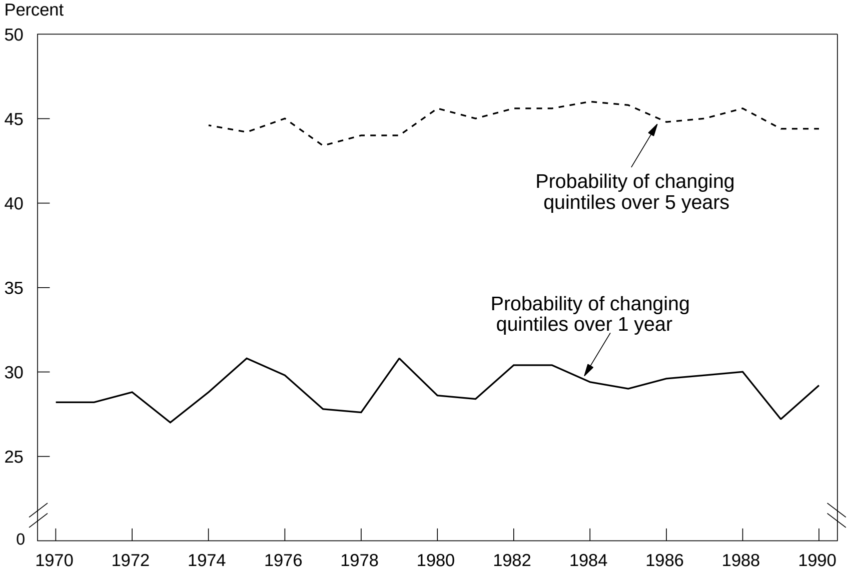
An important problem with these studies, however, is that they ignored measurement error in reported income. If reported levels of income of either the father, the son, or both were inaccurate, the resulting estimates of the correlation in income would be biased toward zero. More recent studies have paid careful attention to the measurement error issue and the bias it introduces. These studies found a considerably higher correlation and thus a considerably smaller degree of intergenerational mobility than did previous work. Their results indicate that it would take four generations before the son of a high-income father had a roughly equal probability of residing at any point in the income distribution.

steady through the 1970s and 1980s. The evidence thus does not appear to support the proposition that rising income inequality has been offset by increasing income mobility.

One issue in interpreting these studies is that transitions over time between income quintiles may occur because of changes in the flow of income (mainly earnings) or changes in household composition. A person who marries is likely to experience a significant increase in household income if his or her spouse works, even if that person's earnings remain constant.

An alternative approach that some researchers have taken in examining mobility is to focus exclusively on individuals' earnings and transitions that occur between earnings quintiles over time. Again, mobility rates are reasonably high, with higher transition rates over longer time periods. Roughly 3 in 10 individuals change earnings quintiles between one year and the next, and almost half make such a transition over 5 years, according to one study. As

Chart 5-11 **One-Year and Five-Year Mobility Rates**
Mobility through the earnings distribution has not changed much over time.



Source: Unpublished calculations by R. Burkhauser, D. Holtz-Eakin, and S. Rhody, Syracuse University.

with income mobility, no trend over time is apparent in earnings mobility (Chart 5–11).

GOVERNMENT POLICY AND INEQUALITY

Without government intervention, the distribution of income would be even more dispersed than it is. A progressive Federal income tax and a variety of Federal and State transfer programs have for decades worked to reduce inequality. More recently, several new policies have been put in place to reduce inequality further, particularly by improving the conditions of those toward the bottom of the income distribution.

ASSESSING THE IMPACT OF GOVERNMENT POLICY

Incorporating the effect of tax and in-kind transfer policies into income measures poses two challenges. First, a household's tax burden and the value of noncash benefits such as food stamps and Medicaid need to be calculated, and this calculation is subject to ambiguities (Box 5–4). Second, calculating income in the absence of government as conventionally measured income less transfers assumes that the availability of the transfers has no impact on recipients' other income. Still, after taxes and transfers have been taken into account to the extent possible, government policy is shown to reduce inequality significantly. The progressivity of the Federal individual income tax system, together with all payroll taxes and State income taxes, reduces the Gini index by about 5 percent. Transfer payments account for an even larger reduction in the Gini index, of around 20 percent. The program that contributes perhaps the most to reducing inequality is Social Security, as one might expect from the relatively low poverty rate among older Americans.

The incidence of poverty is similarly affected by government policies. The officially reported poverty rate of 13.8 percent in 1995 would have been 21.9 percent if cash transfers were not included in income. Moreover, when incomes are measured according to the most comprehensive measure, which includes all taxes and the earned income tax credit (EITC) as well as the valuation of in-kind transfers, the poverty rate is estimated to be only 10.3 percent.

ADDITIONAL POLICIES TO REDUCE INEQUALITY

Both short-run and long-run policies are needed to help reduce income inequality. In the short run, the EITC can help raise the incomes of workers with low earnings. The EITC is a refundable tax credit of up to 40 percent of earnings, depending on family size. The credit was expanded in both 1990 and 1993, with both an increase in its value and a broadening of the covered population to include very low wage workers who do not reside with children. The number of families receiving the credit rose from 12.6 million in 1990 to an estimated 18 million in 1996. Between 1990 and 1996 the average credit per family more than doubled, from $601 to an estimated $1,400. In 1995 almost 3.3 million people were lifted out of poverty by the EITC, more than twice as many as only a few years before.

The recent increase in the minimum wage may also play a part in reducing inequality. Between 1981 and April 1990, the minimum wage remained constant at $3.35 per hour even as inflation eroded its value by 44 percent. The 27 percent increase in the minimum wage in April 1990, to $4.25 an hour, did not restore it to its real 1981 level. Inflation then eroded the value of the minimum wage another 23 percent up to October 1996, when it was increased to $4.75; that increase is to be followed in September 1997 with a further increase to $5.15.

Although even these raises will not restore the purchasing power of the minimum wage to its 1981 level, the minimum wage and the EITC together do more to reduce inequality today than they did then. For example, a single parent with two children earning $5.15 per hour for 40 hours per week, 50 weeks per year in 1998 would make $9,775 (in 1996 dollars) before the EITC and $13,343 including the EITC. Without the 1996–97 minimum wage increases, this family's income including the EITC would have been only $11,294.

The combination of the recent rise in the minimum wage with the expansion of the EITC makes the returns to work for minimum wage workers greater than in 1981, when the minimum wage was higher in real terms. In that year the same family, with the parent working the same hours but earning the minimum wage of $3.35, would have received $11,336 (in 1996 dollars) before the EITC and $12,034 including the less generous EITC available at that time.

In the long run, greater access to education and training programs should reduce inequality by reducing the wage premium associated with additional training. In terms of the simple labor market model presented above, as more workers obtain additional education, the supply of more highly skilled workers shifts outward and that of less skilled workers shifts inward (again assuming that more education translates into higher levels of marketable skill). These shifts increase the wages of the less skilled relative to those of the more skilled, reducing inequality between the two groups.

Improved access to education and training can also reduce inequality if it allows individuals from lower income households to make investments in their human capital that they could not make otherwise. Programs such as Head Start can provide disadvantaged preschoolers the opportunity to begin formal schooling with the intellectual tools they need to flourish. The recently inaugurated Federal direct student loan program has also provided benefits to students and schools. The Federal Government now issues loans directly to students through the financial aid offices of their colleges, rather than through commercial financial intermediaries, and offers four different repayment options, including an income-contingent payment plan. In the 1996/97 academic year, 1.9 million students will have participated in the program, which is widely viewed as successful in providing more timely, flexible, and accessible service to both students and universities.

CONCLUSION

Income inequality in the United States has risen over the past two decades. Its very persistence means that this trend will be difficult to change. Even recognizing the reversal when it does occur will be difficult enough, because statistical analysis cannot easily distinguish a decisive turnaround in inequality from a relatively brief pause in its rise. It is still too soon to tell whether the promising statistics reported in the past few years represent a true reversal or just such a pause.

Because of this uncertainty, continued vigilance is required to find ways to help alleviate inequality, particularly to the extent that it can reduce hardship for those at the bottom of the economic ladder. Some changes have already been instituted, such as the increase in the minimum wage and the expansion of the EITC. Improved access to education and training is also essential. Although these represent useful first steps, much remains to be done.

CHAPTER 6

Refining the Role of Government in the U.S. Market Economy

WHAT IS THE APPROPRIATE ROLE, IF ANY, of government in regulating the manufacture, distribution, prices, and quality of products in the U.S. economy? Much of the 20th century has seen an expansion of the role of government as regulator. But since the late 1970s the regulatory tide has ebbed in many important respects.

The first major deregulatory efforts were in industries such as airlines, railroads, trucking, banking, and natural gas. (Box 6–1 illustrates some of the benefits of deregulation.) Deregulating the traditional utilities, particularly telephones and electricity, has taken a slower course. However, both of those industries have been the object of significant procompetitive policy initiatives in the past year. On February 8, 1996, the President signed into law the long-awaited Telecommunications Act of 1996. Two and a half months later the Federal Energy Regulatory Commission (FERC) issued its Orders No. 888 and No. 889, which set rules for opening up interstate transmission networks to all generators and resellers of electricity.

These two enormous steps toward bringing competition into the utilities sector represent a sea change in the traditional relationship between public policy and private enterprise. During most of the 20th century, government and markets were typically viewed as substitutes. Citizens and policymakers had to choose between government mandate and market forces. As the 21st century approaches, we see that market forces and public policy are less often substitutes than complements. The Telecommunications Act, the FERC's Order No. 888, and the ongoing Federal and State efforts to implement their principles and mandates show how judiciously crafted public policy can increase rather than decrease the role and effectiveness of market forces in the economy, and thereby improve the economic and social prospects for the American people.

Complementarity between markets and government extends in the other direction as well. Just as well-crafted government policy can make markets work better, so the introduction of market mechanisms into the regulatory process can help government achieve society's goals. For example, to ensure that wireless technologies best meet the public's demand for communication services, the Federal Communications Commission (FCC) has turned to auctioning off portions of the electromagnetic spectrum. These auctions not only have been enormously successful in getting licenses quickly into the hands of those who can use them most efficiently, but have raised over $20 billion for the U.S. Treasury in the process. A second success story has been the use of market forces to provide greater flexibility in meeting environmental goals (e.g., tradable permits for sulfur dioxide emissions). Last but not least, market forces can help improve the management, use, and disposal of public lands.

Box 6–1.—The Benefits of Deregulation

That deregulation produces economic benefits when it leads to effective competition is not merely a theoretical proposition. Data from the field bear this assertion out as well. An assessment by a Brookings Institution scholar finds that deregulation not only has brought considerable short-run benefits, by making markets work better, but also has led to technical and operating innovations that promise even greater benefits in the long run. The table below gives some examples of this study's findings.

Industry	Cost Reductions	Innovations
Airlines	24 percent decline in costs per unit of output	Hub-and-spoke systems Computer reservations
Trucking	30–35 percent decline in operating costs per mile	Computer networking Coordinating with logistics firms
Railroads	50 percent decline in costs per ton-mile; 141 percent increase in productivity	Better contracts Double stack cars Intermodal operations
Natural gas	35 percent decline in operating and maintenance expense	Computer planning Contracting through market centers

Source: Clifford Winston, Brookings Institution.

MARKETS, GOVERNMENTS, AND COMPLEMENTARITY

As a prelude to discussing the potential for complementarity between private markets and the public sector, we review the purposes each serves in a primarily market-driven economy.

THE ADVANTAGES OF MARKETS

The argument in favor of deferring to markets typically relies on the efficiency of their outcomes. If markets are competitive and function smoothly, they will lead to prices at which the amount sellers want to supply equals the amount buyers demand. Moreover, the price in any market will simultaneously equal the benefit that buyers get from the last unit consumed (the marginal benefit) and the cost of producing the last unit supplied (the marginal cost). These two conditions ensure efficiency: when they hold in all markets, the Nation's labor and resources are allocated to producing a particular good or service if and only if consumers would not be willing to pay more to have those resources employed elsewhere.

This familiar story is profound and important, yet it understates the role of private markets in making economies work. Since at least the 1930s, economists have noted that in theory the government could reach efficient outcomes without relying on markets, if government officials had sufficient information and the right incentives. But it is markets' superior information-processing ability and preservation of individual incentives that explain their general superiority to government management of the economy. Markets allow transactions to be decentralized to the level where decisions are made by those most affected by them, in direct response to budget constraints and tradeoffs. Market participants themselves then have powerful incentives to generate and gather information and make the deals that best serve their interests.

Information

An insufficiently appreciated property of markets is their ability to collect and distribute information on costs and benefits in a way that enables buyers and sellers to make effective, responsive decisions. Because market prices measure the marginal benefits of goods and services to consumers, firms that maximize their profits simultaneously maximize the difference between benefits and costs. Similarly, consumers look to market prices to decide which goods and services to purchase, and how to use their labor, resources, and financial wealth to generate the income to pay for them. As tastes, technology, and resource availability change, market prices will change in corresponding ways, to direct resources to the newly valued ends and away from obsolete means. It is simply impossible for governments to duplicate and utilize the massive amount of information exchanged and acted upon daily by the millions of participants in the marketplace.

That markets normally process all of this information so well and so rapidly tends to be taken for granted. In light of all the investments, hires, plans, purchases, marketing efforts, sales, contracts, and exchanges necessary to bring goods to market, the fact that the price system normally works as well as it does—for instance, that the products consumers want are usually on the shelves—ought to be regarded as astounding. Instead, it's literally business as usual.

Incentives

Even if the public sector could gather and quickly respond to all available information on changing consumer tastes and production technologies, private markets would still have the advantage of preserving the incentive to produce efficient outcomes. In private markets, buyers and sellers directly reap the benefits and bear the costs of their demand and supply decisions. Each makes decisions aimed at achieving the greatest benefit, or economic return, net of cost. These incentives not only affect how resources are used today, but also lead to innovations that will increase the efficiency with which resources are deployed in the future and result in new products that raise living standards.

In contrast, the links between the government and the individuals who reap the benefits and who bear the costs of its decisions are frequently weak. The nature of day-to-day legislative, executive, judicial, and regulatory proceedings runs a risk of favoring organized, established interests rather than the public at large. Accordingly, government's role in the operation of the private economy must be limited and judicious. Initiatives to increase our economy's reliance on markets, and to improve the efficiency of regulation through market mechanisms, reflect an awareness of the tremendous benefits that market forces can bring to bear by employing private incentives to achieve social goals.

WHY HAVE GOVERNMENT AT ALL?

If markets generally outperform government, why not leave everything to the market? To begin with, it is useful to remember that markets and governments can and do work together. For markets to function effectively, deals must be enforced and fraud discouraged. Without a governmental legal system to guarantee property rights and enforce contracts, corporate organization and market exchange would be virtually impossible. Anarchy and the free market are not synonymous. (Box 6–2 discusses the role of government in protecting property rights in information in an era of electronic, global markets.)

But government has other roles beyond refereeing private transactions. Markets left to themselves sometimes produce inefficient outcomes. For example, markets efficiently transmit information and provide proper incentives only when sellers compete with enough intensity to drive prices down to cost. But in some circumstances, firms can impede the forces of competition by agreeing among themselves to maintain high prices, or by merging to the point where individual production decisions substantially affect prices. The antitrust laws are the public policy instrument for pre-

Box 6–2.—The Role of Copyright in an Electronic Global Economy

The growth of telecommunications, computing power, and their joint progeny, the Internet, is revolutionizing the way in which information is created and shared. Whether by satellite or by fiber-optic cable, electronic telecommunications networks today transmit vast amounts of scientific and commercial information, and entertainment, around the globe in a heartbeat.

Since the 18th century, markets for the products of creative expression and technical innovation have been supported through copyright and patent laws, which extend private property rights to intellectual property. These laws have historically attempted to strike a balance between enhancing economic incentives to create and promoting widespread use of the thing created. By preventing unauthorized copying, intellectual property laws allow creators and innovators to profit from their original works and inventions.

Strong copyright and patent protection can help provide the appropriate incentives to create, by allowing creators to capture a greater share of the marginal benefit of their efforts. The cost of strong protection, however, is that prices to use copyrighted works or patents may remain high for some period of time. Ironically, because patents and copyrights build on the work of others, overly strong intellectual property protection today could discourage innovation and creativity in the future.

An increasingly important policy question is whether these traditional legal means for striking the balance between incentives to create and incentives to use will continue to apply in a global information-based economy. Difficult issues to resolve include:

- rights to display copyrighted information on computer screens
- the applicability of copyright to electronic data bases
- "fair use" rights and other traditional exceptions for the educational and research community, and
- competition within broad-based collective copyright licensing organizations.

The need to coordinate our efforts with other nations makes the resolution of these crucial questions even more complex.

venting such anticompetitive collusion and mergers. Public antitrust enforcement complements market forces by supporting conditions conducive to competition. A second important means of promoting competition in U.S. markets is the reduction of trade barriers and other distortions that deter entry by foreign providers of goods and services. There may also be a role for government when large firms have cost advantages that discourage entry by other firms and thus make sustained competition impossible. For instance, the government may directly regulate prices as a substitute for market forces in such circumstances.

Markets also produce inefficient outcomes when the prices that buyers and sellers agree on do not take account of benefits and costs falling on third parties. The result is called an externality, a textbook example of which is air pollution. It would be prohibitively costly to define and enforce property rights to the use of clean air. Therefore, unless polluters can be made to pay a compensatory tax, purchase emission permits, comply with regulations, or face liabilities imposed by environmental or tort law, they do not take the cost of their pollution into account. This leads to excessive levels of undesirable emissions—a negative externality. Externalities can be positive as well as negative, conferring benefits rather than imposing costs on third parties. For example, inoculations not only protect those who receive them from contagious disease, but may prevent its spread through the rest of the population.

An important example of a public good with positive spillovers is basic scientific research, whose benefits can far exceed those realized by the firm or institution undertaking the research. In such cases, targeted Federal support can more than pay for itself through the technological innovations and product improvements bestowed upon the economy overall. Investments in transportation and communications infrastructure are another example. Numerous recent initiatives, such as the Department of Transportation's programs to provide and leverage financing for public highways and private toll roads, can generate widespread benefits by promoting regional economic development.

Information asymmetries, where one party to a transaction knows more than the others, can also undercut market efficiency. Health insurance offers an instructive example. If consumers of health insurance know better than providers the chances of their falling ill in a given year, only those who know they are more likely to get sick might purchase insurance. As premiums rise to reflect the higher risk of the those buying insurance, the healthier among them—for whom the insurance costs now exceed their expected care needs—drop out of the market. This process of adverse selection can repeat itself to the point where the market collapses. One reason why the government, rather than private insurers, provides health insurance for the elderly through Medicare is that the elderly may have more knowledge regarding their health status than any private insurer, giving rise to an adverse selection problem (see

Box 3–1 in Chapter 3). Maintaining a population-wide risk pool eliminates the problem.

Finally, the efficiency standard is not the only basis for judging the performance of an economy. Probably the most frequent indictment laid against markets is that they can be consistent with significant inequality of opportunities and outcomes. Progressive income taxation, free public education, and numerous transfer programs—all acts of government—moderate some of the inequality in our market-based economy. Civil rights laws prohibit discrimination that market forces may fail to eliminate. In addition, because markets are driven by the pursuit of personal, not collective, interests, market transactions may not fully support our shared social values. Prohibitions on child labor, laws to preserve habitats for endangered species, and public support for the arts exemplify ways in which government seeks to give our important social values their due.

This list of potential limitations to the market is not meant to be exhaustive. And markets, of course, often can and do respond to these and other imperfections on their own. If a market is not competitive, firms may enter that market or buyers may begin production in-house rather than continue to deal with a monopolist. Markets may internalize externalities in cases where it is possible to define property rights or to bring within the same organization all those who reap the benefits and bear the costs. In some cases, warranties and independent testing agencies can mitigate adverse selection and other problems resulting from imperfect information.

The pursuit of goals other than efficiency, such as alleviating inequitable distributions of wealth, is of paramount importance. Chapter 5 of this Report discusses an array of policies for addressing inequality, from transfer payments to progressive taxation to the earned income tax credit. Because reducing inequality is so vital a concern, we need to recognize that few strictly regulatory decisions will have much of an effect on the distribution of wealth or income. The controlled pricing of telephone service, electricity, or other products of regulated firms may promote other social objectives, but it is unlikely to have much effect on the prevalence and intensity of poverty. Efforts to reduce inequality will be more effective if directed at wages, taxes, and other determinants of disposable income, rather than at prices for particular products, especially those that make up only a small fraction of household budgets. However, firm and even-handed enforcement of broad public health, environmental, and other regulatory protections can help to ensure that low-income and minority communities are not disproportionately affected by pollution and other activities that generate harmful spillovers.

MARKETS AND PUBLIC POLICY AS COMPLEMENTS

The conventional emphasis on markets and governments as substitutes, rather than complements, has often led well-meaning, thoughtful people to take extreme positions on the role of the public sector in the economy. Proponents of a strong government role frequently compare real market failures with an idealized vision of a government possessing unlimited information and purely beneficent objectives. Opponents of government often fall prey to the opposite fallacy, contrasting the qualities of an ideal market with the behavior of real governments, which must act upon limited information and often with distorted incentives. Both institutions have limitations; neither measures up to the ideal.

A more useful approach is to compare real markets with real policy effects, to understand when and where lines between the public and the private sectors should be drawn. Finding this boundary is difficult; reasonable people can and do differ on its location. Comparing the actual performance of markets and governments also helps us see how public policies can make private markets work better, and how using market incentives can improve the performance of the government.

Nineteen ninety-six saw the realization of major initiatives to establish and extend competition in two markets where it had long been absent: local telephone service and electricity generation. Last year's *Economic Report of the President* examined the future of deregulation of those two industries in detail. When that *Report* was written, these initiatives were optimistic prospects. Now the complex task of implementing the visions behind them has begun. Policymakers are working to devise ways to bring about competition while protecting against the undue exercise of market power. Much of the responsibility for maximizing competition in electricity sales and telephone service falls to State government. As we report below, the States have not shied from the task.

Markets also help the government do its job. A profound innovation of the last few years has been the use of market mechanisms to help the government achieve its goals at least cost to consumers and taxpayers. Even where the case for government intervention is persuasive, policymakers have been able to exploit the advantages of the market so that public policies generate greater benefits at lower cost.

Three examples of that success are especially noteworthy. The first is the use of tradable emission permit programs, in which the government distributes rights to emit some pollutant and then allows firms to allocate those rights across their plants and to buy and sell them among themselves. Programs such as these encourage abatement of pollution at least cost. The second example is spectrum auctions. Here the policy goals are twofold: get spectrum into the hands of communications service providers who can generate the greatest economic benefit from it, and raise funds to reduce the need for taxes to cover government expenses. The third example is the use of market-based prices to lead to more efficient use of public lands for mining, grazing, timber, and water supply, while protecting their environmental value. The remainder of this chapter discusses all three examples and concludes by looking at the limits to transferring public responsibilities to the private sector.

USING PUBLIC POLICY TO BRING COMPETITION TO REGULATED INDUSTRIES

In light of the Federal Government's success in introducing competition into airlines, banking, trucking, and natural gas, its delay in deregulating the telephone and electricity industries may be puzzling. The reasons for the delay explain why government is likely to be a complement to the development of competitive markets in these industries for some time to come.

REASONS FOR THE DELAY IN DEREGULATING ELECTRICITY AND TELEPHONE SERVICE

Jurisdictional issues have made it legally and politically more difficult for the Federal Government to deregulate electric and telephone utilities than other industries. Much of the regulation of these industries takes place at the State level, through public utility commissions. The Federal Government generally regulates only those portions that involve interstate commerce. (Box 6–3 discusses some of the economic issues involved in assessing whether regulation should take place at the State or the Federal level.) In the telephone industry the FCC has traditionally asserted authority over long-distance calling between States, wireless services, and interstate access services that local telephone companies provide to long-distance carriers. In electricity, the FERC's jurisdiction covers wholesale power sales, the transmission of electricity for resale to final customers, and (it asserts) transmission service to retail buyers where such transmission service is unbundled from the power itself.

A more fundamental difficulty is the widespread presence of substantial economies of scale, which create natural monopolies. A natural monopoly occurs when a good or service can be provided at lower cost by one firm than by two or more. With a few exceptions, the industries first deregulated in the 1970s (e.g., trucking and the airlines) were not natural monopolies. This choice was by design.

Box 6–3.—The Economics of Federalism in Regulation

Historically, responsibility for regulating electricity and telephone service has been divided between the States and the Federal Government. As a legal matter, the scope of Federal authority depends upon interpretations of the commerce clause of the Constitution, which says (Article I, Section 8), "The Congress shall have Power . . . [t]o regulate Commerce . . . among the several States . . . ." Economics, however, can inform these interpretations by examining a variety of factors, including:

- *Economic effects that cross State lines.* When problems are local, solutions in general should be local. The case for leaving matters of economic regulation or policy to the States is stronger if a State's policy choices do not impose costs on residents of other States. For example, if a State chooses to regulate in ways that raise prices, the strength of the Federal interest should depend on whether consumers in other States are affected by those high prices as well. A second important example involves environmental effects that cross State borders, such as airborne pollutants. A State may fail to impose sufficient pollution controls on plants within its borders if those in other States incur the damages.
- *Economies of scale in regulation.* Just as the economy gains by having firms compete in the marketplace, it may also gain by having government jurisdictions compete in the form and content of their regulations. In some cases, however, effective regulation may require the devotion of considerable resources and specialized expertise to gathering and providing information, assessing costs, evaluating the state of competition, estimating environmental effects, and overseeing compliance. It may be more efficient for one entity—the Federal Government—to undertake these responsibilities than to have them divided among the 50 States, the District of Columbia, and other jurisdictions. The case for Federal regulation is stronger if considerations determining the best way to regulate vary little from State to State.
- *Comparative performance of government institutions.* Public institutions may have incentives to act in accord with special interests rather than those of the public at large. When this problem is more prevalent at the State level, the Federal level is likely to be the better venue in which to vest regulatory authority.

In both electricity and telephones the most important natural monopoly was the local distribution network. It was believed wasteful to lay a parallel set of electric cables or telephone lines through cities and towns to enable different sellers to compete for customers. The value of having everyone on the same network further argued at the time for a local telephone monopoly.

Accordingly, electricity and telephone service used to be provided by companies that managed virtually every important aspect of the industry from top to bottom. Telephone service was largely the province of the American Telephone and Telegraph Co. (AT&T), which provided most local networks, long-distance service, and telephone equipment. The electricity industry was more complex, but the dominant form of organization was the vertically integrated investor-owned utility. These utilities generated power and transmitted it over high-voltage lines to their local distribution networks, which in turn delivered it to homes, offices, and factories.

Technological change and new forms of organization in the last two decades have eroded the natural monopoly characteristics of both these industries. Combined-cycle gas turbine generators reduced the scale necessary to produce electricity at low cost, increasing the potential for competition in power production. The telephone industry has seen the development of wireless technologies, along with reductions in the cost of fiber-optic transmission lines and of the computers and software that may someday route telephone calls over alternative pathways such as cable television systems. These innovations have encouraged some to believe that entry into local telephone service, the last telecommunications monopoly, may soon take place on a massive scale, but such entry has not yet occurred to a substantial degree outside of specialized mobile and business services.

Elimination of natural monopoly in the physical distribution and transmission of electricity may take longer. It remains generally uneconomical to build overlapping sets of power lines for the local delivery of electricity. Long-distance power transmission also has monopoly characteristics. Because directing electricity along a particular transmission path is prohibitively costly, current supplied into a grid will take all available paths between two points and therefore affect power loads and congestion on many lines. Consequently, the interconnection of independently owned transmission lines—a practice to promote reliability of the system as a whole—tends to convert the separate grids into a single entity.

Experience with structural change in these industries has complemented these technological developments in opening utility markets to competition. In electricity, public policies that have created an independent power producing industry, mostly to promote cogeneration (production of electricity by factories as a by-product of manufacturing) and renewable technology, had the side effect of demonstrating the feasibility of relying on nonutility generators for power supply. The analogues in telephones were the "equal access" rules, imposed on the local telephone companies created in 1984 by the AT&T divestiture, to give all long-distance carriers equivalent technical interconnection, telephone numbering, customer subscription, and billing arrangements. The divestiture created distinct local and long-distance companies, and compliance with the equal access rules provided valuable experience in how to interconnect separately owned and managed facilities. Interconnection is, as we discuss below, a crucial prerequisite for competition in local telephone service and in electric power generation.

THE TELECOMMUNICATIONS ACT OF 1996

The Telecommunications Act of 1996 outlines the route that competition and deregulation in the telecommunications industry will follow. It first takes on the challenge of facilitating competition in local telephone service. New competitors may fall into any of three categories: providers with facilities offering all aspects of local telephone service; partial facilities-based carriers that would purchase unbundled network elements, such as switching capacity, from the incumbent local carrier; and resellers that would purchase local service at wholesale and resell it at retail, often as part of a "one-stop shopping" package of local and long-distance telephone service. (Box 6–4 discusses some other aspects of the Telecommunications Act.)

The Telecommunications Act requires each incumbent local telephone company to allow facilities-based competitors to interconnect with its networks so that customers on both networks can call each other. Responsibility for interconnection rests initially with the carriers themselves, who can negotiate nondiscriminatory terms and conditions, subject to State Government mediation and arbitration. Incumbent local telephone companies must make network elements and wholesale local service available to competitors. To eliminate unnecessary entry barriers, they must also adopt technology to permit customers to keep their phone numbers when switching carriers, and must provide information necessary for network interoperability. The Telecommunications Act also charges the States and the FCC with devising competitively neutral policies to promote universal service, that is, to ensure that telephone service is reasonably available to all income groups and geographic areas in the United States.

The Telecommunications Act also eliminates court-imposed rules keeping the regional Bell operating companies (RBOCs, the regional telephone companies created by AT&T's breakup) out of other communications businesses, most notably long-distance tele-

Box 6–4.—Telecommunications Policy Is Not Just for Telephone Companies

The Telecommunications Act covers much more than the current set of firms in the telephone industry. It also expands the number of radio and television stations a single firm may own, simplifies license procedures, and sets policies applicable if the FCC grants existing broadcasters rights to additional spectrum for tomorrow's advanced digital television services (while giving the FCC the power to reclaim those additional rights or even those that broadcasters currently have). But because the act also loosens FCC rules on concentration of radio and television station ownership, such concentration may raise antitrust concerns. Increasingly, radio and broadcasting mergers are now being scrutinized by the Antitrust Division of the U.S. Department of Justice.

The Telecommunications Act also reduces price regulation of some cable television systems, while maintaining for 3 years regulations on cable systems that do not face effective competition. Cable television shares the wire-based network characteristics that have made local telephone and electricity service natural monopolies, but it arguably faces greater competition from other video media such as broadcast television, videocassettes, and direct broadcast satellite service. To encourage telephone companies to compete with cable operators, the Telecommunications Act establishes a common-carrier "open video systems" framework that local telephone companies can use to provide cable television service with substantially less regulation. In addition, the act amends the Public Utility Holding Company Act of 1935 to permit public utility holding companies to acquire or maintain an interest in "exempt telecommunications companies" (ETCs), which could provide telecommunications or information services in competition with incumbent providers. Since the act was passed, the FCC has approved a number of petitions for determination of ETC status.

Other major provisions of the act seek to control the availability of obscene and indecent material to minors via the Internet and require that televisions with screen sizes exceeding 13 inches include a so-called V-chip, which when activated blocks programs with ratings designed to inform parents of sexual, violent, or indecent content that their children might see. As of this writing, several Federal courts have ruled that the content provisions regarding indecency on the Internet violate freedom of speech.

phone service (Box 6–5). The act replaced these rules with a long-distance entry approval procedure administered by the FCC. For an RBOC to receive FCC authorization to provide long-distance service to its local service customers, it must have an approved interconnection agreement with a facilities-based competitor, or, if no competitor has made a good-faith request for interconnection or network elements within a specified time, it must have an approved statement of terms and conditions under which it will provide interconnection. In either case the RBOC must offer interconnection under terms and conditions that meet a 14-point statutory checklist. The FCC then must determine whether granting the RBOC's application to provide long-distance service "is consistent with the public interest." In making its determinations, the FCC is required to consult the regulatory commissions of the relevant States to verify compliance with the checklist, and to solicit and grant substantial weight to the Department of Justice's evaluation of the application. The Antitrust Division of the Department of Justice has long experience in competition analysis, and thus has the expertise to judge the effects of an RBOC's provision of long-distance service.

Similar prohibitions against manufacturing of telecommunications equipment by the RBOCs are repealed, effective when the company obtains approval to provide long-distance service. The Telecommunications Act prohibits RBOCs from discriminating against competitors in areas such as procurement and access to technical network information. To protect against anticompetitive discrimination and the possibility that local telephone customers will end up paying for the RBOCs' ventures into long-distance service, manufacturing, and other new enterprises, these offerings must be provided by separate subsidiaries for a minimum of 3 years.

Yet creating competition is not simply a matter of legislative declaration; controversies regarding market power and dominance will persist for some time. Exemplifying both the complexity of the issues and the case for regulatory oversight is the FCC's First Report and Order implementing the local competition provisions of the Telecommunications Act. Table 6–1 summarizes some of the controversy and the FCC's decisions.

As of this writing, the 8th Circuit Court of Appeals has stayed implementation of parts of the order, holding that the FCC went beyond its jurisdiction in prescribing prices and pricing methods for network elements and wholesale telephone service. While the courts consider these issues, State regulators continue to mediate, arbitrate, and approve interconnection negotiations between incumbent local telephone companies and new entrants. The FCC will still have to make decisions regarding whether the RBOCs have met the prescribed conditions for being allowed to offer long-dis-

Box 6–5.—Why Were the Regional Bell Operating Companies Kept Out of Other Markets?

The RBOCs are the local service companies spun off by AT&T in 1984 as part of the settlement of the antitrust case brought against it by the Department of Justice. The divestiture was premised on the economic harm created when a regulated monopoly can evade controls on prices and profits by operating businesses in other unregulated (or less tightly regulated) markets. In *U.S. v. AT&T*, the regulated monopolies in question were AT&T's local service companies, and the relatively unregulated businesses were its long-distance service and its telecommunications equipment manufacturing subsidiary. The leading concerns were:

- *Anticompetitive discrimination.* A regulated local telephone monopolist that also provides long-distance service might, for example, provide delayed or inferior connections to other long-distance competitors. If long-distance companies can only complete calls through the local network, those competitors cannot turn elsewhere for adequate connections. This boosts demand for the monopolist's own long-distance service, allowing it to raise long-distance prices.
- *Cross-subsidization.* A regulated local telephone company might purchase equipment and labor to provide long-distance service and record these purchases as costs of providing local service. It could then cite these added costs to justify to its regulator an increase in its local telephone rates. Because it has a local service monopoly, customers cannot turn elsewhere and must pay the higher rates. The profits show up on the books of the unregulated long-distance service.

In the 1970s and early 1980s the local telephone monopoly appeared permanent and regulatory approaches ineffective. The Department of Justice's Antitrust Division therefore pressed AT&T to divest its local operations, creating the RBOCs. To prevent anticompetitive discrimination and cross-subsidization from recurring, the RBOCs were kept out of long-distance service and other markets. Enacted 12 years after that divestiture, the Telecommunications Act of 1996 reflects technical change that has made the prospect of local competition more realistic, and gives the RBOCs a reasonable opportunity to meet conditions under which their provision of long-distance service would promote rather than inhibit competition.

TABLE 6–1.—*The Interconnection Debate*

Entry method	Entrant side	Incumbent side	FCC policy (absent a negotiated agreement between the parties)
Facility-based total service providers	Incumbent would preserve monopoly by refusing to interconnect.	Act left interconnection to bilateral negotiation; FCC intervention will give too little weight to local market considerations.	Set basic rules for interconnection between existing local telephone companies and new end-to-end providers.
Purchase of "network elements"	Incumbent would offer too few elements at too high a price.	Entrants demand inefficient slicing of network; rates based on forward-looking costs will not provide enough revenue to pay for past investments.	Determine the "network elements" (loops, switches, other components) incumbent carriers should make available; specify cost-based methods for setting their prices.
Resell incumbent's service at retail; own no facilities	Wholesale discounts below retail rates are necessary for profitable retail competition.	Resellers should not get service at prices discounted from retail rates that, because of regulation, are below the cost of providing service.	Set a default wholesale discount of 17–25 percent below retail, based on estimates of incumbents' costs related to retailing that incumbents would avoid.

Source: Council of Economic Advisers, based on Federal Communications Commission interconnection order.

tance service, in accord with the checklist and the "public interest" standard in the Telecommunications Act.

While the interconnection issue is pending, the Joint Board of FCC and State Public Utility Commissioners has adopted recommendations for funding universal service subsidies for telephone service to low-income or high-cost (generally rural) areas through competitively neutral contributions from interstate telecommunications service providers. The proposal defines universal service as including basic voice telephone service and ancillary services. The current practice of subsidizing universal service through "access charges" (fees that long-distance companies pay the local incumbent to originate and terminate calls) is neither transparent nor likely to be sustainable in a competitive environment, as the entry of new telephone companies fosters bypass of the payment system. In December 1996 the FCC initiated proceedings to reform access charges. It is proposing to prescribe specific changes in access charges and/or to grant a local telephone company different degrees of pricing flexibility depending upon whether it faces potential entry, actual competition, or substantial competition.

One question in addressing universal service and access charges is whether, after deregulation, the earnings of incumbent telephone companies will suffice to cover the infrastructure costs mandated under prior regulatory regimes. As last year's *Economic Report of the President* argued in the context of "stranded costs" of electric utilities (which are discussed further below), recovery of costs legitimately incurred pursuant to regulatory obligations would be warranted. Such recovery should be limited, however, to investment expenses not already recovered through past earnings. It is also crucial that any such recovery be accomplished in a manner that is competitively neutral—for example, creating neither artificial price nor cost advantages for the incumbent carrier.

The years of debate that preceded passage of the Telecommunications Act are likely to presage additional years of regulation and litigation to realize its goals. These complex issues will require active policy oversight to ensure a proper outcome.

EXPANDING COMPETITION IN ELECTRICITY: FEDERAL ORDERS AND STATE INITIATIVES

Telecommunications was not the only industry during the past year to be the object of procompetitive policy initiatives. Major regulatory decisions by the Federal Energy Regulatory Commission, along with ambitious State initiatives, are already opening markets in electric power generation to competition. Legislation to increase competition in electric power markets is under active consideration by the Congress and the Administration. (Box 6–6 discusses the important role of merger enforcement during the transition to competition in the electricity and telephone industries.)

The 1992 Energy Policy Act authorized the FERC to order a transmission-owning utility to provide wholesale transmission service. This enabled generators owned by the transmission utility, by other utilities, or by independent power producers to compete to sell power to local distribution companies or anyone else engaged in the resale of electricity. Opening up wholesale markets and interstate transmission networks to the panoply of generating companies should lower prices and will be necessary for effective retail competition. State regulators are now determining the extent to which competition in electricity may extend to retail markets.

The key provisions of the FERC's Order No. 888, issued April 24, 1996, require public utilities to file nondiscriminatory "open access" tariffs for the interstate transmission of electricity sold at wholesale. Order No. 888 also requires "functional unbundling" by utilities of generation from transmission, with separate rates for wholesale power, transmission service, and other ancillary services. These tariffs are intended to ensure that the utility treats nonaffiliated power companies the same way it treats its own generators in terms of prices and service options. To implement these procedures, Order No. 889 mandates the creation of Open Access Same-Time Information Systems (OASIS) to provide all generators with up-to-the-minute data regarding power flows and congestion in the transmission network. The thrust behind these two orders is the

Box 6–6.—Mergers During the Transition to Competition

At the same time that the FERC, the FCC, and State governments are engaged in designing regulations to facilitate competition in telephone and electricity markets, these industries are seeing considerable merger activity. Mergers may enable firms to exploit economies of scale, but they can also engender concerns that competition will be reduced. The Horizontal Merger Guidelines promulgated by the Department of Justice and the Federal Trade Commission point out that mergers can lessen competition by making it easier for firms to collude and, in some cases, by giving monopoly-like power to the merging parties.

A crucial consideration in evaluating mergers is what antitrust experts call market definition: identifying who is in the market and who is not. All else being equal, the more sellers that remain in the market after a merger, the less likely it is that the merger will reduce competition. As the industries have been structured up to now, mergers between local telephone companies, or between electric utilities, might have little anticompetitive effect, because the two would by law and economics be in separate markets. Following the Telecommunications Act of 1996 and Order No. 888, however, the concern is that these mergers might reduce potential competition in the future. The effects of a merger in these industries depend on how those initiatives are implemented and how the industries respond. We do not yet know how the markets will turn out—whether two, three, or ten companies will compete to provide electricity or local telephone service to customers in any particular area. Moreover, the mergers themselves may reflect the firms' belief that they should merge now before authorities can prove that the mergers would reduce competition.

In principle, mergers can be a way for firms to reduce costs and improve their ability to compete. However, efforts to block anticompetitive mergers are crucial if legislative and regulatory efforts at all levels of government to promote competition are to realize their full potential.

creation of institutional arrangements that will support greater competition in the industry.

Among the many complex issues to be resolved in managing the transition from regulation to competition in electric power generation, two stand out. One is the degree to which more stringent forms of separation between generation and transmission will be necessary to prevent discrimination. Order No. 888 did not require strict corporate separation between transmission companies and generators. A widely discussed alternative is to create so-called independent system operators (ISOs). An ISO would operate (but not own) a transmission grid, keep power supply equal to use, and manage responses to emergencies and blackouts. The FERC recognizes the need to prohibit conflicts of interest between ISOs and power providers and has set forth principles that ISOs must satisfy. However, the agency has left the development and implementation of ISOs to the utilities and the States.

A second major issue involves what are known in the electricity industry as stranded costs. As discussed in last year's *Economic Report of the President,* electric utilities facing competition from new, low-cost power suppliers may be unlikely to recover substantial amounts of their undepreciated investments in high-cost power plants. A second source of stranded costs is long-term contracts with high-cost renewable power suppliers. Such contracts were mandated by Federal laws intended to promote purchases of such power by utilities at their avoided costs of new plant construction. Over time, however, those contract prices have probably turned out to be higher than the projected cost of power under deregulation.

Allowing utilities to recover prudently incurred investment and contract costs is important. Investors in regulated enterprises need to be reasonably confident that the government will not renege on its commitments by arbitrarily denying the investors any opportunity to recover their upfront costs. At the same time, however, regulated firms may engage in wasteful investments if recovery is guaranteed unconditionally. To avoid creating this incentive, a presumption in favor of cost recovery should apply only for costs incurred to comply with specific regulatory mandates or before competition became a significant prospect.

In its recent Order No. 888, the FERC granted utilities the right to seek recovery of costs stranded when a former wholesale customer purchases power from new suppliers. The FERC's rule only covers contracts established prior to July 11, 1994, the day the agency published its stranded cost rulemaking in the *Federal Register.* It served notice that it would not consider a request for wholesale stranded cost recovery for contracts entered into after that date. Much of the potentially stranded costs, perhaps over 90 percent, fall under State jurisdiction, however, and are being resolved by the various States in different ways.

States across the country are also expanding competition in electricity. New Hampshire has already undertaken a pilot program in which 16,000 randomly selected customers were allowed to choose their electric company. In response, over 30 power companies have offered a variety of flat rates and usage discounts, rebates and other inducements, and promises of environmental sensitivity. In

February 1996 the Wisconsin Public Service Commission submitted a proposal to the State legislature describing a 32-step plan to bring retail competition to consumers there by 2001. In September 1996 California enacted a plan that would offer consumers a choice of power providers as early as January 1998, with deregulation of retail power prices by 2002. These initiatives illustrate how complementarity between public policy and private markets holds at the State level as well as for Federal regulation.

The existing statutory and regulatory framework may make it difficult to resolve the complex issues, such as ensuring system reliability, that are sure to arise as competition in electricity evolves. Accordingly, the Administration is considering a variety of legislative proposals to modify existing regulatory frameworks. Such legislation could promote competition and efficiency in the electricity industry by permitting more flexible industry structures and clarifying the jurisdictional boundaries between State and Federal Governments.

MARKETS COMPLEMENTING GOVERNMENTS

The Telecommunications Act, the FERC's open access orders, and State and Federal actions to implement them illustrate how government policy can facilitate the development of responsive, competitive markets. The street goes both ways, however. Recent policy developments regarding pollution control, spectrum management, and land use show how government can use market forces to help achieve important social objectives. (Box 6–7 indicates how advances in telecommunications are making the government more accessible to the public.)

EMISSIONS TRADING: APPLICATIONS TO AIR POLLUTION

Concerns about environmental degradation and resource depletion have led to an intensified search for innovative, cost-effective solutions. One fairly new approach is emissions permit trading. Proposed at least as long ago as the 1971 *Economic Report of the President,* emissions trading is now often regarded as the preferred policy approach to a range of environmental problems. By giving polluters a financial incentive to reduce emissions in the least expensive possible way, emissions trading reduces the costs of environmental protection. Firms with high abatement costs can purchase permits from firms with low abatement costs, which thus find it profitable to reduce their emissions and sell their surplus permits. As a result, greater responsibility for reducing emissions is allocated to those firms that can do so at least expense.

Box 6–7.—Bringing the Government to the People via the Internet

An important advance in the use of telecommunications technology to promote democracy is the expanding availability of government information via the World Wide Web on the Internet. Any citizen with access to a computer and a telephone line at home, work, or the public library can now search this vast hoard of information.

To get to these sources of information, one enters a website address (formally called a uniform resource locator, or URL) in a World Wide Web browser program. The URL usually takes the form:

http://www.name.gov/

where in place of "name" the user specifies the site. Some of the leading government websites are:

Library of Congress	loc
White House	whitehouse
Department of Agriculture	usda
Department of Commerce	doc
Department of Education	ed
Department of Energy	doe
Department of Health and Human Services	dhhs
Department of the Interior	doi
Department of Justice	usdoj
Department of Labor	dol
Department of State	state
Department of Transportation	dot
Department of the Treasury	ustreas
Department of Veterans Affairs	va
Environmental Protection Agency	epa
Federal Communications Commission	fcc
Federal Trade Commission	ftc
Government Printing Office	gpo
National Aeronautics and Space Administration	nasa
National Science Foundation	nsf

Within the Library of Congress website, a useful source of information on the Congress and on Federal legislation is the Thomas data base. From the White House website, one can use the "Interactive Citizens' Handbook" to find websites for other Executive Office agencies, including that of the Council of Economic Advisers, which includes an electronic edition of this *Report*.

Emissions Trading in Practice

Much of the enthusiasm for emissions trading is due to its success in attaining mandated reductions in sulfur dioxide (SO_2) emissions from electric utilities, at lower-than-expected costs. The Environmental Protection Agency (EPA) implemented emissions trading as part of its Acid Rain Program. That program, instituted under the 1990 Clean Air Act Amendments, called for major reductions of atmospheric SO_2 and nitrogen oxides (NO_x), the pollutants that cause acid rain. To hold SO_2 emissions to a targeted maximum total level, the EPA issued each polluter a number of permits based on fossil-fuel usage in the mid-1980s. (Box 6–8 discusses the relative merits of giving away emissions permits, auctioning them to the highest bidder, and charging emissions fees.) After the initial distribution, permitholders were allowed to buy or sell permits or use them to offset excess pollution in other parts of their own operations.

During the debate over the Clean Air Act in the 1980s, utilities warned that annual compliance costs could exceed $4 billion by the year 2000, and SO_2 pollution allowances were predicted to trade at prices ranging from $170 to almost $1,000 per ton of emissions. By the end of 1995, however, the price of SO_2 permits was around $80 per ton. Some preliminary analyses suggest that several factors—deregulation that reduced the cost of shipping Western low-sulfur coal by rail, improvements in fuel blending technology, and subsidies for the installation of equipment (called "scrubbers') to filter out emissions from smokestacks—reduced demand for and thus the price of SO_2 permits. The flexibility provided by the emissions trading system, however, is credited with promoting competition in coal markets and encouraging innovation that led, at least in part, to these cost reductions. Whatever the linkage, as market-based methods reduce the costs of abatement, more stringent environmental standards become easier to justify.

The first phase of SO_2 emissions trading, affecting 110 plants, began January 1, 1995. Phase II of the Acid Rain Program is slated to begin in 2000, when an additional 700 fossil fuel-burning plants will be subject to emissions caps. Moreover, analysts expect that permit trading will play a greater role in other ways as the market expands. The EPA is examining ways to respond to increased competition following the FERC's Order No. 888, which according to the EPA's analysis will increase the market share of relatively high emission coal-fired plants. A trading system for NO_x is a strong contender.

Emissions Trading and Climate Change Policy

In July 1996 the Administration announced that the United States would support an international effort to set reasonable and attainable, binding emissions-reduction targets for greenhouse

Box 6–8.—Taxing Pollution Versus Giving Away Emissions Trading Permits Versus Auctioning

The first emission permits under the EPA's Acid Rain Program were issued to utilities without charge. But handing out tradable emissions permits for free is not the only way to introduce markets into environmental protection. Other policy options include placing fees on emissions, and auctioning rather than giving away permits. By changing relative prices, and therefore incentives, all of these policies seek to improve upon traditional command-and-control methods that specify pollution limits for each plant and, in some cases, even the technologies to be used to achieve those limits. Market-based incentive policies tend to increase efficiency by imposing a marginal cost on firms for polluting, through either paying more fees, purchasing more permits, or forgoing the opportunity to sell permits to someone else. Facing these costs gives firms the incentive to reduce pollution most at plants where it costs the least to do so, and by developing and using less expensive abatement technologies.

Economically, the choice between fees and marketable permits is of secondary importance. If it is crucial to set some absolute limit on the quantity of pollution introduced into the environment, permits together with stringent enforcement can ensure that that limit is not exceeded. If the incremental social cost from adding pollutants is known to be relatively constant, the theoretically better approach would be to set fees equal to that cost. Collecting emissions fees, and auctioning rather than giving away permits, also raise revenue that can be used for deficit reduction or to cut other, more distortionary taxes.

Whether regulators give away permits, auction them off, or impose pollution fees, anything that forces firms to abate pollution or cut back output is sure to raise the cost of supplying the goods and services those firms produce. These higher costs translate into higher product prices. Higher prices, however, lead consumers to take pollution costs into account when making their own purchasing decisions.

gases—the gases whose emission is believed to cause global warming. The possible effects of global warming include risks to coastal areas from rises in sea level; changes in rainfall and agricultural productivity; and increased incidence of diseases such as malaria, yellow fever, and cholera. Combustion of fossil fuels, primarily coal and oil, is the main source of elevated levels of carbon dioxide, the most prevalent of the greenhouse gases.

The United States has called for flexible and market-based approaches for reducing these emissions, one of which may be domestic and international greenhouse gas emissions trading systems. Extending trading internationally is especially intriguing. An international trading system would be able to take advantage of greenhouse gas reductions in those participating nations where the marginal cost of reducing emissions is relatively low.

Other Implementation Issues

Determining the initial distribution of emission permits can be contentious. The alternative to allocating permits through the market by auctioning them is to rely on a formula, which may be based on past and current pollution. Such formulas can be controversial because recipients of permits are given a scarce and valuable resource. Moreover, companies anticipating an allocation based on current practices have an incentive to delay actions to limit pollution or other environmentally harmful activities, in order to qualify for more permits. This incentive can be partially neutralized by linking reductions to some prior historical baseline. However, this approach can make the choice of allocation formula more difficult, since participants will realize that a distribution of permits based on historical practices penalizes those who were the first to undertake actions to improve the environment.

In cases where the incremental harm from emissions is relatively constant over time, the efficiency of emissions trading can be enhanced, at least in the short run, by allowing polluters to bank and borrow permits. Under such a system, polluters could defer their use of a permit, or borrow against future allowances, as their costs dictate. Where workable, this can allow the emissions trading market to allocate reductions over time in a more efficient manner. Timing flexibility can reduce compliance costs through better coordination of emissions reductions when replacing old facilities with less polluting technology. In the first year of the EPA's SO_2 trading program, emissions reductions were about 40 percent greater than the target level, as utilities "banked" allowances for future years.

A problem can arise when the damages from emissions are not distributed evenly over the geographic area in which firms can trade permits. If polluters with high abatement costs—the ones most likely to buy permits—are geographically concentrated, a "hot spot" area that is persistently in serious noncompliance may result. Hot spots are a potential problem with SO_2, but they may be more serious with regard to NO_x. Better market mechanisms for dealing with hot spots should be developed.

Despite these and other complications, interest in emissions trading remains strong, primarily because of the potential cost savings and efficiency gains. The EPA estimates that meeting possible SO_2,

NO_x, and mercury targets through an emissions trading program with banking would reduce abatement costs in 2005 by almost two-thirds compared with a traditional command-and-control approach. Researchers at the Stanford Energy Modelling Forum have predicted that international emissions trading for carbon dioxide could reduce costs as much as 50 percent below the minimum achievable using purely domestic programs—and as much as 80 percent if flexibility in the timing of emissions reductions is allowed. These cost savings do not conflict with considerations of intergenerational equity, because they take place within a program designed to ensure that concentrations of carbon dioxide never exceed critical target levels in any year.

SPECTRUM AUCTIONS

Auctions of rights to use publicly owned resources can allocate those resources efficiently, as well as generate revenues to help cover the costs of government programs. The chief example in 1996 was the FCC's auctions of rights to use parts of the radio spectrum for personal communications systems (PCS). By virtually all accounts, this was an enormously successful example of using market forces to complement the public sector.

Auctions can be designed in numerous ways. Some feature one-time sealed bids, whereas others feature repeated open bids. Rights or permits to be auctioned can be offered together or one at a time. Winning bidders may pay the bid they offer or, to limit strategic incentives to underbid, they may pay the second-highest bid offered. The winner can be determined either as the last to make an offer higher than all preceding offers, or as the first to speak up as an auctioneer offers a succession of declining sales prices. Regardless of the method, the goals are the same: to get assets into the hands of those who will derive the greatest economic value from them, and to do so rapidly and efficiently. How best to design the auction depends on a variety of strategic considerations. A primary factor in the PCS auctions (Box 6–9) was to enable bidders to pursue collections of licenses and preserve their options when strategies needed revision. This added flexibility is likely to have increased firms' willingness to bid, allowing the government to capture some of the economic benefits created by making it easier for firms to place bids for one license based on their beliefs about whether they will win others.

Spectrum auctions have particular advantages over earlier methods of issuing spectrum licenses. Comparative hearings, in which the FCC attempted to distinguish among prospective licensees on noneconomic grounds, generated enormous delay and expensive litigation with little if any public benefit. Using lotteries to distribute licenses randomly to applicants eliminated the need for the

Box 6–9.—Spectrum Auctions: A $22 Billion Economic Idea

As a mechanism for capturing the value of the electromagnetic spectrum for the public, and for getting spectrum quickly into the hands of service providers, auctioning has been spectacularly successful. The most dramatic examples have been the auctions of spectrum for broadband personal communications systems (PCS). Broadband PCS might be thought of an advanced form of wireless mobile telephone, fax, and data service, akin to cellular radio.

To understand the success of PCS auctions, it is important to understand how they work. The FCC first defines spectrum blocks, each consisting of a range of frequencies and a geographic area over which a winning bidder may use these frequencies. In the first broadband PCS auctions, concluded in early 1995, two 30-megahertz blocks (designated A and B) were assigned to each of 51 "major trading areas." These auctions were open to all firms, subject to ownership restrictions to promote competition. In the second PCS auction, which took place in 1996, an additional 30-megahertz block (designated C) was offered in each of 493 "basic trading areas" across the United States. Bidding in that auction was restricted to smaller "entrepreneur" firms, with discounts built in to promote participation by the smallest (those with less than $40 million in annual revenue).

A key innovation was to allow bidding to continue for all areas until no one wanted to place a higher bid on any particular area. This allowed firms to bid in an effort to combine PCS licenses so as to provide services over broad territories. These innovative auctions, designed by the FCC with the help of experts in auction theory, achieved the FCC's goals in outstanding fashion. Bids on the A and B blocks fetched $7.7 billion, and those on the C blocks over $10 billion more. The FCC's recently completed auctions of its D, E, and F blocks for PCS service raised more than $2.5 billion. This same method had already raised over $1 billion in 1994, in auctions for narrowband PCS services—useful for paging and voice message services.

When the less complicated auctions for interactive video and data services and direct broadcast satellite licenses are included, auctions so far have raised over $22 billion and, more important, rapidly promoted the use of innovative, advanced telecommunications technologies throughout the economy.

FCC to determine which firm would be a better service provider. Unfortunately, they also created a cumbersome and expensive mechanism for collecting and processing vast numbers of applications, many from those with no motive other than to sell their "winning ticket" to an actual service provider. Instead of the government collecting revenues to cover the costs of public programs, a few lucky winners got windfalls. Moreover, the cellular lotteries did nothing to eliminate delays in the efficient aggregation of licenses, whereas the PCS auctions incorporated such aggregations into the bidding mechanism.

Auctions eliminate the need for arbitrary comparisons and the cost of filing and processing speculative applications. The winner is presumably the firm that believes it can make the greatest profit in markets for telecommunications services for which the license can be used. If it fails, it can generally sell its license, just as firms throughout the economy that overestimate the profits they expected can sell their plant and equipment to other entrepreneurs.

Auctions need not be inconsistent with achieving important non-economic objectives associated with spectrum use. Providers can bid for licenses that include, for example, designated public service obligations. But auctions are no panacea:

- If spectrum uses are specified in advance, auctions may not lead to efficient outcomes. The economic value of spectrum, and thus the revenue to the government, are greater when bidders have more flexibility in how they can use the spectrum. To promote these goals and implement recent legislation, the FCC is proposing a new wireless communication service, with licenses to be auctioned during 1997. Licensees would have considerable flexibility to lease portions of either their spectrum or their geographic coverage to other providers.
- If auctions are regarded primarily as a revenue-raising device, the government may have an incentive to restrict the spectrum available for any particular service. We need to recognize, however, that a tax on any good or service has the effect of reducing its supply. In that regard, the potential output effect of using spectrum auctions specifically as a means for raising revenue for the government would not be unique.
- A dominant firm might outbid potential entrants simply to preserve its market power. Antitrust oversight and restrictions on bidders may be necessary to preserve competition in spectrum-related services.
- The incentive to develop new spectrum uses might be diminished if auctions take place only after developers of those uses disclose their innovations. If disclosure of the new idea is what leads to the auction, innovators will have to bid for spectrum made valuable only because of that idea. This could reduce the

incentive to innovate in the first place. An approach sometimes used to deal with this problem is to grant "pioneer preferences" in spectrum auctions to innovators. A better long-run policy might be to commit to auction useful portions of the spectrum up front, rather than make auctions contingent on public disclosure by innovators of their ideas.

NATURAL RESOURCE POLICY REFORM

America's natural environment is an important part of our national heritage and has contributed to the development of our economy. Federal agencies, including the Bureau of Land Management (BLM) and the National Park Service of the Department of the Interior and the U.S. Forest Service (USFS) of the Department of Agriculture, manage large tracts of land, particularly in the Western United States. Indeed, the majority of land in several Western States is regulated by these agencies. The Bureau of Reclamation of the Department of the Interior and the U.S. Army Corps of Engineers also influence the quality of many of the Nation's aquatic ecosystems through their construction and operation of numerous diversion, flood control, hydropower, and navigation projects.

Federal public lands are used for a number of purposes, including recreational use and resource extraction. Historically, three industries have dominated the extractive use of public lands: livestock grazing, mining, and timber harvesting. All these activities continue today: grazing, for example is permitted on over 240 million acres of Federal rangeland. Policies for management of the Nation's public lands and aquatic resources have evolved over time as the result of legislation and its interpretation by other branches of government. The Administration is committed to ensuring that natural resource policies reflect today's realities and balance the diverse and sometimes competing objectives of all who derive benefits from the natural environment.

Current Policies

Current policies toward natural resource use are mainly rooted in past legislation intended to stimulate the economies of the West and encourage settlement of the region. These policies facilitate the development and exploitation of natural resources.

Subsidized Use of Federal Public Lands. Most uses of Federal public land are currently subsidized in one of at least three possible ways. First, a subsidy can exist when the price to the user is less than the government's cost of overseeing the activity. Second, a subsidy may exist when users of Federal lands pay the government a price below that paid for the similar use of comparable privately owned lands. Finally, resource users may receive a subsidy if they pay the government less than the opportunity cost of the land's use, which is defined as the value of the highest alternative use of the resource. The type and amount of subsidy offered on Federal lands vary with the nature of the activity and with the location of the land.

Public grazing fees are almost always below private fees and may not even cover the government's cost of administering the grazing program. The amount of the subsidy varies widely by location. The Public Rangeland Improvement Act of 1978 dictates that grazing fees be determined as a function of aggregate livestock market conditions, including a forage value index, the price of beef cattle, and an index of prices paid by farmers; because the formula disregards local factors, public grazing fees are the same everywhere. Private grazing fees, by contrast, differ widely and systematically throughout the West, depending upon the quality of local forage and regional livestock market conditions. A recent study concluded that average private grazing fees between 1965 and 1992 were $12.75 per animal unit month (AUM) in Montana, $7.80 per AUM in Arizona, and $11.20 per AUM across the 11 contiguous Western States. Public grazing fees, by contrast, averaged $1.20 per AUM during this same period. Although these figures do not account for the higher quality of forage often found on private land, or for the value of private landlord services, they nevertheless represent a significant subsidy for grazing domestic stock on public land.

The subsidy offered to ranchers is small, however, compared with that given to miners taking hardrock minerals such as gold, copper, silver, and uranium: miners do not pay the government any significant revenue or fee for hardrock minerals extracted from Federal public lands. This policy, established in the 1872 General Mining Law, bestows a large subsidy on private mining companies. In 1994, for example, a mining company patented a claim in northern Nevada with a gross mineral value of $10 billion, for which the Department of the Interior collected only $9,765. Although this was the largest single transfer of public mineral assets in recent years, it is not the only such case (Table 6–2). Between May 1994 and September 1996 the Federal Government was forced by the General Mining Law to give away over $15.3 billion worth of minerals, in return for which taxpayers received only $19,190.

Timber extraction from Federal public lands is also subsidized, although the subsidy is more subtle than those for mining and grazing. Generally, the USFS subsidizes timber extraction from public lands by collecting less in timber sale revenues than it spends on timber program costs. In 1995, for example, the USFS collected $616 million in timber receipts but spent over $850 million on timber management, reforestation, construction of logging roads, payments to States, and other program costs. Closer analysis of this negative cash flow reveals that the losses vary by region. In seven of the nine National Forest System regions, annual cash

TABLE 6–2.—*Examples of Mining Patents Issued Since 1994*

Location of patent	Date	Mineral	Mineral value	Paid to United States
Eureka and Elko Counties, Nevada	5/1994	Gold	$10,000,000,000	$9,765
Clark County, Idaho	9/1995	Travertine limestone	1,000,000,000	275
Humboldt County, Nevada;. Imperial County, California	3–6/1995	Gold	1,200,000,000	3,585
Pima County, Arizona	12/1995	Copper and silver	2,900,000,000	1,745
Eureka County, Nevada	9/1995	Gold	68,000,000	540
Mohave County, Arizona	4/1996	Gypsum	85,000,000	100
Seward Peninsula, Alaska	9/1996	Gold	38,600,000	2,680
Pinal County, Arizona	9/1996	Copper	56,000,000	500
Total			15,348,000,000	19,190

Source: Department of the Interior.

receipts from timber harvesting have consistently failed to cover the USFS' annual expenditures. This problem is particularly severe in the Rocky Mountain, Northern, and Intermountain regions, where expenditures have exceeded receipts from timber sales by a ratio of 3 to 1 over the past decade.

Federal water projects constructed and managed by the Bureau of Reclamation, the Army Corps of Engineers, and the Natural Resource Conservation Service of the U.S. Department of Agriculture are all highly subsidized. For example, projects constructed by the Bureau of Reclamation embody a number of different subsidies. These include interest-free repayment for capital invested in irrigation facilities, limitation on repayment associated with "ability to pay" guidelines that do not necessarily reflect changing economic or market conditions or individuals' income, and the repayment of costs above an irrigator's estimated ability to pay by using hydropower revenues far in the future. The length of the repayment period is also important in determining the overall magnitude of the subsidy. Subsidy amounts vary by project depending on date of construction, repayment terms, and interest rates, but on many projects the subsidy is significant. Moreover, even when farmers and other users pay some portion of the true cost of delivering water, they pay nothing additional for the value of the water itself.

Recreational use of Federal public lands is also heavily subsidized: in many areas fees paid by recreational users do not cover the costs of maintaining the resource for recreation. The Park Service spends around $250 million annually to provide visitor services at its 374 parks, monuments, and historic sites. Entrance fees raise only $80 million annually.

The National Park Service is currently implementing new fees in accordance with the demonstration projects authorized in Public Law 104–134. Fees for the recreational use of USFS and BLM land are charged sporadically. The revenues are far smaller than for National Park lands and are well below costs. These agencies are also implementing selective fee increases.

Environmental Damage. Grazing, mining, timber harvesting, and water project development have all placed heavy burdens on the Nation's natural resources. Streams and rivers in the Western States are particularly affected.

Ever since the first European settlement of the West, rangeland vegetation there has been affected by the introduction of livestock grazing and related changes in the occurrence of fire. Livestock grazing has reduced native grasses and palatable shrubs in upland communities, exposing bare ground and increasing soil erosion. More important, however, is the damage done by grazing to the riparian (river-related) areas upon which all fish and nearly all terrestrial species depend. Whereas the condition of uplands has improved since rangeland management began in the 1930s, riparian areas in the Western United States have continued to decline under the impact of grazing and are considered to be in their worst condition in history.

Mining operations have also caused significant environmental damage. Although problems of acid drainage have been reduced by the Clean Water Act, and dangerous mining of mercury and asbestos has been curtailed, mining operations still pose serious environmental risks. Groundwater infiltration of abandoned mine sites and cyanide contamination of streams and aquifers from gold extraction are serious concerns (Table 6–3). The mining industry and State and Federal regulators have taken steps to reduce the ongoing damage, but much remains to be done.

TABLE 6–3.— *Miles of Streams Polluted by Hardrock Mine Wastes*

State	Miles
Arizona	200
California	578
Colorado	1,298
Montana	1,118
New Mexico	69
Utah	83
Total	3,346

Source: Western Governors' Association.

Federally sponsored water projects inflict significant damage on our aquatic resources. Dams can inhibit the spawning of migratory fish such as salmon and steelhead. The vast Columbia River basin is in many respects the most affected by water project development. The Columbia River watershed now contains, by one count, 79 hydroelectric projects; 30 of these are Federal projects that provide subsidized power. The basin holds 450 major dams, if those for irrigation are included, many of which have no fish passage facilities. Diversion of water to farms and cities for crop irrigation and drinking reduces the quantity of water in rivers and streams; return flows are often warmer than desirable and may contain agricultural chemicals and other pollutants that lower water quality. Timber harvesting, mining, and ranching have also degraded Western fisheries by inundating spawning habitat with silt and debris.

Use Restrictions. Use restrictions are one tool by which Federal agencies coordinate activities on public lands. The fact that the price of resource extraction and recreation is often subsidized places more emphasis on such nonprice policies for controlling the use of public lands.

Those extracting resources from Federal public land often have exclusive rights in a given area for the activity in which they are engaged; this is one sense in which public lands have already been partially privatized. For example, the General Mining Law of 1872 provides for exclusive possession as against other miners, even while prospecting. Similarly, the Taylor Grazing Act of 1934 grants an exclusive grazing right to a single permitholder in a given area of BLM-managed land. This provision of grazing law was created largely to avoid the "tragedy of the commons" that had afflicted these public rangelands. With open access, each rancher has an incentive to introduce additional animals to the range until the average benefit equals the marginal cost. In this way, open access can dissipate the overall economic benefits from grazing.

Use-it-or-lose-it provisions are another type of use restriction on extractive activities. Under these provisions, whoever holds the right to extract a given amount of a resource in a certain time period must extract the resource as specified or face the possibility of losing the right. For example, grazing permits issued by the USFS require that a rancher graze close to the maximum permissible number of cattle or face termination of the permit (temporary exemptions are available, however). Similar provisions apply to timber harvesting permits and to water diversion rights. These provisions were intended to promote the utilization of public lands; in practice, however, they limit the transferability of extraction rights by reducing the incentives for conservation interests to obtain them.

Changing Conditions in the West

Current Federal resource policies are thus characterized by subsidized extraction and use restrictions that limit the transferability of extraction rights. These policies have resulted in overextraction and significant environmental damage. Changing economic conditions in the Western States and increasing recognition of environmental values suggest that many of the original motivations for these policies no longer apply. The Western regional economy is now prosperous and diverse, and extractive activities there provide far less income and employment in the aggregate than do recreation, tourism, manufacturing, and finance.

Less Reliance on Resource Extraction. The economy of the Western States has become highly diversified. Total employment in the West was more than 22 million in 1982. This figure had increased by nearly 50 percent to over 33 million by 1990. Industries in which employment has increased as a share of total employment include services, finance, insurance, real estate, construction, and retail trade. The Western regional economy produced more than $1 trillion worth of goods and services in 1982, and $1.35 trillion in 1990 (both figures are in 1993 dollars). Industries whose income has increased as a share of total regional product include services, manufacturing, and retail trade. In many respects these changes in employment and income generation mirror broader trends in the Nation's economy, with the result that the West does not look as different from the East as it did in the 19th century. Extractive industries now make up only a small and declining fraction of economic activity.

Agriculture (including timber extraction) and mining together provided only 6.3 percent of income and 5.3 percent of employment in these States in 1990, and their importance is declining. Their share of employment in the Western States fell by 21 percent between 1982 and 1990, during which time their share of regional income fell by 15 percent.

A declining number of Western families rely solely on income from ranching, mining, timber extraction, or farming. For example, ranch families in Arizona have, on average, two people employed off the ranch, who together contribute 53 percent of household income. In part this trend reflects the maturation of the regional economy. More jobs in the region translate into more opportunities for outside employment. This trend also implies that the incomes of families with a member employed in the resource extraction sector are also affected by public policies that strengthen the non-agricultural economy.

Nor should one overestimate the importance of extraction from Federal public lands to the livestock and timber industries as a whole. Permitted use on Federal lands accounts for only about 7 percent of beef cattle forage and about 2 percent of the total feed consumed by beef cattle in the 48 contiguous States. Similarly, less than 15 percent of the national timber harvest is from Federal lands.

The small contribution of extractive industries to economic activity in the Western States and the small contribution of public lands to total national cattle and timber production should not, however, obscure the fact that many rural communities and individual businesses in the West currently depend on Federal public lands for their economic well-being. Moreover, participants in the traditional Western industries represent, in the Department of the Interior's words, "a significant part of the world's image of America and America's image of itself." The unique cultural institutions of the West are valuable, and their preservation should factor into the debate about the nature of economically desirable natural resource policies.

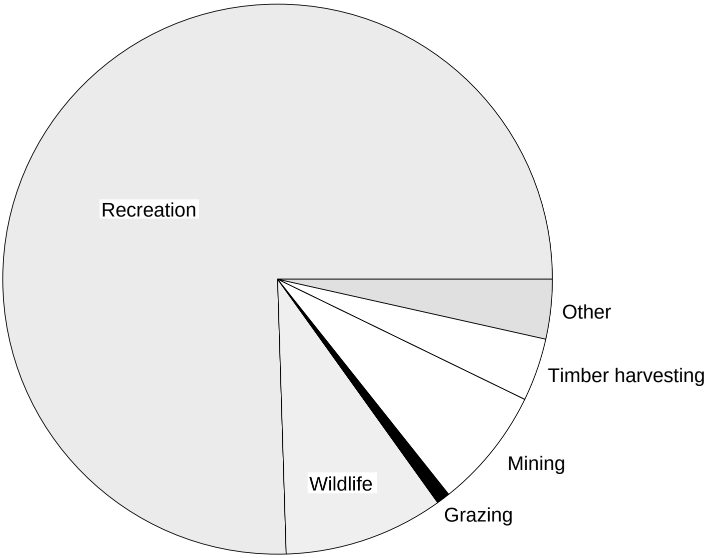
Increasing Value Placed on the Environment. The American public places more importance on a healthy environment today than at any other time in our history. This change in values is revealed in several ways. Public interest groups play an increasingly prominent role in the debate over public lands policy and have prompted various Federal agencies to enact important changes in policy. In recent years the Congress has enacted historic legislation designed to enhance the quality of the Nation's environment. To the extent that legislation reflects social preferences, these laws reveal an increasing value placed on environmental quality and a recognition of resource scarcity.

Recreational use of public lands is also increasing rapidly. On USFS lands, for example, such use increased by over 20 percent between 1991 and 1995, from 279 million to 345 million visitor-days. This rate of increase far outstrips the rate of population and income growth during this time period and may well reflect a change in preferences when compared with changes in other determinants of recreation demand.

A recent USFS study shows that recreation on National Forest System lands produces far more income and jobs than do traditional extractive industries. The agency calculated that recreation on these lands (including hunting, fishing, and wildlife viewing) contributed over $105 billion to GDP in 1993, or nearly 85 percent of the total Forest System contribution to GDP (Chart 6–1), and resulted in over 2.7 million jobs. Grazing, timber harvesting, and mining together contributed less than one-seventh as much income and employment as did recreation. The USFS projects that, by 2045, recreation will generate an even larger share of the economic benefits from the Forest System, particularly if environmental quality improves.

Changing National Fiscal Priorities. Finally, it is important to consider Federal natural resource policy in the context of Federal deficit reduction. Deficit reduction produces numerous public bene-

Chart 6-1 **Economic Activity Attributable to National Forest System Programs**
Recreation use of the National Forest System contributes by far the largest share of the $125 billion in annual income produced by these public lands.



Note: Data shown are for 1993. Wildlife includes activities such as hunting, fishing, and bird-watching.
Source: Department of Agriculture.

fits, detailed elsewhere in this *Report*. Reducing the Federal deficit is a prime economic policy objective of this Administration.

With this emphasis on deficit reduction, all public spending, including subsidies on public land use, is under closer scrutiny than in the past. Economic principles suggest that the marginal benefits of all government expenditures should be equal when the government is making maximal use of its fiscal resources. This means we must compare the value of an additional dollar spent subsidizing timber extraction or grazing—or on environmental restoration—with the value of a dollar spent on providing school lunches or job placement assistance or supporting basic research. If these marginal values are not equal, then an optimal allocation of public funds requires reducing some expenditures that provide lower marginal benefit while increasing others with higher marginal benefit.

New Foundations of Natural Resource Policy

These changing economic and social conditions—the maturation of Western economies, the emphasis on deficit reduction, and the increasing value placed by the public on environmental quality—motivate a new set of objectives for Federal natural resource policy.

Market Incentives. Users of Federal public lands should be more exposed to market signals, so that their decisions will help maximize economic welfare for all. Economics teaches that subsidizing the use of public lands affects economic behavior in ways that may prove costly. By encouraging overinvestment and overproduction in the livestock, mining, and timber industries, subsidies attract resources away from other, more productive sectors of the economy and reduce overall economic well-being. Reducing subsidies can improve economic performance by giving producers better information about the true cost of using public land.

Increasing the transferability of extraction rights is another market-oriented reform that may increase aggregate economic welfare. Some rights to extract resources from public lands are currently tradable in a limited sense. For example, Federal grazing permits are often transferred with the sale of a ranch to other qualified ranchers. One possibly beneficial reform would be to allow conservation interests to compete for extraction rights on an equal basis with other interests. For example, environmental groups could acquire grazing permits and use the land to introduce native plant species and improve wildlife habitat, or acquire permits for the use of timberland and permanently retire that land from commercial harvesting. Such voluntary transactions can provide value to the seller as well as to the buyer, and thereby maximize the value received by all elements of society from the stock of public land. Environmental groups already have acquired grazing permits at the State level.

Not everyone favors the trading of extraction rights. Rural communities sometimes assert that allowing conservation interests to acquire permits reduces the number of extractive businesses, thereby threatening the livelihood of their suppliers and possibly raising input costs to those producers who remain. Although some rural communities have indeed suffered from the loss of input supply businesses, it is important to recall the backdrop against which changes in public land policy are taking place: a maturing and diversifying Western economy. It is possible that these businesses would fail in any case, as the economy shifts away from natural resource-based industries, and jobs lost as a consequence are increasingly likely to be replaced by others within the community or region.

Another objection comes from resource managers who argue that grazing and timber cutting in particular play a key role in managing biological activity on public lands. For example, grazing of livestock and thinning of timber can reduce the danger of destructive fire. However, conservation interests have many of the same incentives as the government—and perhaps even greater incentive—to preserve resources in good condition. These groups may, for example, allow grazing, but at a low level of intensity.

Contribution to Deficit Reduction. Reducing subsidies can contribute to deficit reduction. For example, requiring royalty and bonus payments for hardrock mineral extraction, as many private landowners do and as the Federal Government itself does for oil and gas, could provide additional revenues. The Department of the Interior has calculated that an 8 percent net income royalty on hardrock minerals extracted from Federal public lands would generate at least $275 million for the Treasury over the next 5 years. Reducing subsidies for timber extraction, grazing, water deliveries, hydropower, and recreation would have beneficial fiscal impacts as well.

Increasing reliance on market mechanisms can also support deficit reduction. For example, grazing permits could be allocated through competitive auctions (much like the successful spectrum auctions described earlier in this chapter); it is quite possible that such a reform would raise more money for the government than the grazing fee increases proposed in 1994. Similarly, the current patenting process for mineral extraction could be replaced with a system of royalties and competitive bidding on bonus payments to the government. Such a system, already used for other minerals and by numerous other landowners, is likely to raise more revenues than a simple royalty payment as envisaged in current reform attempts. However, replacing the current patenting system with a leasing-competitive bidding regime might raise difficult policy and administrative issues.

Timber contracts are currently allocated competitively. However, the bidding process could be fine-tuned to the benefit of taxpayers by incorporating a larger share of road and overhead expenses in the minimum acceptable bid. This adjustment would reduce continuing Federal losses from many timber sales and would give logging interests more accurate price signals about the true resource cost of timber extraction.

Environmental Stewardship and Efficient Land Use. Reducing or eliminating resource subsidies can improve environmental quality on Federal public lands. To the extent that environmental damage is related to the level of production, reducing subsidies reduces the incentives for production and thereby reduces environmental damage.

Of course, the environmental impact of resource extraction is not just a question of production levels; technique is also important. For example, the environmental damage from grazing may be due both to the number of livestock grazed and to the way in which grazing is managed: where animals are permitted to graze and for how long. Similarly, the impact of mining on water quality depends not only on the volume of minerals produced; control technologies and reclamation practices also have important effects. Direct use restrictions and reclamation requirements can help correct for the environmental damage done. For example, the government can exclude riparian areas from grazing. It can also place more environmentally sensitive lands off-limits to mineral location and production. Without environmental taxes to provide price incentives, direct controls can be an important way to improve environmental quality and achieve an efficient resource allocation.

Subsidizing the price of environmentally friendly extraction technology may also be consistent with increasing efficiency. Reducing the price of such technology increases the likelihood that it will be adopted. Such a subsidy can be implemented in a number of ways. Public investment in agricultural research and development is one approach that has generally paid impressive returns. Land-grant universities and the cooperative extension system have helped farmers increase productivity and, more recently, cope with environmental problems. Increased funding of land-grant research, development, and outreach directed at public lands management is one way to encourage the adoption of more benign, and more productive, extraction technologies.

Transferability of extraction rights can also be consistent with environmental stewardship in at least two ways. Trading can allow conservation interests and various levels of government to acquire the resources they value the most at prices that compensate willing sellers. For example, the Department of the Interior has initiated innovative willing-seller programs to reallocate water from agriculture and enhance instream flows in the San Francisco Bay/Delta estuary and Nevada's Truckee River basin. As the government excludes more resources from extraction, trading among the remaining permitholders can also help mitigate the industry's economic losses by allocating extraction rights to those entities that can use them most profitably. At the same time, trading can lead to a more efficient economy-wide allocation of resources, effectively allowing us to produce more with fewer resources.

Reconfiguring the Public Land Base. The Federal Government owns a substantial share of the Nation's natural resources. It owns about one-third of all the land in the United States, including 29 percent of forestlands and 43 percent of rangeland. State and local governments and American Indian Nations own another 8 percent of U.S. lands. Over 10 percent of the U.S. population receives water from Federal diversion projects.

Sound economic reasons argue for the government keeping such a large share of our natural resources in its possession. Most goods in our economy are private property, traded in markets that appropriately determine prices and quantities. But many natural resources possess characteristics that make them unsuitable for private market control. The most important of these is the fact that many natural resources are public goods.

A public good is anything that can be used or enjoyed by one person without detracting from the use or enjoyment of others, and to which it is difficult to restrict access. For example, suppose that the land comprising Yosemite Valley were subject to being bought and sold in a market. A developer thinking of purchasing the land might consider only how to maximize the individual returns from owning it: he or she might weigh the potential profits earned from preserving the land for tourist use against, say, developing a housing tract or a shopping mall on the site. There is no guarantee that preservation would win out, even if Americans would value that outcome more highly in the aggregate. Even if concerned citizens established a fund to preserve the land, the money collected might well fall short of the actual value the Nation places on preserving this important site. Each potential contributor would have an incentive to wait, hoping that someone else would make the necessary donation to prevent development. In this case the public good character of the natural resource leads to a failure of the market to reflect collective values, and society is better off if the government manages the asset.

This discussion suggests another principle for resource policy reform that should receive serious attention. Federal public lands that private owners could manage efficiently, in a manner that protects the public interest, should be considered for privatization. Conversely, many lands currently in private hands have certain characteristics of public goods, and thus might be more efficiently owned and managed by the Federal Government. Achieving the most efficient mix of public and private lands may require reconfiguring the public land base, adding to it in some places and divesting in others. The Administration is currently working on several exchanges that are consistent with this general principle: for example, the Federal Government is in the process of acquiring the Headwaters forest in Northern California and the New World Mine adjacent to Yellowstone National Park in exchange for surplus properties elsewhere.

Reconfiguring could be accomplished directly through swaps of public for desired private lands, as is most common today, or public lands could be sold and the proceeds put into an account for land purchases elsewhere. Economists have long recognized that the swap option is limited by the "double coincidence of wants" problem. It is often hard to find a swap partner who both owns an asset the government wishes to acquire and places a similar value on an asset the government wishes to sell. For this reason, a land purchase fund that decouples buying and selling land assets is superior to direct swaps.

DISPOSAL OF SURPLUS DEFENSE PROPERTIES

The closing of military bases offers a good illustration of the principle that land no longer needed by the Federal Government can be turned over to local authorities or to the private sector. In four rounds of defense base reductions beginning in 1988, independent base closure commissions performed the difficult task of determining which bases would be closed. Nearly 100 major installations have been selected for closure.

Disposition of these properties has not been easy. A number of objectives have to be taken into account, including local economic redevelopment, savings for the Federal budget, and the needs of the homeless. Recognizing the complexity of this task, the law provides for a 6-year period from the initial closure decision to actual closure, to determine how best to meet these goals.

Until recently, the disposal of surplus military bases—one of the most significant divestitures of Federal real property—reflected the hierarchical approach embodied in the Federal Property Act. Other Federal agencies had first call on the land, followed in order by State and local governments, and finally the private sector. Specific national priorities, such as the provision of shelter for the homeless, enjoyed privileged status.

Recognizing that government downsizing represents both a major economic dislocation and an opportunity to stimulate new economic activity, the Administration has taken several important steps to smooth adjustment and promote economic development in these situations. The President's five-part Program to Revitalize Base Closure Communities, supported in 1993 by new statutory tools, institutionalized economic revitalization as a priority. In 1994 the Administration secured further legislation that gave communities and providers of assistance to the homeless increased flexibility to meet the needs of the homeless either with specific buildings or other surplus government property, or with the proceeds from sale of these assets, applied in ways that make the most sense in the local setting. The base closure and redevelopment process illustrates that increased flexibility in the disposal of surplus Federal land enhances both the speed of disposition and the economic value of reuse.

A remarkable set of alliances has developed to put these sites into productive reuse, to support residual defense activities along with those of other Federal and State agencies, and, most important, local communities and the private sector. Throughout the Nation, economic revitalization from all of these sources is well under way in affected communities. New uses range from airports and manufacturing to college campuses and affordable housing. As a result, numerous new jobs have been created. At the 40 major closed installations, nearly half of the civilian jobs lost have already been replaced, and more are being created every day. Most communities affected by closure expect to regain or exceed previous civilian employment levels.

The steps described here represent vast improvements over the hierarchical manner in which surplus base closures have been handled in the past. Continued flexibility and innovation will be required to achieve the program's objectives.

Even where the Defense Department has retained installations, it is looking for ways to maximize their economic benefit. This can include introducing multiple uses for vast weapons and training ranges, such as mining, recreation, and preservation of wildlife habitat. To minimize the need for Federal land and to spread operating expenses, the Defense Department is actively attracting compatible Federal activities, other State and local government functions, and private business activity. Privatization of some government functions, such as military family housing, is another example of this trend.

As the Federal Government increasingly adopts private sector management methods and privatizes its functions, exclusively Federal use of its real estate is likely to diminish, and the value of that real estate to the local and national economy is likely to increase.

CHANGES IN FARM POLICY

The Federal Agriculture Improvement and Reform (FAIR) Act of 1996 makes important changes to American farm policy. Most significantly, the legislation increases market influence in planting decisions and reduces the distortions in resource use caused by previous commodity programs. Under Title I of the new law, eligible producers of grains, cotton, and rice can enter into 7-year production flexibility contracts, receive a series of predetermined annual payments, and have almost complete flexibility to plant any crop on any land. Contract commodities may be planted on any acreage, and any commodity except fruits and vegetables may be planted on contract acreage. It is unlikely that there will be large changes in land allocation or prices as a result of the act, at least in the short run. Under the 1990 Farm Act, growers were given planting flexibility on up to 25 percent of their base acres but actually used, on average, only about one-fourth of that flexibility to plant alternative crops.

The amounts paid to farmers during the 7 years covered by the 1996 Farm Act are large—almost as large as during the past 7 years under previous law. Furthermore, the new payments are well above the amounts that would have been expected if the previous law had been extended. Under the old law, deficiency payments increased when prices were low relative to the target price set by the law, and decreased or fell to zero as prices rose toward the target price. Under an extension of the previous system to 2002, deficiency payments would have provided little cash support, because prices received by producers in 1995 and 1996 were high relative to the old target prices, and prices are expected to remain high for the next several years. However, once the 7-year payments run out, they are not expected to be renewed. At that time farmers will become subject to market forces.

The act's impact on conservation is also significant. The Conservation Reserve Program (CRP) is reauthorized through 2002, with up to 36.4 million acres enrolled at any time. Under the CRP the government contracts with farmers to convert highly erodible or otherwise environmentally sensitive cropland to approved conservation uses for 10 to 15 years. In exchange, farmers are paid an annual rent and a share of the cost of converting and maintaining the land. The Wetlands Reserve Program (WRP) provides payment and cost sharing to farmers who grant permanent or long-term easements (over 30 years) that restore farmlands to a wetland environment. The landowner is allowed certain economic uses of the restored wetland, which may reduce the cost of the easement. The WRP is reauthorized through 2002 for a maximum of 975,000 acres. Finally, the Environmental Quality Incentives Program (EQIP) combines and replaces several earlier programs. One of its objectives is to encourage farmers and ranchers to adopt practices that reduce environmental and resource problems through targeted 5- to 10-year contracts providing educational, technical, and financial assistance.

More is known about the budgetary and economic costs of these programs than about their benefits. Further, the benefits are multidimensional, as decisions about how to use farmland affect soil loss, water quality, wildlife habitat, and other environmental characteristics. Thus, to maximize overall benefits, the CRP and other programs must be managed to achieve multiple objectives, recognizing the tradeoffs among policy goals.

The conservation programs of the 1996 Farm Act have the potential to enhance social welfare, but they are also expensive. The CRP alone retires up to 10 percent of the Nation's stock of cultivated cropland and raises prices received by farmers overall. Impacts on particular commodities will depend on the extent to which farmers vary cropping patterns in response to price changes. Since there are few restrictions on cropping decisions under the new law, market prices will allocate land left out of the CRP to the highest-valued uses. Legislation and administration have increasingly reflected concern for more careful management of conservation programs. The 1990 act encouraged the Department of Agriculture to improve the cost-effectiveness of the CRP. In response, the department actively targeted subsequent CRP signups to land that would best contribute to conservation reserve goals by using a national ranking of applications based on costs and an environmental benefits index. The 1996 act encouraged targeting of priority areas for the CRP, the WRP, and the EQIP and specifically called for the EQIP to maximize the environmental benefits per dollar expended.

LIMITS ON BRINGING MARKETS INTO THE PUBLIC SECTOR

The success of spectrum auctions and emissions permit trading programs again raises the question of whether we might not leave all government service provision to the market. For example, if airport landing rights can be sold, why not sell the right to operate the air traffic control system as well? Recently proposed legislation would lead to the privatization of the Patent and Trademark Office. And the National Aeronautics and Space Administration recently signed a $7 billion contract with a joint venture between two leading aerospace companies to run the space shuttle program. In principle, more might be done. The Federal Government might contract out or privatize virtually every one of its operations, from law enforcement to Medicare administration, from the Census Bureau to the Army. Where, if at all, should we draw the line?

It is worth noting that the U.S. economy is already in private hands to a greater degree than the economies of most other industrial countries. In many countries, services provided privately in the United States—including telephone service, electric power, broadcasting, health care, and air transportation—are nationalized. In the United States, most goods and services except for the mail, the public schools, local mass transit, intercity passenger rail, and some local utilities, are already provided in the private sector. Moreover, in those sectors where the public sector is the dominant service provider, as well as in the rest of the government, many day-to-day operations such as food service, transportation, and cleaning are supplied by private firms under contract. Indeed, the increasing scope of privatization in the rest of the world is a response to its demonstrated success in the U.S. economy.

But contracting out has important limits in the public sector, just as it does in the private economy. Firms exist because internal production of goods and control of services are often less expensive than going to the market every day to procure employees, equipment, and supplies. Outside procurement, especially under long-term contract, is especially problematic when assets and services are specialized to a particular enterprise, leaving one party or both vulnerable to opportunistic threats to breach the agreement. One way the government can avoid the costs of using the market and its exposure to such opportunism is to undertake specialized, long-term activities in-house rather than to contract out for them. This, too, is consistent with the Administration's policy to imitate effective private sector activities in providing public services. Private firms, after all, organize themselves the way they do in large measure to realize savings from producing goods and services in-house rather than purchasing them from others.

A second reason for limiting the scope of privatization of public services stems from the fact that the justification of many of these services is on other than economic grounds. Privatization works best when the goals of an activity are well defined, performance at meeting those goals can be accurately assessed, and the primary objective is to ensure that they are met at least cost. These conditions are often met, but in many cases it is hard to define goals explicitly or to monitor private providers to ensure that the public's goals are being met. Many times, service providers themselves have to judge how best to meet publicly designated objectives. In those cases it may then be more efficient to keep those service providers within the government. Agencies could then hire personnel who already understand and share their objectives. Where such a professional ethic is important to achieve the public sector's goals, delegation to private, profit-maximizing entities may be an inefficient way to promote the public good.

CONCLUSION

Markets have undeniably significant advantages over the public sector in processing and transmiting enormous quantities of information about the costs and benefits of goods and services. They also allow millions of individuals and businesses to act in such a way that they directly reap the benefits and bear the costs of their actions. When insufficient competition, incomplete markets, imperfect information, or noneconomic goals complicate the picture, however, markets may not lead to efficient or socially desirable outcomes. On the other hand, as both academic research and practical experience point out, the public sector is not always the perfect alternative when markets fail to meet theoretical ideals.

Too much of the debate about the virtues and vices of government involvement in the economy is predicated on an artificial dichotomy between government and markets, usually understating the deficiencies of one and overstating those of the other. With a careful, pragmatic balance of the costs and benefits of public intervention in the economy, however, we have seen that markets and governments need not be regarded as substitutes, but as highly effective complements. The passage and implementation of the Telecommunications Act of 1996, the promotion of electric power competition through the FERC's Orders No. 888 and No. 889, the introduction of emissions trading and spectrum auctions, and the reform of land management policies all exemplify this principle. Public policy can help markets perform better, and market mechanisms can help the government better serve the public while reducing burdens on taxpayers and the economy as a whole.

CHAPTER 7

American Leadership in the Emerging Global Economy

SEVENTY-EIGHT YEARS AGO, after the end of World War I, an isolationist America made a tragic mistake by retreating from international engagement. The punitive economic conditions imposed on Germany in the 1919 Treaty of Versailles, along with protectionist pressures culminating in the Trade Act of 1930 in the United States (the origin of the infamous Smoot-Hawley tariff) and other measures elsewhere, destabilized the international economy and deepened the Great Depression. These events in turn are widely believed to have contributed to political instability in Europe, thus helping bring on World War II.

After that war the United States, determined to get it right this time, did pursue a policy of international engagement. American leadership fostered the creation of a stable and predictable international economic environment and of international institutions, such as the International Monetary Fund (IMF), to promote cooperation on economic matters. The United States also played a key role in designing the postwar multilateral trading system. Mutually agreed rules, formulated under the General Agreement on Tariffs and Trade (GATT), underpinned the development of a trading regime in which countries could prosper. All these efforts greatly enhanced America's well-being, economically as well as politically. In the Cold War years, the United States led an economic partnership with other industrial democracies in Europe, North America, and the Pacific Rim. These countries flourished as economic cooperation took root.

The Cold War era also saw the decolonization of much of Africa, Asia, the Middle East, the Pacific, and the Caribbean. The new countries that emerged, together with the already independent lower and middle-income countries of Latin America, became known collectively as the developing world. Through its own direct assistance and through institutions such as the World Bank, the United States led the international coordination of aid and lending to these countries and, more recently, to the countries in transition from central planning.

Now a new era is beginning. Fundamental changes have reshaped the world economy. One of the previous central motivations for U.S. leadership, that of superpower competition with the Soviet Union, is gone. Yet the United States and other countries continue to benefit from U.S. leadership in international economic policy. U.S. economic leadership must move forward with a renewed vision, adapted to these changed political and economic realities.

This chapter examines how the world economy has changed, and how U.S. leadership remains necessary in international economic relationships. A policy of economic openness and engagement, supporting the kind of international economic system the United States has worked hard to establish over the past half century, will continue to yield great benefits to the Nation, through access to new markets and through enhanced international stability and cooperation. In this area some of the current policies on which the Administration places priority are:

- facilitating economic reform in the transition economies and their integration into world markets, including their accession to the World Trade Organization (WTO)
- providing adequate resources for multilateral development efforts, including full funding of U.S. commitments to the World Bank's International Development Association (IDA)
- supporting the rules-based international trading system centered on the WTO
- continuing a wide variety of efforts to open foreign markets to U.S. exports, encouraging U.S. companies to take advantage of these opportunities, and working with the Congress to negotiate further international market opening
- furthering U.S. efforts toward greater economic linkages within the Asia-Pacific Economic Cooperation (APEC) forum and the proposed Free Trade Area of the Americas (FTAA) agreement
- strengthening the international financial system and increasing the capacity of international financial institutions to respond to crises.
- fostering cooperation on common challenges in the Group of Seven at the summit of heads of state that the President will host in Denver in June 1997.

THREE SWEEPING CHANGES

At the core of the international economic system that emerged after World War II was what came to be called the liberal international trading system. It was liberal in the sense that it worked to free the flow of goods and capital from the restrictions that had often characterized the interwar regime. A few widely shared, basic premises underlay this system.

Just as competitive markets *within* economies had helped deliver remarkable increases in standards of living in the industrial world, so competition *between* economies could help sustain and enhance these increases. The economic principles underlying this belief were long established. One was that international trade allows countries to find their comparative advantage, concentrating their production on those goods in which they have the largest cost advantage over others. Another was that bigger markets spell greater scope for the gains that come from specialization.

The trading system had other, noneconomic purposes as well. The Western democracies believed that prosperity was the best insurance against the spread of Communism. Indeed, trade liberalization is a natural corollary of the paradigm of democratic market capitalism, which won an important intellectual and strategic victory in the Cold War.

Three recent changes have had a profound effect on the international economic environment: the end of the Cold War, the emergence of growing markets among the developing countries of East Asia and Latin America, and the increasing globalization of the international economy. These changes have also created important opportunities for the United States. Understanding these changes helps us see where the international economy is headed in the future, so that we can more effectively respond to these challenges, fulfill our responsibilities, and take advantage of these opportunities.

THE END OF THE COLD WAR

In 1989 the Soviet Union relaxed its control over the Eastern European countries that had suffered its domination for over 40 years. These countries immediately seized the opportunity to throw off authoritarian Communist rule. Two years later the Soviet Union itself underwent a political and ideological upheaval, which quickly led to its breakup into 15 independent states. Most of these and the other formerly centrally planned economies are now, to varying degrees, engaged in a process of transition from central planning and state ownership to market forces and private ownership.

An essential part of the West's victory in the Cold War was that it decided once and for all the contest between two radically different approaches to organizing political and economic life. The industrial democracies had allowed markets to guide most economic decisions. The Communist countries had relied on central planning, in which state-owned producers acted on instructions handed down from government ministries. By the 1980s the success of the market democracies stood in sharp contrast with the evident stagnation of the Communist economies that had stuck by central planning.

This triumph of democracy and markets was as much an intellectual victory as a political and economic one. The idea that state planners could effectively guide every aspect of production in an entire economy was thoroughly discredited. The amount of information required for planning to work far exceeded the planners' ability to gather and process it. In any case, without private property, hard budget constraints, and competition both from other domestic firms and from abroad, the managers of socialist enterprises lacked incentives to streamline production or to innovate. Consumers in these countries had to make do with increasingly shoddy products. Industrial productivity fell far short of that in the industrial democracies. Lacking a system of flexible, market-determined prices to convey information about relative scarcities, and lacking decentralized decisionmakers with the freedom and incentives to act on that information and allocate resources accordingly, the centrally planned economies fell far behind the West.

The Communist countries made another major blunder: as a matter of policy, they insulated themselves from the world economy and ignored the opportunities that international trade offers to raise living standards. This is not to say that the Communist countries did not trade. They did, but mostly with each other. In 1989, for example, Czechoslovakia, despite its location adjacent to affluent Western Europe, conducted 54 percent of its trade with its fellow Communist countries, and almost 60 percent of that trade was with the Soviet Union. Given these countries' other economic handicaps, such limited trade failed to reap many of the potential gains of comparative advantage or of expanded competition. Trade became just another misguided planning decision, and was often undertaken merely for political reasons as well.

INDUSTRIALIZATION AND GROWTH COME TO THE DEVELOPING WORLD

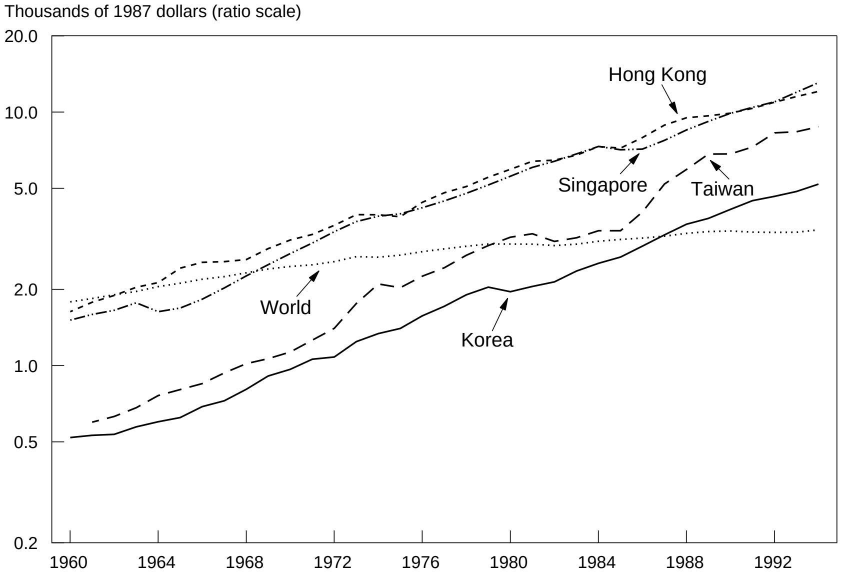
The second great change of recent years has been the rapid industrialization and economic growth of a number of developing countries in several parts of the world. The first of these emerging markets were the four Asian "tigers": Hong Kong, Singapore, South Korea, and Taiwan. Now Malaysia, Thailand, and some other Asian countries are following in their footsteps, and some of the Latin American countries, having overcome the debt crisis of the 1980s and undertaken economic and political reforms, have also begun to see faster, more sustained growth.

The success of these countries offers valuable insights into the necessary ingredients for successful development. It has implications for U.S. international economic policy as well. Again, because trade, and economic relations more generally, are a positive-sum enterprise, the rise of these countries also brings opportunities for the United States and the other established economies. As a major exporter of capital goods—the tools of development—and of agricultural products, consumer goods, and commercial services, the United States is especially well poised to benefit from these economies' growing demand.

The Success of East and Southeast Asia

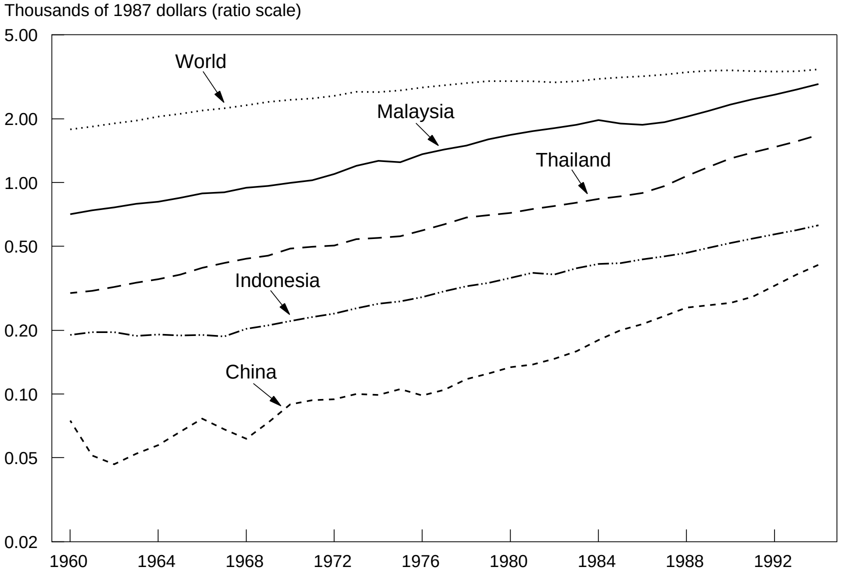
From 1960 to 1993, 8 of the world's 10 fastest-growing economies were all in the same region: East and Southeast Asia. Japan's gross domestic product (GDP) per capita, adjusted for differences in relative prices, grew from 30 percent of that of the United States in 1960 to 82 percent in 1994, and South Korea's from 9 percent to 40 percent. The four "tigers" experienced growth in GDP per capita averaging over 6 percent per year, during a period in which U.S. income per capita grew less than 2 percent per year (Chart 7–1). Malaysia's growth has averaged over 4 percent a year, and Indonesia's only slightly less (Chart 7–2). China, the world's most populous country with more than a billion inhabitants, has seen phenomenal growth in GDP per capita, averaging 8.1 percent per year since 1978. Although still under Communist rule, China has begun to recognize the tenets of market economics, including the importance of incentives and entrepreneurship, which have awakened the country's vast potential.

Chart 7-1 **GDP Per Capita in the "Four Tigers"**
Since 1960, real GDP in each of the four East Asian "tigers" has grown by more than 6 percent per year.



Source: World Bank.

Chart 7-2 **GDP Per Capita in Four Other Asian Economies**
Although still below that of the "tigers," real GDP in several other East and Southeast Asian economies has also grown quickly.



Source: World Bank.

Although their approaches to development have differed in various ways, the success of these economies teaches important lessons on the elements of a sound development strategy. These include attention to human and physical capital, a limited role for government, and export-oriented policies. Another lesson is that rapid development need not be accompanied by large income disparities.

The development of human capital has made a critical contribution to Asia's success. The region's successful economies have invested in nearly universal primary and secondary education, while at the same time developing their scientific and engineering capabilities. This has given them a labor force equipped to work with increasingly complex production processes, and has permitted them to move to increasingly sophisticated technologies over time. A particularly noteworthy aspect of their educational strategy has been its emphasis on female as well as male education.

Investment in physical capital has also contributed greatly. In the successful economies, most of this investment has been financed domestically, thanks to relatively high domestic saving rates. Some East Asian economies have achieved gross saving rates of more than 30 percent of GDP.

The role of government in many successful East Asian economies has generally been to complement markets and make them work better, rather than to replace them. Governments made it their first responsibility to keep their fiscal affairs in order. Deficits were small, and some governments actually ran surpluses. Government expenditure focused on investment, both in people and in infrastructure. Governments also took charge of maintaining macroeconomic stability, avoiding extremes of high inflation and high unemployment.

The successful East Asian economies also adopted policies of outward orientation. Firms were expected to compete in export markets, where they would have to adopt international standards and best practices. Engagement in the international economy also facilitated the increase of technological capacity. Empirical evidence indicates that economies in East Asia and elsewhere that adopted such outward-oriented strategies enjoyed superior performance in terms of exports, overall growth, and employment. One study found that, during the 1970s and 1980s, the more open economies in a large sample of developing countries grew on average by 4.5 percent per year, compared with only 0.7 percent for more closed economies. Not a single open developing economy in the survey grew at less than 2 percent per year during this period. Of course, some of the observed correlation between openness and growth may be due to reverse causality: countries tend to liberalize trade as they develop. But even when one isolates exogenous differences in trade levels across countries (e.g., due to geography), it appears that trade leads to faster growth.

The East and Southeast Asian economies recognized the importance of exports to their economic growth, but they were not always as receptive to imports. Although they avoided the extremes of protracted import substitution policies (discussed below), which insulated the industries of many other countries behind walls of protection, they did erect a variety of barriers to trade, which were distortionary and may have impeded growth at home and abroad.

The East Asian experience upset the conventional wisdom on the relationship between growth and income equality. The established theories held that inequality was necessary to promote economic growth, because growth requires saving, and the wealthy tend to save more than the nonwealthy. Theory also held that inequality increased in the early stages of growth, as an income gap emerged between workers in the new industrial sector and those left behind in the traditional agrarian sector. The poor would *eventually* benefit from the growth in national prosperity, in this view.

Confounding these theories, several East Asian economies succeeded in growing rapidly while not only maintaining a more even income distribution than many other countries but actually reducing inequality. More-equal distribution of income contributed to rapid growth through several channels. For instance, it facilitated the accumulation of human capital, as more households could afford to pay for their children's education. Land reform in Taiwan and some other economies after World War II both improved equality and enhanced peasants' incentives, stimulating growth.

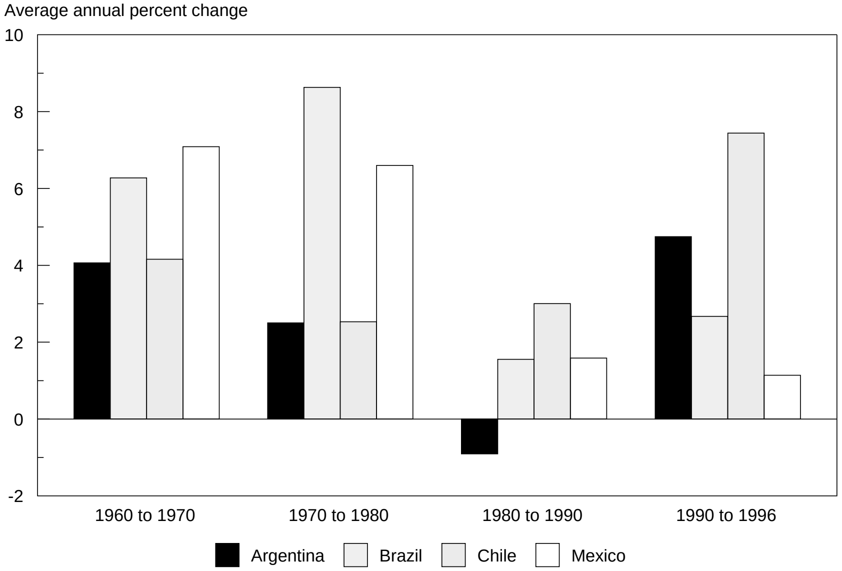
The Revival of Growth in Latin America

For many economies in Latin America the 1980s were a "lost decade." After growing robustly in the 1960s and 1970s (Chart 7–3), these countries took on large foreign debts in the late 1970s and early 1980s. They pursued inward-oriented economic policies, developing their industries to supply domestic demand behind high trade barriers that reduced competition and distorted prices. These policies left them ill equipped to service this mounting debt, much of which financed consumption rather than productive investment. In 1981–82, high dollar interest rates pushed these countries' debt-service requirements upward, a deep recession in the United States lowered demand for their exports, and prices for their export commodities declined. Debt-service payments thus rose sharply in relation to export earnings. When these problems erupted into a crisis in Mexico in August 1982, a number of countries were forced to suspend these payments. Many were compelled to make painful adjustments to continue debt payments, while investors remained reluctant to extend new financing. Through cooperative efforts led by the United States with other industrialized creditor countries and the IMF and the World Bank, many Latin American countries reformed their economies and restructured their debts, and by the early 1990s the crisis had unwound.

Most of these countries have resumed growth in the 1990s. Their governments now intervene less in their economies, and they have adopted more outward-oriented policies. The star performer has been Chile, whose relatively open, liberal economy has seen growth averaging more than 6 percent per year since 1983 while moving more than a third of the country's poor above the poverty line. Other economies have also expanded. Since 1993, real growth in Brazil, Latin America's largest economy, has averaged over 4 percent per year. Brazil has also quashed inflation after more than a decade of extreme price instability. Argentina's economy, which contracted by 1 percent per year during the 1980s, has seen an even more striking recovery.

The reentry of a dynamic Latin America into the international economy offers especially great opportunities for the United States. Our historical ties with that region as well as our geographical proximity make it likely that the United States will benefit greatly from Latin America's resurgence.

Chart 7-3 **Real GDP Growth in Latin America**
Growth has revived for some Latin American countries in the 1990s.



Note: 1995-96 data projected by the International Monetary Fund.
Sources: International Monetary Fund and World Bank.

INCREASED GLOBALIZATION

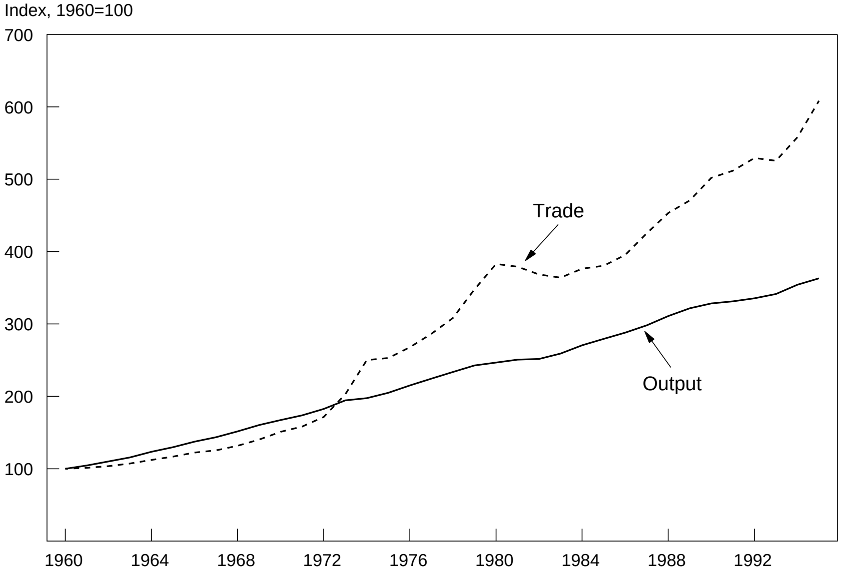
The third major change in the international economic environment is even more sweeping than the first two. National economies are becoming steadily more integrated. Technological barriers have fallen as transportation and communication costs have plummeted. Man-made barriers have also fallen, as tariffs have been drastically reduced in a series of multilateral trade negotiations since World War II, and as efforts to reduce nontariff barriers have gathered speed.

Some numbers help illustrate the shrinking economic distance between countries. Advances in shipping technology have reduced average ocean freight charges per short ton from $95 in 1920 to $29 in 1990 (these figures are for U.S. trade only and are in 1990 dollars). Between 1930 and 1990, average air transport revenue per passenger-mile fell from 68 cents to 11 cents, and the cost of a 3-minute phone call from New York to London dropped from $244.65 to $3.32 (again in 1990 dollars).

Trade has increased faster than output in the postwar era. In 1960, total world exports amounted to $629 billion (in 1995 dollars). By 1995 they had risen to over $5 trillion. In real terms, world exports have grown at an annual rate of 6.1 percent per year since 1960, while world output grew at 3.8 percent (Chart 7–4).

This growth of trade has led to wider competition, allowing countries to benefit from their comparative advantage and raising living standards everywhere.

Chart 7-4 **Growth in World Output and Trade**
Trade has expanded much faster than output, especially since the early 1970s.



Sources: International Monetary Fund and World Bank.

Globalization has made great strides but still has a long way to go. The physical and information costs of international trade are still substantial, although current trends and the history of economic and technological advancement suggest that these costs will continue to shrink. As they do, however, other barriers to trade will take on greater importance.

The Evolution of International Institutions

A number of international institutions have evolved under strong U.S. encouragement to handle the challenges posed by increased global integration. Two that are central are the International Monetary Fund and the World Bank, both created at the Bretton Woods conference at the end of World War II. The World Bank's first task was to finance Western Europe's postwar reconstruction. It has since become a major financier of infrastructure and other projects and programs in developing countries—and now transition economies as well—around the world. On its successful model, regional multilateral development banks have also been set up for Africa, Asia, Latin America and the Caribbean, and most recently for Eastern Europe and the former Soviet Union.

The IMF was designed to provide temporary financing to countries with balance of payments shortfalls, as a means of supporting the international system of fixed exchange rates that the Bretton Woods conference also established. That system pegged members' currencies to the dollar, which in turn was made convertible into gold for foreign governments. Since the fixed exchange rate system collapsed in the early 1970s, the IMF has taken on several other important roles, including financing structural adjustment programs in developing and transition economies. These programs, in conjunction with funding for structural adjustment reforms by the World Bank and other multilateral development banks, involve a negotiated set of economic reforms designed to stabilize the domestic economy and facilitate the development of institutions and markets that will maximize future growth.

The architects of the Bretton Woods system also sought to create a new order in international trade, to reduce friction between trading partners and prevent a return to the beggar-thy-neighbor policies of the 1930s, in which countries imposed tariffs and devalued their currencies in an ultimately futile effort to increase domestic employment at foreigners' expense. The Bretton Woods proposal for an International Trade Organization was never ratified, but the General Agreement on Tariffs and Trade, an accord originally intended as a precursor to the ITO, was concluded in 1947. Subsequent negotiations under the GATT's auspices have done much to liberalize trade. The code of conduct that it embodies introduced two important principles to trade relations: first, that countries should eventually renounce import quotas and similar quantitative restrictions on trade, and second, that they should adopt a policy of nondiscrimination, opening their markets to all participating countries equally.

The GATT has provided a framework for countries to negotiate large reductions in tariffs and, more recently, in nontariff barriers. Successive GATT negotiating rounds have achieved reductions of over 90 percent in tariffs on industrial products traded between the major industrial countries. The GATT's Uruguay Round, completed in 1993, made landmark reductions in nontariff barriers in textiles and apparel, product standards, and intellectual property, among other areas. It also extended GATT principles both to agriculture, where certain nontariff barriers were converted to tariffs, later to be progressively reduced, and to services.

A key outcome of the 1993 Uruguay Round agreement was to set up an international trade body along the lines envisioned at Bretton Woods nearly 50 years earlier. The establishment of this body, the World Trade Organization, recognizes the need for a forum for discussion, negotiation, and liberalization. The WTO also encompasses a system for the impartial and expeditious adjudication of trade disputes, to help ensure that countries operate fairly in international trade. The WTO's dispute settlement system applies in integrated fashion to the whole range of Uruguay Round agreements.

The WTO system respects national sovereignty. Each country retains ultimate authority for making and implementing national policy. But decades of GATT negotiations have resulted in a set of internationally accepted rules of the game. A country that is found to be engaging in an unfair trade practice has a choice: it can either desist from that practice or face appropriate retaliation from the injured country. Within the WTO, judgments are reached in a quasi-judicial framework on the consistency of countries' trade practices with WTO obligations. Section 301 of U.S. trade law has in fact always required the United States to use GATT (and now WTO) dispute settlement mechanisms where available. A problem under the former GATT system was that many restrictions and distortions of international trade did not violate any specific GATT obligation, and thus were not subject to treatment under GATT dispute settlement mechanisms. Given the success of the Uruguay Round and the resulting broader scope of the WTO, this problem has been significantly lessened, though not eliminated, for the United States and other countries. Section 301 also provides a mechanism for addressing unfair trade practices not covered by the WTO.

The WTO benefits its members individually by establishing clearer multilateral trading rules and a more effective means of enforcement. Its presence makes the international trading system more predictable, thereby facilitating trade and the advantages that derive from it.

Under U.S. leadership, the industrial countries have also created procedures to coordinate their bilateral assistance to developing countries. The primary mechanism for this coordination is the Development Assistance Committee (DAC), run under the auspices of the Organization for Economic Cooperation and Development (OECD), whose members include most of the world's richest and a growing number of upper-middle-income countries.

The major industrial countries have developed some other, less formal mechanisms to manage economic issues. The annual summit meetings of the Group of Seven major industrial economies (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) offer an opportunity for heads of government and their senior ministers to deal with issues of mutual importance, such as appropriate macroeconomic policies. The United States will host this year's meeting in Denver in June. Group of

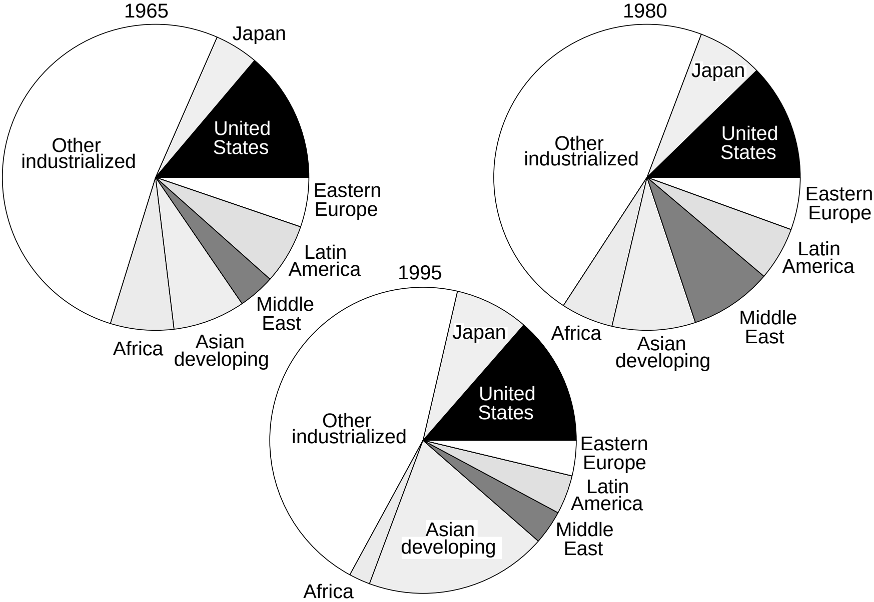
Seven finance ministers and central bank governors also meet several times a year to address these issues.

The Increasing Openness of Developing Economies

Aided by policies that have opened developing-country markets, globalization has increased the involvement of developing countries in world trade and investment flows. The share of the developing countries and today's transition economies in world trade has increased dramatically over the last 30 years. These economies accounted for 27 percent of total world exports in 1965; by 1995 their share of a many-times-larger world export market had grown to 33 percent (Chart 7–5). Within this growing share, that of the Asian developing economies more than doubled, from 8 percent to 19 percent of total world trade; meanwhile the shares of the African and Latin American countries fell considerably.

Chart 7-5 **Shares of World Trade**

The share of Asian developing countries in international trade has risen greatly since 1980, increasing the overall importance of developing countries in world trade.



Note: Eastern Europe includes the (former) Soviet Union.
Source: International Monetary Fund.

The developing world's strategy toward trade and development has undergone a remarkable change. In the 1950s and 1960s many developing countries adopted policies of import-substitution industrialization: countries would build their economies by making for themselves the manufactured goods that they were used to importing. Infant-industry protection was a corollary to this argument, combining protection of new domestic industries from foreign competitors with state support. The import substitution approach seldom succeeded, however, in encouraging the development of internationally competitive manufactures. Once granted protection, firms tended to settle comfortably into home-grown monopolies rather than strive to duplicate world standards of technology and productivity.

In the 1980s, engulfed by the debt crisis, many of these countries responded at first by further raising trade barriers. But as the crisis deepened, they were forced to change direction. Dismantling of trade barriers was one of the cornerstones of the structural adjustment policies many countries adopted as part of their debt-restructuring packages. Trade liberalization not only helped establish powerful, direct linkages between their domestic economies and the world system, but also compelled action on other promised reforms under the pressures of international competition. Meanwhile governments scaled back the scope of their activities, privatizing state enterprises they had set up in steel, chemicals, and other heavy industries.

ACHIEVEMENTS AND OPPORTUNITIES

A cornerstone of this Administration's economic policies has been to position the United States to benefit from the global changes described above. The United States has worked hard, through the negotiation of bilateral, regional, and multilateral agreements, to open foreign markets to American products. The past 4 years have seen perhaps the most rapid progress ever in this area, including the completion of the North American Free Trade Agreement (NAFTA), the conclusion of the Uruguay Round of the GATT, and over 200 trade agreements in all (see *Economic Report of the President 1995* and *1996* for details of some of these agreements). The Nation has reaped huge benefits from these policies and has experienced strong export growth, leading to strong job and income growth as well. One of the many economic successes of the last 4 years has been a surge in exports, which have grown by 42 percent—over $185 billion. By one reckoning, exports account for almost a third of the Nation's strong overall growth. Exports are critical to creating high-wage, high-tech jobs, because they allow the United States to expand production in those high-productivity sectors in which we have comparative advantage. Since 1992, the number of high-wage, export-related jobs in the U.S. economy has increased by 1.5 million. These jobs pay more—13 to 16 percent more on average—than the average job.

Implemented in 1994, NAFTA joins the U.S. and Canadian economies in a free-trade area with that of Mexico. In the first 3 years since NAFTA went into effect, trade between the United

States and its NAFTA partners, which are our largest and third-largest trading partners, has grown by about 33 percent. NAFTA's value was proved during Mexico's 1995 financial crisis. Despite the extreme adjustments and the sharp economic contraction that the crisis forced upon Mexico, the agreement ensured that Mexico would keep its markets open to U.S. products. The result was in sharp contrast to the restrictive policies that followed Mexico's 1982 financial crisis. In 1996 U.S. exports to Mexico rose to record highs. This forestalling of any potential reversion to insular and protectionist policies also benefited Mexico.

The United States is actively pursuing further market opening in the Western Hemisphere, building on NAFTA through ongoing talks toward a Free Trade Area of the Americas. Under the proposed FTAA, 34 Western Hemisphere countries will be linked in a free-trade area by 2005. Trade with countries in this hemisphere (including Canada and Mexico) accounted for over $170 billion in U.S. exports—well over a third of the total—in the first three quarters of 1996. A useful first step toward this goal would be completion of a free-trade agreement with Chile.

The United States is also benefiting from market opening and expanded trade with the other Pacific Rim countries. Progress within the Asia-Pacific Economic Cooperation forum has been rapid. At the 1996 leaders' summit at Subic Bay in the Philippines, the 18 APEC members—which include both industrial and developing economies and account for over half of world income—committed themselves to take the initial steps toward free and open trade and investment and a free-trade area by 2020. In addition, the Information Technology Agreement (ITA), a U.S. initiative that would liberalize trade in semiconductors, computer and telecommunications equipment, and software exports, was broadly embraced by the APEC nations at the December summit.

With strong support within APEC, completion of the ITA was a centerpiece of U.S. efforts at the WTO's first ministerial meeting, held in Singapore a few weeks later. There 28 countries endorsed the agreement, including almost all the industrial countries, several developing economies in East and Southeast Asia, and Turkey. The agreement would cover products accounting for some $500 billion in annual world trade and over $90 billion in annual U.S. exports.

One of this Administration's first initiatives was the establishment of the Trade Promotion Coordinating Committee (TPCC), which coordinates government policies affecting U.S. exports across agencies. In September 1993 the TPCC unveiled the National Export Strategy, which laid out 65 concrete recommendations for leveraging export promotion resources and removing government-imposed obstacles to exporting. The Administration quickly implemented the strategy, which includes opening export assistance centers around the country, providing "one-stop shopping" for new exporters, leveling the playing field for U.S. companies by countering the advocacy efforts of foreign governments, and eliminating unnecessary export controls and licenses. The National Export Strategy also includes specific initiatives for each of the "big emerging markets".

As early initiatives are successfully implemented, the National Export Strategy continues to evolve through the identification of new areas and the development of initiatives by the TPCC. For example, the TPCC concluded that the use of illegitimate practices such as bribery was far more widespread than previously known. The TPCC was able to identify $11 billion in contracts lost to U.S. exporters over a 2-year period because of bribery by foreign firms. Last year's report on the National Export Strategy contained a blueprint for government-wide action to combat bribery. And this year the TPCC is developing a strategy against the use of product standards as barriers to U.S. exports.

At the same time, the United States has continued to take steps to ensure that globalization lifts living standards in all countries, through a serious commitment to promoting labor standards throughout the world. In its efforts within international organizations, the Administration has sought to establish a framework for multilateral discussion on how best to promote core labor standards: freedom of association, the right to organize and bargain collectively, nondiscrimination in the workplace, prohibition of forced labor, and elimination of exploitative child labor.

EXPLAINING THE BENEFITS OF INTEGRATION

Virtually all economists agree that international trade and economic integration raise the living standards of U.S. residents overall, while also increasing economic well-being in other countries. The benefits of international trade have become increasingly apparent as it has fueled growth over recent years. When unemployment is significant, as it was in 1993, an expansion of exports raises demand for U.S. goods and services and therefore increases employment. Even as the economy approaches full employment, the benefits of trade continue to manifest themselves in the form of higher incomes, and continue to influence the pattern of job creation and change.

The effects of trade opening are similar to a major technological innovation: both may require economic restructuring. It is also widely acknowledged that some companies and workers may be hurt by the opening of markets as they adjust to increased foreign competition. The U.S. Government undertakes various measures to assist workers and companies injured by trade (Box 7–1). Moreover the core of this Administration's education policies is to ensure that all Americans have the tools they need to compete and succeed in the international economy.

Box 7–1.—Trade Adjustment Measures

Government programs such as the transitional adjustment assistance (TAA) help workers adversely affected by trade retrain and take advantage of the economic opportunities trade offers. The NAFTA-TAA program provides a short-term safety net in the form of an adjustment allowance for workers who suffer from a shift of production to or increased imports from Mexico or Canada (whether or not related to NAFTA); it also provides employment services and training to help them acquire the skills they need to enter new jobs. In fiscal year 1995, over 2,000 workers entered training under this program, and almost 1,400 began receiving adjustment allowances. Also important to adjustment is the phasing in of trade liberalization over time. Changing the rules gradually gives import-competing industries time to adjust to new competition. However, such delays must not become a device to postpone agreed liberalizations indefinitely.

Are trade deficits a source of concern? As last year's *Economic Report of the President* emphasized, trade deficits and surpluses are primarily determined by macroeconomic factors, in particular the balance between domestic saving and investment. Trade barriers have little lasting influence on the Nation's overall trade balance, although they may have marked effects on bilateral deficits, and they do affect the extent to which countries can reap the benefits of trade. It is even an oversimplification to think that deficits are necessarily bad, and surpluses necessarily good. A current account deficit merely means that a country is, on balance, borrowing from the rest of the world; a surplus means it is a net lender to the world. Whether such borrowing or lending is proper depends, as it would for any individual or company, on what the borrowing is used for or why the country is lending.

The United States has run trade and current account deficits every year since 1982. In the 1980s these deficits were a red flag that the United States was failing to save enough. The budget deficits run up during those years generated vast government dissaving: the economy was living beyond its means. In the last 4 years, however, this Administration has successfully worked with the Congress to reduce the government budget deficit and increase national saving. Nonetheless, trade deficits have persisted, although they are much smaller in proportion to GDP than in the peak years of the 1980s. But in contrast to the surge in the trade deficit in the 1980s, this most recent increase appears to be financing a surge in U.S. investment, particularly in business equipment. The implication is that the improving economy will continue to grow and will generate the resources necessary to repay our net borrowing from the rest of the world. (The national saving rate is still low, however. The most effective way to raise it is to continue efforts to reduce the budget deficit.)

Investment, like trade, yields benefits to both sides of the transaction. Capital goes to those who are best able to make productive use of it, and the suppliers of that capital receive a higher return, for a given level of risk, than they could get elsewhere. These mutual benefits may be particularly pronounced in the case of foreign direct investment (FDI). FDI occurs when a foreign investor either sets up an enterprise in another country or obtains a large enough share in an existing enterprise to give the investor effective influence over its management. FDI benefits the country receiving it in many ways: besides the funds themselves, direct investors bring managerial, technical, and marketing know-how, which often spills over to other parts of the economy.

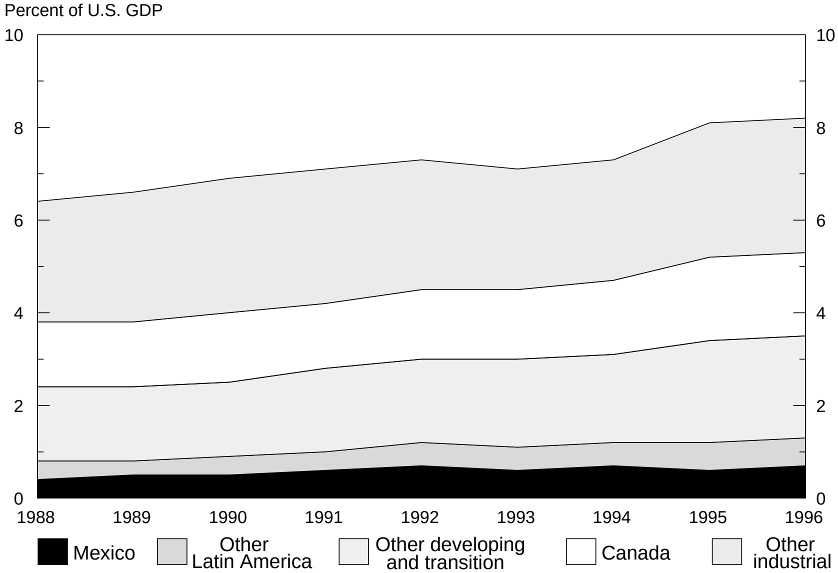
FDI by American companies can open the way for U.S. exports, both as inputs to foreign production and as consumer goods to supply foreign demand. It also offers U.S. companies a toehold in foreign markets from which they can further expand sales. In many cases, investment in distribution and other essential services increases a supplier's ability to export into a market. Trade between firms and their foreign affiliates (intrafirm trade) can be an efficient means of international trade, particularly when problems of imperfect information exist. Over a third of U.S. exports and two-fifths of U.S. imports are estimated to be intrafirm. Worldwide, about a third of trade is intrafirm trade.

In short, whatever the short-run effects on the economy and the trade deficit, over longer periods increased globalization increases incomes both in the United States and abroad. Globalization produces greater gains from trade, through specialization according to comparative advantage and through realization of scale economies in production. And by allowing capital to flow across borders, it lowers the cost of financing investment in the recipient country, and increases the return to saving and allows for portfolio diversification in the country providing the funds.

U.S. POLICY ON TRADE WITH DEVELOPING COUNTRIES

Much of our strong recent export growth is due to demand from developing countries. During the 1990s U.S. exports to other industrial countries have grown at a satisfying rate of 5 percent per year in real terms—but U.S. exports to developing countries have grown at almost twice that rate (Chart 7–6). U.S. exports to Latin America have been particularly strong, rising from 0.9 percent of U.S. GDP in 1990 to 1.4 percent in the first three quarters of 1996. Exports to other developing and transition economies rose from 1.6 percent to 2.2 percent of GDP.

Chart 7-6 **U.S. Exports of Goods by Destination**
U.S. exports to developing countries have grown faster than exports to markets in industrialized countries.



Note: Data for 1996 are estimated using 12 months of data ending in November.
Source: Department of Commerce.

The United States is committed to encouraging the involvement and integration of developing countries in the global trading system. To this end, a number of policies have been put in place that not only benefit U.S. consumers, but also provide special encouragement for developing countries to expand and diversify their exports. By encouraging openness and economic growth, our policies also promote democracy and stability.

One of the main U.S. programs for promoting trade with developing countries is the Generalized System of Preferences (GSP). Under the GSP, instituted in 1976, roughly 4,600 products from 148 beneficiary countries and territories are eligible for duty-free entry into the United States. In 1995 the United States imported $18.3 billion in duty-free goods under the program, accounting for 16 percent of total U.S. imports from GSP beneficiaries. Over two-thirds of all GSP imports in that year originated in six countries:

Brazil, India, Indonesia, Malaysia, the Philippines, and Thailand. As countries develop they are graduated from the program, to allow lower income countries to take better advantage of available preferences. (Malaysia, for example, graduated January 1, 1997.) The President intends to seek a renewal of the GSP arrangement beyond its presently scheduled expiration in May 1997.

Implemented in 1984, the Caribbean Basin Economic Recovery Act provides preferential access to the U.S. market for 24 Caribbean countries and territories. In 1991 the United States implemented a similar program under the Andean Trade Preferences Act for four South American countries. This program is a centerpiece of U.S. efforts to encourage these countries to reduce their production and exports of cocaine. These two programs help support growth and development in some of the hemisphere's less developed nations, which in turn have become better customers for U.S. products.

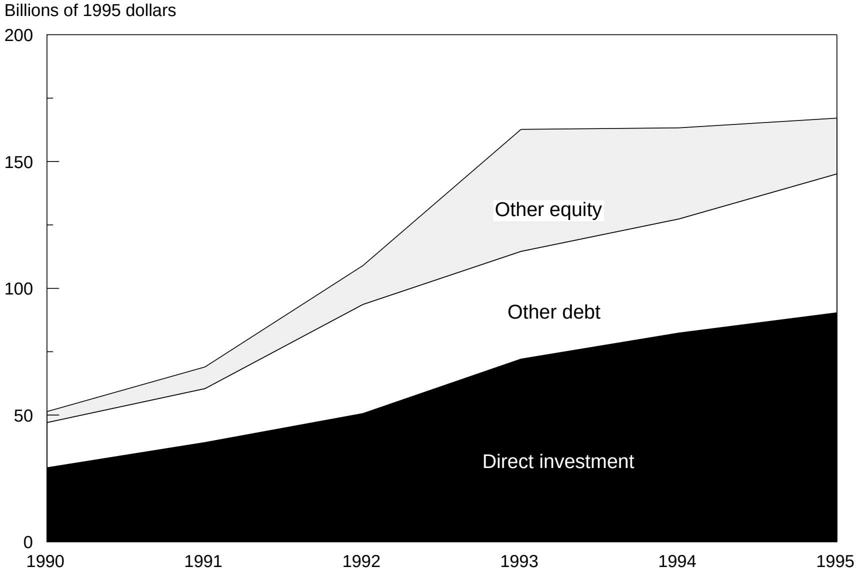
PATTERNS OF FOREIGN INVESTMENT IN DEVELOPING AND TRANSITION ECONOMIES

Developing countries tend to be importers of capital: their investment needs are massive and the potential returns large. But in the 1980s, as already noted, the debt crisis reduced and in some cases reversed the net flow of capital into these countries. At the same time, relatively large public sector deficits in the high-income countries absorbed private saving, increasing competition for international investment funds.

During the 1990s, private investment in developing countries has undergone a marked revival. Those that have restored economic and political stability have been rewarded with greatly increased access to international capital. The significant and continuing restructuring of developing countries' external public debt has greatly aided their mobilization of external private capital, by lowering the risk perceived by investors. Long-term net private capital flows to developing countries have nearly quadrupled in the 1990s, reaching $167 billion in 1995 (Chart 7–7). Most of this growth occurred in East Asia and the Pacific, where net resource flows rose from $35 billion in 1991 to over $100 billion in 1995. Flows to Eastern Europe rose sharply, too, from $6 billion in 1992 to $24 billion in 1995.

International private capital flows take three forms: FDI, portfolio investment in securities, and bank lending. FDI in developing countries has grown without interruption over the last decade. Cumulative FDI flows during the 1990–95 period totaled $345 billion. Developing countries' share of global FDI has risen rapidly, from 12 percent in 1990 to 38 percent in 1995. But the bulk of FDI into developing countries has gone to a small number of countries. In

Chart 7-7 **Net Capital Flows to Developing Countries**
Led by large increases in foreign direct investment and portfolio equity investment, investment in emerging markets has boomed in the 1990s.



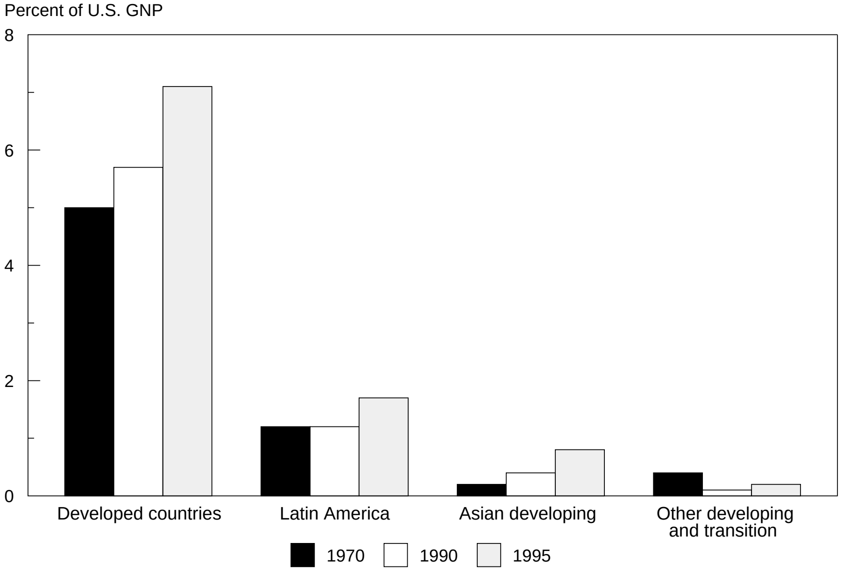
Note: Series adjusted by CPI-U.
Source: World Bank.

1994, Indonesia, Malaysia, and Mexico accounted for almost 60 percent of total FDI flows into developing countries (excluding the transition economies). East Asia has done relatively well this decade in attracting FDI, while the share of FDI going to Latin America has declined.

Only 6 years ago, less than one-quarter of the stock of U.S. outward FDI was in the world's poorer countries, a smaller share than in 1970 (Chart 7–8). Since 1990, however, in keeping with the general trend of global capital flows discussed above, U.S. investment in emerging markets has boomed. The stock of U.S. investment in these economies increased to 27 percent of all U.S. external investment. While total U.S. investment abroad rose 65 percent between 1990 and 1995, investment in developing countries nearly doubled.

The surge in FDI in the 1990s may have resulted in part from the improvements in the economic structure of developing countries already mentioned. Economic stabilization and reforms that have reduced external indebtedness and lowered the risk of balance of payments crises have also reduced transfer risk—the danger that host countries would block the remittance of earnings to the parent companies. In addition, reform of legal and regulatory regimes and the adoption of outward-oriented economic policies have probably reduced other risks perceived by foreign investors.

Chart 7-8 **Stock of U.S. Direct Investment Abroad**
Investment of U.S. companies in developing countries is still well below the stock of U.S. direct investment in other industrialized countries, but it has increased rapidly in the 1990s.



Source: Department of Commerce.

Portfolio investment—the acquisition of bonds or corporate equity in the absence of a significant ownership stake in the enterprise—has grown dramatically. Portfolio investment gives firms that are already up and running the extra finance they need to increase performance. Portfolio equity flows to developing countries have been highly volatile. After increasing 12-fold during 1990–93, they fell 23 percent in 1994 and another 37 percent in 1995, to $22 billion. The sharp drop in 1994–95 was partly a reaction to events surrounding the Mexican crisis. It also reflected higher U.S. and European interest rates and concerns about possible overheating in some Asian economies.

Corporate bond flows have grown more steadily, from $3 billion at the beginning of the decade to $34 billion in 1995. In keeping with their rapid growth and history of macroeconomic stability, East Asian borrowers enjoyed maturities three times longer than those of Latin American borrowers. Average spreads (differences in interest rates) over government bonds in the United States and other major industrial countries were one-half of those for Latin American debt.

Finally, commercial bank lending has been highly volatile, jumping from less than $2 billion in 1990 to nearly $14 billion in 1993, then reversing course to a $5 billion net outflow the following year.

By 1995, commercial bank debt inflows in developing countries had risen again to $17 billion.

OTHER ASPECTS OF U.S. POLICY TOWARD EMERGING MARKET ECONOMIES

The U.S. economy no longer dominates the world economy by its sheer size, but even so the United States carries a disproportionate weight in world economic affairs. We are looked to for leadership in part because our economy remains the largest in the world, and in part because we are the sole remaining superpower. How do we intend to exercise that leadership? Among the most important objectives of U.S. economic policy are to ensure that the United States itself benefits fully from the integration of these emerging markets into a globalized economy; to guarantee that the former Communist countries make a successful transition to the market and become integrated into the international trading system; and to help developing countries in their quest for growth and development, by fostering both their economic institutions and their human resources.

INTEGRATING THE TRANSITION ECONOMIES INTO THE WORLD ECONOMIC SYSTEM

One way in which the United States has led the pursuit of these objectives has been by promoting an international economic system that reflects our values of openness, competition, and private enterprise. A key challenge in this regard, as already noted, is to ensure that economies that are newly embracing these values undertake reforms and are assisted in integrating into this system. This will ensure that these emerging economies have a stake in preserving the system that U.S. leadership has helped create. History teaches that outcasts can make trouble.

The task of transition is daunting, especially in the newly independent republics of the former Soviet Union, where Communism had its deepest roots. By far the most important element of a successful transition is market-oriented economic and political reforms. In addition, these countries will need generous support from the established market economies through the international financial institutions, as well as private investment. Foreign assistance can help encourage the development of the political and social institutions that will allow markets and democratic principles to flourish in the countries of the former Soviet bloc. The United States has led efforts here: it has provided direct assistance to these countries (as discussed below) and has worked within the IMF and the World Bank to assist the transition. In particular, the United States has strongly supported a major focus of the international financial institutions on building a foundation for market-driven growth through the sale of state-owned enterprises, sweeping legal and regulatory reform, financial sector modernization, and comprehensive redesign of social safety nets.

If these countries are to benefit fully from their conversion to market economics, they must also be able to put their comparative advantage to work. Just as it is also in the best interests of the transition economies to play by the rules of the international marketplace, so too is it in the best interests of the established industrial economies to apply the trading rules fairly to the economies in transition. The markets of the established industrial economies must remain open to trade and investment opportunities with the transition economies. Consumers—as well as producers buying inputs—will gain from lower prices, and other producers will gain from exporting back to these new market economies and from increased opportunities for investment. In addition, all peoples will benefit from a more stable world as the transition economies successfully leave their Communist past behind.

Russia and the United States have rapidly deepened relations since Russia reemerged as an independent state at the end of the Cold War. At a series of meetings in Vancouver, Tokyo, Moscow, and Washington, the President and his Russian counterpart laid the basis for a lasting U.S.-Russian partnership. In the economic sphere, a commission headed by the Vice President and the Russian Prime Minister has worked to advance bilateral cooperation through eight working committees covering health, space, energy policy, agribusiness, defense conversion, business development, the environment, and science and technology. The commission last met in Moscow in July 1996 and is scheduled to meet in Washington in February 1997. In the area of trade, a Partnership for Economic Cooperation, signed by the two presidents at their September 1994 summit in Washington, serves as a framework for reducing barriers to expanded economic cooperation. A number of U.S. agencies—in particular, the Overseas Private Investment Corporation, the Export-Import Bank, the Trade and Development Agency, and the Department of Commerce—have programs in place aimed at facilitating trade and investment in Russia. The United States is also actively supporting the transformation of Russia from a centrally planned to a market economy. Since 1992 the U.S. Agency for International Development (USAID), which coordinates U.S. bilateral foreign development assistance, has devoted approximately $2 billion in assistance under the Freedom Support Act to helping Russia develop democratic and market institutions.

Meanwhile significant developments in the security sphere have reduced the threat of military confrontation in the post-Cold War era, while also providing economic benefits for the United States.

Most recently, Russia and the United States signed an agreement that will transfer substantial amounts of Russia's supplies of highly enriched uranium from Russian warheads to U.S. energy facilities—a real-life example of turning swords into plowshares. The Administration has been working to develop institutional arrangements to ensure that these mutually advantageous transactions, an effective part of our policy to prevent nuclear proliferation, continue.

Both China and Russia are currently negotiating accession to the WTO. Their successful integration into the multilateral trading system requires that they continue their market reforms, agree to provide mutually beneficial access to their markets, and abide by multilateral rules and obligations. Likewise, by keeping open our markets and those of our traditional allies to these new economic powers, we can increase the stake they have in maintaining the international rules-based economic system.

China and the United States together account for almost 16 percent of global trade and 30 percent of global output. Whether we meet regional and global goals for freer and more open trade—among the APEC countries and among all the members of the WTO—depends in part on the strength of the bilateral relationship between China and the United States. Recognizing this, the Administration is committed to pursuing a regular and intensive dialogue with China. Significant progress was made with the beginning of a dialogue between China's State Planning Commission and the Council of Economic Advisers in August 1996. Progress continued at the September 1996 meeting of the Joint Commission on Commerce and Trade, with the establishment of a consultative group on business operational issues and with commitments to engage in further discussions on export controls and commercial law. In the November 1996 session of the U.S.-China Joint Economic Committee, China and the United States pledged further cooperation in the areas of customs, tax collection, and financial sector reform.

With the end of the Cold War, an important rationale for foreign aid—to cement alliances with the world's poorer countries against the threat of Communism—has disappeared. But there are other important rationales. Beginning with the Marshall Plan after World War II, foreign assistance has been part of a broad effort by the United States and the other industrial democracies to foster a world order based on freedom, prosperity, and stability. In an increasingly interdependent world, these ideals retain enormous relevance.

Some foreign aid is purely an expression of our sense of humanity: Americans find it difficult to turn their backs on children starving during a famine or left homeless after an earthquake. But just as we believe, as a matter of domestic policy, that it is better to extend a helping hand up than a handout, so we believe it is better to create the economic conditions that will enable countries abroad to stand on their own feet.

For half a century the United States has used its international influence to spread democratic and market institutions. U.S. higher education has also promoted markets and democracy overseas (Box 7–2). Aid, although much less important than trade economically, is nevertheless an essential instrument by which the United States and the other industrial democracies help less developed economies become stronger and more self-reliant. We also believe—and not without evidence—that countries with higher living standards are likely to be politically more stable, especially when improvements in living standards are spread widely within a population. By contributing to the world's political stability, these improvements in living standards contribute to America's security.

Box 7–2.—How Educating Foreign Students Promotes Markets and Democracy

The United States has clear comparative advantage in higher education. Many foreign students, especially from developing countries, come to America to study for college and graduate degrees. Their spending on tuition counts as U.S. exports of educational services and rivals U.S. exports of corn or wheat, our two largest agricultural exports. When these students return home, they take with them an appreciation of the benefits of an open society and an open economic system. The U.S. system of higher education has done much to spread our values throughout the world, including our belief in democracy and the market system.

This phenomenon is particularly evident with respect to Latin America. Many Latin Americans have come to the United States to study for graduate degrees in economics or public policy, and many have entered government service on returning home. The last two presidents of Mexico and the finance ministers of Argentina, Brazil, Chile, and Mexico, for example, all received doctorates in economics from U.S. universities. Partly because of their leadership, Latin America has embraced market-oriented economic policies.

This is one example of how the United States itself benefits from aid given to others. But we realize important economic benefits as well. When our aid helps countries grow, we benefit from increased exports. For example, 20 countries have achieved a sufficient level of development to graduate from lending programs of the International Development Association (the World Bank affiliate that lends to the poorest countries on a concessional basis). These countries bought $61 billion in U.S. exports in 1995, or 6.3 percent of our total exports. And by deepening our economic relationship with developing countries through aid, we also make it more likely that they will turn to U.S. firms for products in the future. More broadly, U.S. assistance in setting up legal and commercial institutions in developing countries leads to foreign business environments that are transparent, open, and predictable. This makes it easier for U.S. exporters and investors to operate in these markets. Familiarity breeds trade.

How developing countries treat their environment is increasingly relevant to Americans. The decimation of a rainforest, or the use of inefficient coal-burning power plants, may affect the climate of the entire globe. The explosion at Chernobyl brought home forcefully that badly designed nuclear reactors in one country can have far-ranging effects. We all share the same planet. But poor countries may have difficulty raising the resources to do what is necessary to help preserve the global commons. Financial aid is one way we can pursue these objectives.

To respond to these varied rationales, USAID has spelled out five goals for its work: encouraging broad-based growth, protecting the environment, building democracy, helping to stabilize world population growth, and providing relief through humanitarian assistance. The web of international institutions created under U.S. leadership also plays a key role. The World Bank, together with the several regional development banks, lend on both a concessional and a nonconcessional basis, depending on the income of the borrowing country. Other international organizations also provide lending and technical assistance. The United States contributes to the capital of these institutions and to their special concessional lending funds, but the impact of these institutions is many times the level of U.S. contributions. They therefore provide an efficient means for the United States to leverage its international leadership.

A Brief History of Aid

The targets and strategies of foreign assistance have undergone a steady evolution since the end of World War II. Immediate postwar assistance was focused on countries hard hit by the war. The Marshall Plan channeled assistance to Western Europe on a vast scale, to promote economic recovery while preserving social stability and democracy. In the Marshall Plan years of 1949–52 the United States gave $18.6 billion in aid, equivalent to 1.5 percent of our gross national product (GNP) in those years. As a percentage of our output, the aid we send overseas today is far smaller than it was then.

The United States and the other industrial countries provided relatively little assistance to what are now the developing countries before the early 1960s, and what was offered usually came in the form of specific technical assistance. It was widely assumed that the income gap between these countries and ours would close over time, without much special effort on our part. In addition, many of what are now high-income countries were still well behind the United States, so that concern was not focused exclusively on the developing world.

In the early 1960s, under the leadership of President Kennedy, the United States greatly increased the resources devoted to assisting developing countries. U.S. foreign economic assistance rose from $13 billion in 1958 (in 1996 dollars) to $22 billion by 1962. The United States accounted for the great bulk of official development assistance throughout the 1960s. Apart from providing direct assistance ourselves, the United States also led efforts to coordinate bilateral assistance from other countries. In 1961 the DAC, the primary mechanism for coordinating aid among the OECD countries (see above), was established. The United States also led the way in providing development assistance and nonconcessional development finance through the multilateral development banks. The IDA was organized in 1960 to provide concessional financing to the poorest countries. The first two regional development banks, the Asian Development Bank and the Inter-American Development Bank, began operations in the 1960s, with the United States as a founding member of both.

U.S. development assistance has contributed to many successes since the 1960s. Some of the world's fastest-growing countries today have been major recipients. Targeted programs have achieved particular success. During the 1960s and 1970s, for example, USAID assistance to India for higher education and agricultural research was instrumental in the rapid growth in cereal production in that country—the so-called Green Revolution. In various countries, USAID programs have helped reduce infant mortality and population growth rates and improved basic education programs.

Over time, the intellectual focus of development assistance changed. By the early 1960s it was clear that most developing countries were not catching up with the United States as fast as Western Europe and Japan were. It was assumed that a shortage of investment resources was behind this lack of growth. Long-term growth models developed in the 1950s posited a direct relationship between a country's investment level and growth of its GDP. Countries unable to generate enough resources to fund high investment levels would fail to generate rapid growth. The role of aid was to alleviate bottlenecks to growth, by filling the gap between the desired level of investment and the saving and private foreign capital available to finance it. The idea that resource transfers were an important determinant of growth was in keeping with our successful experience with the Marshall Plan.

In the 1970s the focus of assistance shifted to the direct alleviation of poverty. Although rapid economic growth held the promise of alleviating poverty over the long term, it was feared that poverty could actually worsen in the initial stages of development. Aid increasingly was allocated to projects directly designed to meet basic needs of the poorest populations in developing countries. These efforts were focused on measures targeted to population control, health, education, and rural development.

The growth rates of developing countries began to diverge widely in the 1970s, with the Asian and Latin American countries generally growing steadily and many African countries beginning to stagnate. Investment bottlenecks were not the only factor inhibiting development. How investment was used, and the environment in which it was made, were also important. The focus of development broadened to include the need to develop agriculture, exports, and human resources, as well as industry and infrastructure.

As it became clear that no simple causal relationship existed between the quantity of assistance, rates of economic growth, and changes in poverty, the policy focus in the 1980s changed once again, this time to the influence of a country's domestic economic and social policies on development and growth. The quantity of aid, which had been the focus of the earlier models, came to be seen as just one of many factors influencing development. Aid was seen as having an impact on a country's growth only if sound domestic policies were in place. Those concerned about poverty also focused on the policy environment. Growth did not necessarily cause poverty to worsen; in fact, the East Asian experience showed that growth was the most effective antidote to poverty and that egalitarian policies could facilitate growth.

This view led to an increased emphasis on conditionality: aid would only be given if a country agreed to a specific set of reforms, which generally included fiscal discipline, open capital and trade flows, deregulation and reform of public enterprises, the establishment of efficient banking systems, legal reforms, and the liberalization of prices, exchange rates, and interest rates. The IMF and the World Bank led the way in negotiating the structural adjustment programs that embodied these reforms, establishing them as a condition for providing funds to developing countries, many of which had been hard hit by the debt crisis that began in 1982. Several empirical studies during this period confirmed that reforms of this kind were a necessary, though not a sufficient, condition for economic growth.

The United States' dominance in foreign assistance diminished in the 1970s and 1980s, as other industrial countries channeled increasing resources toward this purpose, in line with their increased economic capacity. In the 1950s and most of the 1960s the United States had accounted for over half of all official development assistance provided by the market democracies. Since that time, other industrialized countries have shouldered an increased share of the burden, rising to 55 percent in 1970, 72 percent in 1980, and 88 percent in 1995.

Most of the industrial countries have reduced their bilateral assistance, and the resources of the multilateral institutions and regional development banks are coming under increased strain. The end of the Cold War has led to an increased demand for assistance to the transition economies as well, stretching development resources ever thinner. Political support for development assistance has eroded, as the need to battle Communism in the developing countries has virtually disappeared and as donor-country budgets have been squeezed. Yet the need for development assistance has continued. Countries without the social, economic, and political bases for development, in Africa and elsewhere, are likely to be left behind as other developing countries experience rapid growth.

Official development assistance from the 21 DAC members has declined by almost 6 percent in real terms since 1991 (12 percent when accounting for exchange rate fluctuations), to $59 billion, or only 0.27 percent of their aggregate GNP in 1995. Bilateral disbursements accounted for about two-thirds of the total in 1995; multilateral sources provided the remainder.

Patterns of U.S. Aid Today

In 1996, the Congress authorized $6.7 billion for foreign assistance spending. That amounts to 0.1 percent of GDP, or a per capita expenditure of $27. Contrary to conventional wisdom, evidence indicates that American public attitudes are sufficiently supportive of foreign assistance to justify a modest increase (Box 7-3). The Administration has requested an increase of 10 percent in its budget request for fiscal year 1998. If approved, that would restore spending to fiscal 1988 levels in real terms.

Over 1993–95, 30 percent of U.S. non-military bilateral aid was allocated to Egypt and Israel. Other major allocations went to Ethiopia, Haiti, India, Peru, Russia, South Africa, Turkey, and Ukraine. The share of U.S. aid going to the sub-Saharan African countries has grown in recent years, while the share to Latin America and East and South Asia has diminished. A special initiative to assist the transition to democracy in South Africa allocated over $600 million, to be disbursed over 1995–97. During the 1990s the United States and other donors have also developed assistance programs for the transition economies. U.S. aid has supported a

Box 7–3.—Foreign Aid and U.S. Public Opinion

Most Americans think the U.S. Government spends far too much on foreign aid, to the neglect of domestic needs. Yet a number of surveys and polls have found that this widespread attitude toward aid is based on false premises. In one survey the median respondent guessed that the United States provides 40 percent of all aid to developing countries; the true figure, according to the OECD, is 12 percent. Likewise, most of those surveyed believe that the United States spends a larger percentage of its GDP on aid than other industrial countries, whereas in fact we spend the smallest. Those surveyed estimated that 18 percent of the Federal budget goes to foreign aid; the true figure is well below 1 percent. The median respondent (before being told the actual level of aid) would raise the amount of aid provided to 20 percent of all international aid and 5 percent of the Federal budget. Focus groups and polls have found that Americans, in general, retain some sense of moral obligation to help those in need.

wide range of projects, including privatization programs in the Czech Republic and Russia; legal reform in Kazakstan, the Kyrgyz Republic, and Russia; public health programs in Russia and Ukraine; and humanitarian assistance in Bosnia and Herzegovina. A large portion of U.S. aid goes to social infrastructure such as health and education; less than 6 percent of U.S. bilateral development assistance is spent on economic infrastructure—in sharp contrast with Japan, which expends almost one quarter of its aid on the promotion of transport and communications alone. An increasing amount of aid from the United States and other countries is absorbed by crises and humanitarian relief.

In addition to providing bilateral aid, the Administration strongly supports the international financial institutions which provide multilateral aid. In its 1998 budget request, the Administration has asked that funding for multilateral development banks be restored to fiscal 1990 levels of more than $1.4 billion.

As already noted, in addition to their regular nonconcessional lending the international financial institutions provide concessional financing for the poorest countries that lack access to alternative financing. Funds for these "soft" loans come from contributions by the wealthier countries and income earned from past projects. The World Bank's IDA remains the single most important source of such funding, having approved an annual average of $6 billion in concessional lending over the past 5 years. It is therefore vitally important that the United States deliver in full on its outstanding commitments to the IDA. The IMF's Enhanced Structural Adjustment Facility (ESAF), established in 1987 to provide concessional financing to low-income countries experiencing balance of payments problems, has been enlarged to $15 billion—roughly double its original size. Thus far, over 40 countries have borrowed from the ESAF; in return for these funds they agree to undertake 3-year structural adjustment programs. Recently the United States, together with the World Bank and the IMF, spearheaded a new initiative to reduce debt burdens for highly indebted low-income countries (Box 7–4).

A FRAMEWORK FOR FUTURE LEADERSHIP

For half a century the Cold War defined the principal objective of U.S. international policies: contain Communism. As we have seen, with the end of the Cold War the United States has had to rethink its objectives. We can all agree that the government should seek to increase economic growth, raise living standards, protect the environment, and enhance security in all its dimensions. But in this *Report* we have tried to be more precise: What are the special roles of the Federal Government? And how have these roles changed as the environment we face has changed—with the end of the Cold War, the emergence of new economic powers, and the globalization of the world economy? Markets, individual responsibility, community—all are essential to the society that we have created and are creating still.

Some guidance here is provided by the theory of international public goods. Pure public goods have two properties. First, they are nonrival in consumption. That is, their consumption by one person does not diminish the benefit another person derives from consuming them. Another way of putting this is that the cost of providing the good to the second person, given that it has already been provided to the first, is zero. The second feature of public goods is that they are nonexcludable. That is, it is difficult or impossible to prevent someone from enjoying the good, regardless of whether he or she has paid for it. Classic examples of such goods are national defense and basic scientific research.

It has long been recognized that the market, if left to itself, will tend to underproduce public goods. As discussed in Chapter 6, this creates a rationale for government action to provide public goods for the benefit of the entire community. The efficient provision of such services is essential to long-term growth, and without the government they would be inefficiently underproduced.

Some public goods are local in nature; they affect people only in a limited geographic area. Examples include police protection and urban parks. Other public goods are national, such as the defense of a country. Still other public goods are international, benefiting

Box 7–4.—Reducing the Debt Burden of Developing Countries

Heavy debt burdens have severely constrained the economies of many developing countries for well over a decade. At the end of 1995, the total external debt of developing countries was estimated at over $2 trillion, equivalent to 150 percent of their annual exports. The debt burden varies dramatically across regions: the sub-Saharan African countries faced an average debt-to-exports ratio of 270 percent in 1995, whereas in East Asia the ratio was only 83 percent. The successful reduction of commercial bank debt combined with economic policy reforms in the first half of the 1990s has helped launch many middle-income developing countries on a path of sustainable growth. For many low-income countries, however, debt remains a barrier to growth and development.

The U.S. Government has actively pursued several multilateral and bilateral initiatives to reduce the debt burden of the poorest developing countries. In mid-December 1994 the Paris Club of creditor countries (including the United States) agreed on more-generous debt reduction terms—called "Naples terms"—which would lower the debts of heavily indebted poor countries by up to 67 percent. During the 1996 fiscal year, the United States entered into debt-reduction agreements with seven countries under Naples terms. In February 1996 the Congress authorized a pilot debt buyback and swap initiative for lower income Latin American and Caribbean countries that are actively engaged in economic reforms, particularly investment reforms. Countries must also meet certain political criteria: they must have democratic governments and not have an egregious record in the areas of human rights, narcotics, and terrorism.

The United States has taken a leadership role in developing the newest multilateral debt initiative with the World Bank, the IMF, and the Paris Club. The Heavily Indebted Poorest Countries (HIPC) debt initiative would enable heavily indebted poor countries with a strong record of policy reform to achieve sustainable debt burdens, by offering them comprehensive debt relief from all creditors, including the international financial institutions. The HIPC focuses on those economies that adopt programs of adjustment and reform supported by the IMF and World Bank, but still face an unsustainable debt situation even after the full application of current debt-relief measures. Eligibility will be determined on a case-by-case basis.

people across the globe. Four important types of international public goods are international economic cooperation, international peace and order, some forms of environmental protection, and basic scientific knowledge. In all these areas the United States can benefit itself and other countries by promoting international cooperation.

INTERNATIONAL ECONOMIC COOPERATION

All countries can benefit from economic cooperation. But as with all public goods, countries have an incentive to free-ride on the cooperative efforts of other countries, deriving satisfaction from the existence of public goods but letting others bear the costs. They also have an incentive to take actions to serve their own interests, which may turn out to be short-sighted. Despite these inherent obstacles, the United States has led the international community to many notable successes in economic cooperation. One important success has been the coordination of macroeconomic policies among the major industrial countries through the annual Group of Seven summits. All nations gain from the increased international macroeconomic stability that this coordination provides. The President has also initiated separate labor summits among the Group of Seven, to provide a forum for collective exploration of how best to promote job creation and alleviate joblessness.

The Organization for Economic Cooperation and Development has served as a catalyst for successful economic cooperation. Within the OECD the industrial countries discuss policy in a host of areas, including macroeconomic policy. Another OECD accomplishment was a 1993 agreement that established a set of international principles for shipping policy, to promote a freely competitive environment for shippers and prohibit discriminatory fees and charges based on port of origin. A Maritime Transport Committee serves as a forum for dialogue, consultation, and harmonization of OECD member policy in this area.

The International Trading System

One of the most important dimensions of international economic cooperation has been the efforts led by the United States and its partners to strengthen the international trading system. This chapter has discussed the many benefits that accrue from this process. The work of expanding and reinforcing this system is ongoing, however, and there is still much to do.

As successive GATT rounds have reduced tariffs to a small fraction of their earlier levels, an important part of the agenda for trade policy now is the reduction of nontariff barriers to trade. Nontariff barriers are more complicated than tariffs and more difficult to eliminate. Indeed, many arise out of the legitimate pursuit of domestic policy goals, yet their effect is to restrict imported goods and services. The fact that they may serve or appear to serve legitimate domestic goals makes them often hard to remove. For example, although health and safety standards usually serve legitimate domestic purposes, they may be applied in ways that discriminate against imports. This is particularly the case when these policies are not set in a transparent and open manner.

Nontariff barriers are also more difficult to measure. They are not easily expressed by a single number like the average tariff rate. Although limited progress has been made in calculating tariff equivalents for some nontariff barriers, much room for improvement remains.

The United States and other countries have made progress in reducing nontariff barriers of various kinds. Some success has been achieved in the area of product standards, which historically have been based on the attributes of domestically produced goods. Provisions of the WTO and NAFTA require that product standards have a scientific rationale; they also promote the use of internationally recognized standards.

Another consequence of globalization is the increase in cross-border competition within industries. Trade officials are concerned that this competition be fair. Antidumping and countervailing duty laws are intended to ensure fair competition. Countervailing duties may be imposed when imported goods benefit from subsidies by a foreign government and injure a domestic industry. The duties are designed to offset the subsidies, restoring a level playing field for the injured domestic producers. Antidumping duties are intended to offset international price discrimination that causes injury to a domestic industry. Both measures are covered by WTO agreements, which authorize and set boundaries on the application of the rules.

Separate domestic laws also govern competition (antitrust) policy. When barriers between markets were high, these two sets of laws, domestic and international, could operate more or less independently. With globalization proceeding apace, and with international market barriers falling, the two increasingly overlap, yet they embody distinct criteria. Competition promotes economic efficiency, and the goal of both sets of laws should continue to be to promote competition and efficiency.

In static trade theory, under perfect competition U.S. customers may actually gain from accepting foreign subsidies, which lower the cost of imports. This gain more than outweighs the loss to U.S. producers harmed by the subsidized competition, and the winners can in theory compensate the losers. However, dynamic considerations and imperfect competition may yield a different conclusion. Government subsidies may allow foreign firms to engage in predatory behavior, permanently altering strategic dynamics in favor of foreign firms and, in the extreme, driving U.S. firms out of business. There are questions, however, about the prevalence of circumstances in which predation is likely.

Subsidy "wars," in which governments compete for market share by offering subsidies to some of their most promising firms, may occur. Such competition results in excessive investment in the subsidized industry, to the detriment of economic efficiency and welfare. To prevent subsidy wars in shipbuilding, to take one example, the OECD countries have signed an agreement to curb subsidies to shipbuilders. The President has asked the Congress to ratify this agreement, which was slated to go into effect in 1996.

Protecting the Rules-Based System. The international trading system applies a set of rules to countries' trading behavior. One of the most important is the requirement that countries not take arbitrary measures such as raising tariffs. Other core rules include the most-favored-nation principle, in which countries agree generally to extend the same tariff rates to all other countries, and national treatment, which requires countries to give foreign-based companies treatment equivalent to that received by domestic companies.

Economic dislocation may result from trade liberalization, and the Federal Government is committed to helping those adversely affected, for example through trade adjustment assistance. Safeguard provisions in WTO agreements permit a variety of temporary measures, including increased duties, to allow an industry injured by imports to adjust to the increased competition.

WTO rules permit the use of these measures, as well as countervailing duties and antidumping measures, under carefully circumscribed conditions. As traditional tariffs decline, countries are increasingly resorting to such remedies to shield their domestic industries from import competition. In certain instances it has become clear that the rules are being improperly interpreted or applied, or it is simply difficult to discern how proceedings are being conducted or to understand the basis for decisions. U.S. firms are frequently the targets. This is not surprising, given the role of the United States in the international trading system and the competitiveness of U.S. firms, which often operate with low profit margins. The United States has had to monitor closely the implementation of foreign trade remedy laws in order to discourage, identify, and correct such irregularities. The United States is committed to the active use of WTO dispute settlement provisions to address such irregularities and to ensure the fairest possible treatment for exporters.

Regional Trading Agreements. Free trade is an international public good from which all nations benefit. Regional trading arrangements can serve as a bridge to broader, even worldwide agreements—true global public goods. Toward the end of the 1980s the proliferation of regional trading agreements picked up speed. These arrangements have always had both costs and benefits. The main benefit is that they create trade by reducing barriers between member countries. The cost is that they can also divert trade from more efficient producers outside the region to less efficient producers within the region. WTO rules permitting regional trade agreements are designed to make it more likely that the trade creation effects dominate. For the North American Free Trade Area, the benefits of trade creation are likely to have outweighed the costs of trade diversion, because its members have relatively low trade barriers for most products from outside the region and because members are free to lower their external tariffs individually.

Regional trading arrangements have also proved to be powerful tools for liberalizing trade more widely, and thus increasing economic efficiency. The President has led efforts within APEC and the FTAA talks to provide fora for neighboring countries with common interests to negotiate pathbreaking arrangements. These arrangements can then serve as a pattern on which multilateral efforts within the WTO can build. For example, the United States-Canada Free Trade Agreement contained a chapter on services that became a model for the Uruguay Round negotiation on services. When regional trade arrangements are structured on this model, the danger of their succumbing to the temptation of trade diversion is diminished.

Cooperation in Competition Policy

Noncompetitive conditions in global markets can interfere with the efficient allocation of resources and harm consumers and producers throughout the world. Global cartels restrict output and increase prices of both consumer goods and producer inputs. Anticompetitive exclusionary or predatory practices can insulate firms from competition and exclude more efficient or innovative firms from the market. Such practices reduce economic welfare and retard economic growth.

Noncompetitive conditions in a domestic market can also serve as a barrier to trade. An example is the $4.5 billion Japanese market for flat glass. Three large domestic producers, with separate, exclusive distribution systems, have dominated this market. It can be extremely difficult for new producers, foreign or domestic, to enter such a market. Under a 1995 agreement with the United States, the Japanese government and the Japanese flat glass industry agreed to a set of steps to open this market to greater competition.

International cooperation in competition policy can help prevent or mitigate the harm resulting from anticompetitive practices. Such cooperation can take three basic forms. First, authorities can reduce unnecessary regulation (which can often act as a market barrier) and eliminate legal barriers to competition by both domestic and foreign firms. Second, they can promulgate and vigorously enforce appropriate competition policies, designed to prevent such conduct as price fixing, carving up of markets, and anticompetitive mergers. Third, they can cooperate in bilateral and multilateral efforts to investigate and share information regarding potential violations, and to enforce their competition policies.

International Capital Markets and Rules for Investment

We have already discussed the benefits to developing countries from receiving foreign investment, as well as the benefits to investor countries, including the United States, from investing in developing countries, and from the trade that accompanies foreign direct investment in particular. Impediments to FDI therefore may act as a nontariff barrier, making it more difficult to export into a market. This is a complicated issue: countries often are genuinely sensitive to the perceived loss of economic sovereignty associated with inward foreign investment, yet such concerns are often difficult to distinguish from efforts to protect domestic companies from competition. In that sense, countries engage in negative-sum behavior when they restrict foreign investment without a clear rationale for doing so, such as national security. These restrictions harm both their domestic consumers and foreign producers.

The United States has engaged in several efforts to improve the international climate for direct investment. The United States has a vigorous program to negotiate bilateral investment treaties with developing and transition economies, to ensure that U.S. firms are able to invest abroad on the same liberal terms under which foreign companies may invest here. To date, the United States has signed 38 such treaties, of which 26 are in force. Several more are pending ratification, and negotiations with other countries are ongoing. NAFTA included an agreement that substantially lowered barriers to cross-border investment and established procedures for settling investment disputes. The United States has been engaged in extending this work through the negotiation of the Multilateral Agreement on Investment (MAI) under the aegis of the OECD. This Administration helped launch the MAI negotiations in May 1995, and they are scheduled to be completed in 1997. The United States' objective in these talks is an agreement that will substantially liberalize foreign investment by establishing clear legal standards on expropriation, providing access to binding international arbitration of disputes (as in NAFTA), and allowing unrestricted investment-related transfers across borders. It is envisioned that accession to the MAI will be open to both members and nonmembers of the OECD, thus making possible an extension of MAI rules to developing and transition economies.

Funds also flow across borders in the form of securities and bank loans. Although these flows may be less stable than direct investment flows, which cannot readily be withdrawn, they can provide an important source of funding. The Group of Ten participate in the General Arrangements to Borrow, which is prepared to make roughly $24 billion available to the IMF in time of financial emergency that might pose systemic risks. Recently the Group of Ten and some other countries agreed to double the amount of emergency funding by creating an additional mechanism, the New Arrangements to Borrow. Contributors will include some of the fast-growing developing countries.

Ad hoc international coordination has also facilitated such actions as the liquidity support provided to Mexico during its early-1995 financial crisis, discussed in last year's *Report*. This U.S.-led international support helped Mexico implement the policies necessary to avert default, regain access to international capital markets, and restore the basis for sustainable growth. Confidence has now returned, and Mexico has repaid its borrowings from the United States ahead of schedule. The temporary support extended to Mexico also helped protect vital U.S. interests: American exports and jobs, the security of our common border, and the stability of other emerging market economies.

The United States worked at the June 1995 Group of Seven summit in Halifax to reduce the likelihood of similar crises in the future. Initiatives launched at Halifax included the New Arrangements to Borrow and the IMF's Special Data Dissemination Standard, which aims to increase the quality and availability of economic and financial data for emerging markets and other countries. This and other initiatives, including the IMF's capital markets surveillance, help promote a transparent and rules-based international financial system, benefiting both providers and users of capital.

In banking, the Bank for International Settlements, which promotes the cooperation of central banks and acts as agent for international financial settlements, has recently enlarged its membership to include the central banks of key emerging markets. The BIS is also the secretariat for the Basel Committee on Banking Supervision, the source of many agreements aimed at strengthening the supervision of internationally active banks. The committee is made up of representatives from 12 industrialized countries (Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland, the United Kingdom, and the United States), but in recent years it has extended its outreach to other countries. It is currently working with a group of developing and transition economies to formulate guidelines for effective bank supervision.

International Development and Humanitarian Assistance

The greatest contribution that the industrial countries can make to growth in developing and transition economies is to preserve these countries' access to international markets for trade and investment. Despite the dramatic increase in private investment flows, however, many developing countries, especially the poorest, still require assistance from the high-income countries and international organizations. It is important that these programs continue if the poorest countries, especially in Africa, are to persevere in the political and economic reforms that many have undertaken in recent years. These countries particularly benefit from aid that encourages their development of the necessary human resources and institutions in which a growing economy can take root. The development of such an institutional base helps ensure that aid flows are used effectively.

As growth in the poorest countries begins to accelerate, the United States and other donor countries will benefit from new and expanding export markets and investment opportunities, as well as from greater international political stability, because it means that countries have an increasing stake in preserving the international rules-based system. Effective assistance depends on international cooperation, both through the coordination of bilateral aid within the DAC and elsewhere, and through multilateral agencies. One aspect of this cooperation has been negotiated limits on the tying of aid to the import of products and services from donor countries (Box 7–5).

Another important aspect of assistance is humanitarian assistance. Human suffering in poor countries due to war, natural disaster, or famine concerns us all; these are circumstances in which countries can be most effective if they coordinate their efforts. Much of this coordination takes place through the United Nations; thus the United States and other countries benefit from continuing to support this organization. The multilateral development banks also provide humanitarian assistance. Continued support for development assistance can also serve as preventive medicine, to forestall the social, political, and economic deterioration that creates these crises in the first place.

INTERNATIONAL PEACE AND ORDER

All the international activities discussed in this chapter presuppose an international environment in which nations act peacefully and respect international order. Throughout the 20th century the United States has led world efforts to create such an environment. Besides military and diplomatic efforts, the United States has also employed economic means to achieve peace and order. Although economic sanctions may be viewed as a somewhat blunt instrument, they are one available tool to use against countries that threaten international stability, particularly when the situation

Box 7–5.—Tied-Aid Agreements

Tied aid is officially supported concessional financing linked to procurement in the donor country. It distorts trade when used to win contracts for capital goods exports rather than to provide true aid. Tied aid can misallocate resources from more efficient to less efficient producers whose governments offer such financing.

When used for export promotion, tied aid can also distort aid flows by directing scarce resources away from high-priority development projects to projects of interest to industries in donor countries. Traditionally, tied aid has directed donor support toward, for example, large electric power generation and telecommunications projects and away from social sector projects. This skewing of resource allocation in developing countries increases the capital intensity of development and burdens the recipient country with high maintenance expenditures in the future.

In response to complaints from exporters that they often faced tied-aid competition for capital goods projects, the United States negotiated rules in the OECD to govern tied-aid programs. The rules, dubbed the Helsinki Package, became effective in February 1992. They apply to nonconcessional financing and stipulate that higher income developing countries (those with incomes per capita above $3,035) are ineligible for all tied aid. The least developed countries remain eligible for all types of financing because of their desperate shortage of capital. For countries in between, such as China, Indonesia, and India, tied aid is prohibited for projects that can generate cash flows sufficient to repay debt on commercial terms.

It is hoped that the Helsinki rules will reduce distortions and maximize the total resources—aid and commercial financing—available to promote economic development. Last year the OECD issued guidelines for the use of tied aid, to draw the line between projects that should receive export credits on commercial terms and those that may receive tied aid. Since 1992, under the Helsinki Package, annual tied aid has declined from $10 billion to about $4 billion. The tied aid that remains has been shifted away from major capital projects capable of supporting financing on commercial terms to legitimate aid projects such as water and sewerage, and health and other social services.

calls for something stronger than diplomatic protest, but less strong than military engagement.

Sanctions come in a variety of forms. Sanctioning countries can restrict exports, impede imports, freeze assets, prohibit investments, restrict financing, withdraw government aid, or ban commercial airline flights. Throughout the 20th century, sanctions have been used primarily to restrict exports to and investment in a targeted nation. Import controls are rare. Examples include the ban on oil imported from Iran in response to the 1979–81 hostage crisis and from Libya in response to terrorist threats, a 46-year ban on all imports from North Korea, and a recent prohibition on oil imports from Iraq. Formerly employed predominantly to complement war efforts or destabilize hostile regimes, sanctions have been used since the 1960s to express condemnation of human rights abuses, force compliance with international treaties (such as nuclear nonproliferation treaties), promote democracy, and secure compensation for expropriated property.

As with any policy tool, the rational evaluation of sanctions involves a weighing of the costs and benefits. This can be difficult; whereas the costs of sanctions can often be expressed in economic terms (e.g., reduced output and growth), the aims of sanctions are frequently noneconomic. Sometimes sanctions may have mainly symbolic value, as part of the imposer's efforts to demonstrate resolve and commitment.

Certain characteristics increase the likelihood that sanctions will contribute to the desired outcome. As one would expect, sanctions that inflict higher costs on the target nation tend to be more effective. The costs, to both the sanctioner and the target, depend among other things on the type of sanction employed, the extent of trade and financial linkages, the relative size of the two nations, and the ease with which the target product or transaction can be substituted.

Like other public goods, sanctions are generally more effective when more nations participate in imposing them. Multilateral sanctions usually impose greater costs than unilateral sanctions; the ability of target nations to access alternative suppliers and providers of aid decreases as the number of sanctioning countries increases. Multilateral sanctions may also reduce the likelihood of long-term costs on those who impose sanctions. Multilateral sanctions on South Africa contributed to the decision to dismantle apartheid. United Nations-sponsored sanctions against Serbia in connection with the recent Bosnian conflict contributed to a severe contraction of Serbia's economy and pressured Belgrade to negotiate a peace agreement. The success of these sanctions was due in part to the coordinated action of the international community, Serbia's high dependence on foreign trade, and the narrow production base of the Serbian economy.

ENVIRONMENTAL ISSUES

Many environmental issues can be viewed through the analytic lenses of public goods and externalities. (Externalities occur when actions taken by one person have unintended and uncompensated positive or negative effects on others.) Clean air, for example, is nonrival, in that anyone can breathe it without impairing the ability of others to breathe; it is also nonexcludable, in that it is next to impossible to charge people for the right to breathe fresh air. As we have seen, some environmental issues are local or national in scope, whereas others are international or global and can therefore benefit from international coordination. We have already touched on some of the environmental challenges facing the United States as they relate to aid to developing countries. International coordination among all nations is important in such areas as global warming and preservation of the ozone layer. U.S. leadership is needed if such coordination is to take place.

All nations benefit from efforts to reduce emissions of greenhouse gases that may lead to global warming. However, in the absence of an international agreement on emissions, every nation has an economic incentive to avoid taking action on its own. That is why the United States is working toward an effective agreement entailing global reductions of greenhouse emissions. The goal of these negotiations is the signing of an international agreement in Kyoto in December 1997 to limit these emissions.

Another example is the overharvesting of ocean fisheries. Each user ignores the marginal cost of his or her use on the stock of fish required for regeneration. All potential fishing countries benefit from the efforts of all other parties to curtail fishing, but each has an incentive to deviate and overfish now. At the November 1996 annual meeting of the International Commission for the Conservation of Atlantic Tunas, the United States took a leading role in establishing an international fishery management organization to enforce fishing quotas in order to protect a declining stock of bluefin tuna. The United States was also one of the first nations to ratify the 1995 United Nations Agreement on Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, which promotes regional commissions to coordinate the management of ocean fishing and provides for binding dispute settlement in accordance with the Law of the Sea.

BASIC RESEARCH

Knowledge may be the purest of public goods, and the most important for economic growth and development. All nations benefit from increases in scientific knowledge that form the basis for technological advances. As with other public goods, however, there is a temptation to free-ride. Some countries have specialized in adapting basic research done in other countries into profitable business opportunities. If the quest for greater basic knowledge and improved technology is to continue, it is important that all countries contribute to the support of basic research. Free-riding on other's efforts can also be minimized if owners of intellectual property are adequately compensated.

International research cooperation is a complex issue. The lines between basic and applied research are increasingly blurred. Tension often arises between the goal of increasing the competitiveness of domestic companies, by channeling research funding to them, and the goal of increasing the world's stock of scientific and technological knowledge, from which we all gain.

CONCLUSION

Enormous changes are taking place in the international economic environment, made possible by U.S. international leadership throughout the postwar era. The United States has led the development of a stable international economic system based on a clear set of rules. These rules have made possible our Nation's preeminence in exports, and thus have served our own interest, but they allow other countries to benefit from exports, too. And that, as we have seen, serves our interest as well. Rules also encourage a more stable world economy, avoiding the calamities of the 1930s and 1940s.

With the emergence of developing and transition economies onto the stage long dominated by the United States and the other industrial democracies, the need is great to ensure that the international system welcomes these new participants and allows both them and the established powers to derive mutual benefit from the system. The new participants themselves must continue to liberalize their trade regimes and their domestic markets, so that all countries can realize the gains from trade. Efforts should also continue to spread prosperity to those countries that have yet to see sustained growth, in part through assistance in developing the necessary economic institutions and human resources.

The United States must also continue to lead the ongoing effort to improve the international economic system. The international public goods of economic cooperation, peace and order, environmental protection, and basic research promise great benefits if countries work together, but such cooperation requires strong leadership.

To exercise that leadership role, we must understand the lessons of the changes that are sweeping the globe. The collapse of central planning tells us of the dangers of overreaching by governments, and reminds us of the key role of Western governments in ensuring a rules-based domestic and international marketplace. The rise of the East Asian economies and the revival of Latin America teach us about the fundamentals of economic growth: saving, education, technological progress, stability, openness to international trade, and equity. We must work to maintain these conditions at home and assist other countries in implementing them abroad. Finally, increased globalization reminds us of our interdependence with other nations and the benefits that we all receive from our economic interactions.

If the United States continues to exercise economic leadership in the world, maintaining the international rules-based system that we, above all others, helped develop, we will contribute to our own prosperity as well as to that of the rest of the world.

Appendix A
REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 1996

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS
Washington, D.C., December 31, 1996

MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1996 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,

Joseph E. Stiglitz, *Chairman*
Alicia H. Munnell, *Member*
Jeffrey A. Frankel, *Member-Nominee*

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. Seevers	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.
William A. Niskanen	Member	June 12, 1981	March 30, 1985.
Jerry L. Jordan	Member	July 14, 1981	July 31, 1982.
Martin Feldstein	Chairman	October 14, 1982	July 10, 1984.
William Poole	Member	December 10, 1982	January 20, 1985.
Beryl W. Sprinkel	Chairman	April 18, 1985	January 20, 1989.
Thomas Gale Moore	Member	July 1, 1985	May 1, 1989.
Michael L. Mussa	Member	August 18, 1986	September 19, 1988.
Michael J. Boskin	Chairman	February 2, 1989	January 12, 1993.
John B. Taylor	Member	June 9, 1989	August 2, 1991.
Richard L. Schmalensee	Member	October 3, 1989	June 21, 1991.
David F. Bradford	Member	November 13, 1991	January 20, 1993.
Paul Wonnacott	Member	November 13, 1991	January 20, 1993.
Alan S. Blinder	Member	July 27, 1993	June 26, 1994.
Laura D'Andrea Tyson	Chair	February 5, 1993	April 22, 1995.
Joseph E. Stiglitz	Member	July 27, 1993	
	Chairman	June 28, 1995	
Martin N. Baily	Member	June 30, 1995	August 30, 1996.
Alicia H. Munnell	Member	January 29, 1996	

Report to the President on the Activities of the Council of Economic Advisers During 1996

The Council of Economic Advisers was established by the Employment Act of 1946 to provide the President with objective economic analysis and advice on the development and implementation of a wide range of domestic and international economic policy issues.

The Chairman of the Council

Joseph E. Stiglitz, previously a Member of the Council, was appointed Chairman on June 28, 1995. Dr. Stiglitz is on leave from Stanford University where he is the Joan Kenney Professor of Economics. Dr. Stiglitz is responsible for communicating the Council's views on economic matters directly to the President through personal discussions and written reports. Dr. Stiglitz also represents the Council at Cabinet meetings, meetings of the National Economic Council (NEC), daily White House senior staff meetings, budget team meetings with the President, and other formal and informal meetings with the President, senior White House staff, and other senior government officials. Dr. Stiglitz is the Council's chief public spokesperson. He directs the work of the Council and exercises ultimate responsibility for the work of the professional staff.

The Members of the Council

Alicia H. Munnell is a Member of the Council. Dr. Munnell had previously served in this Administration as Assistant Secretary for Economic Policy at the Department of the Treasury. She also had served as Senior Vice President and Director of Research at the Federal Reserve Bank of Boston.

Martin N. Baily was a Member of the Council until August 1996. He left the Council to join the Global Institute at McKinsey and Company, Inc. The President has nominated Jeffrey A. Frankel to succeed Dr. Baily as a Member of the Council. While awaiting confirmation, Dr. Frankel has been serving as Chief Economist. He is on leave from the University of California, Berkeley, where he is a Professor of Economics. He previously directed the program on International Finance and Macroeconomics at the National Bureau of Economic Research and is a former Senior Fellow at the Institute for International Economics.

The Chair and Members work as a team on most economic policy issues. Dr. Munnell and Dr. Baily shared responsibility for domestic macroeconomic analysis, the Administration's economic forecast, and budget and tax issues. Dr. Munnell is primarily responsible for health care, welfare reform, environmental, and labor issues. Dr. Baily was primarily responsible for international economic issues and certain microeconomic issues, including agriculture and the environment. Dr. Frankel has taken over this portfolio. The Chair and the Council Members participate in the deliberations of the NEC. Dr. Stiglitz is a member of the NEC Principals Committee.

WEEKLY ECONOMIC BRIEFINGS

Dr. Stiglitz and the Members continued to conduct a weekly economic briefing for the President, the Vice President, and the President's other senior economic and policy advisers. The Council, in cooperation with the Office of the Vice President, prepares a written *Weekly Economic Briefing of the President,* which provides analysis of current economic developments, more extended discussions of a wide range of economic issues and problems, and summaries of economic developments in different regions and sectors of the economy. This document serves as a basis for the President's oral briefing.

MACROECONOMIC POLICIES

A primary function of the Council is to advise the President on all major macroeconomic issues and developments. The Council prepares for the President, the Vice President, and the White House senior staff almost daily memoranda that report key economic data and analyze current macroeconomic events.

The Council, the Department of the Treasury, and the Office of Management and Budget—the Administration's economic "troika"—are responsible for producing the economic forecasts that underlie the Administration's budget proposals. The Council, under the leadership of the Members, initiates the forecasting process twice each year. In preparing these forecasts, the Council consults with a wide variety of outside sources, including leading private sector forecasters.

In 1996 the Council continued to take part in discussions about the President's balanced budget plan. The Council also participated in meetings on a range of budget issues including Medicare and Medicaid, discretionary spending priorities, and the Administration's tax proposals.

The Council, together with the Department of Labor, prepared a report titled "Job Creation and Employment Opportunities: The United States Labor Market, 1993–1996," which analyzed the

American economy's robust employment growth, the nature of the jobs being created, and the incidence of job displacement. This report concluded that over two-thirds (68 percent) of the net job growth in full-time employment between February 1994 and February 1996 occurred in industry/occupation categories that paid above-median wages. The Council also prepared a background report titled "Promoting Economic Growth," which discussed the challenge of increasing the underlying productivity growth rate of the U.S. economy.

The Council continued its efforts to improve the public's understanding of economic issues and the Administration's economic agenda through regular briefings with the economic and financial press, frequent discussions with outside economists, and presentations to outside organizations.

INTERNATIONAL ECONOMIC POLICIES

The Council has been an active participant in the international economic policymaking process through the National Economic Council and the National Security Council, providing both technical and analytic support and policy guidance. The Council engaged in interagency discussions dealing with such topics as U.S. trade remedy laws (antidumping, countervailing duties, safeguards, and Section 301 actions); the U.S. balance of payments; cross-border investment; international aspects of telecommunications and information technology; integrating Russia, China, and other newly market-oriented economies into the world economic order; and the agendas of multilateral and regional fora such as the World Trade Organization, the Asia-Pacific Economic Cooperation forum, and the North American Free Trade Agreement.

In 1996, Dr. Stiglitz led a U.S. delegation to the Information Society and Development (ISAD) Conference in South Africa. The ISAD Conference, which followed the 1995 G–7 Ministerial Conference on the Information Society held in Brussels, was designed to extend acceptance of the Global Information Infrastructure principles, first articulated by the Vice President in 1994, to the developing world. Dr. Stiglitz also led a U.S. delegation to China, where he met with top Chinese officials to initiate a dialogue on economic issues between the Council and China's State Planning Commission. In addition, the Council drafted the 1996 *APEC Economic Outlook* for the Asia-Pacific Economic Cooperation, and Dr. Stiglitz presented this report to the APEC Ministers during their meetings in Manila.

The Council plays a leading role in U.S. participation in the Organization for Economic Cooperation and Development (OECD), the principal forum for economic cooperation among the high-income industrialized countries. The Council heads the U.S. delegation to the semiannual Economic Policy Committee (EPC) meetings, and

Dr. Stiglitz is the Committee's Chairman. In that role, Dr. Stiglitz has led an effort to make the EPC's meetings more relevant to member-country policy discussions. Dr. Munnell led the U.S. delegation to the OECD's Working Party 1 on microeconomic and structural issues and participated in Working Party 3. Dr. John D. Montgomery also participated in the OECD's Working Party 3 on macroeconomic policy coordination, and Dr. Steven N. Braun led the U.S. delegation to the OECD's Short-term Economic Forecasters Meeting.

MICROECONOMIC POLICIES

The Council was an active participant in discussions of microeconomic policy issues in 1996. Dr. Stiglitz is a member of the Administration's Regulatory Working Group and addressed numerous groups on the principles, content, and importance of the Administration's regulatory reform program. At Dr. Stiglitz's initiative, the OECD has undertaken a series of studies to promote regulatory reform around the globe. The Council also participated in a range of Administration efforts to reform regulation.

The Council was an active participant in the Administration's reinventing government effort, which has made Federal Government agencies more efficient and more performance oriented and has revised and eliminated thousands of pages of regulations. To help promote its objectives, the Council advocated procurement reforms that would extend the use of competitive auctions by Federal agencies in their purchase of products and services.

The Council was involved in efforts to implement the 1996 telecommunications reform bill. The Council worked with the Vice President, the National Economic Council, and the Departments of Justice and Commerce to develop Administration policies regarding interconnection of telephone competitors. Dr. Timothy J. Brennan participated in an economists' forum at the Federal Communications Commission to examine various aspects of allowing local telephone companies to provide long-distance service. The Council also promoted participation in spectrum auctions held by the Federal Communications Commission and played an important role in ongoing efforts to restructure INTELSAT and Inmarsat (the international satellite consortia).

The Council was active in a range of policy discussions on natural resources and the environment. The Council has been a leading proponent of reforming public lands policy, especially by reducing subsidies for extractive use of Federal public lands. The Council played a key role in the Headwaters acquisition negotiations and has worked extensively on other land exchanges.

The Council participates actively in the ongoing assessment of global climate change policies. The Council was also active in discussions on the Superfund program and other issues relating to the management of hazardous wastes. The Council helped assess the reauthorization of the Clean Water Act and the Safe Drinking Water Act and evaluated the drafts of the Environmental Protection Agency's Mercury and Utility reports required by the Clean Air Act Amendments of 1994. In addition, the Council was involved in the evaluation of alternative National Ambient Air Quality Standards for particulate matter and ozone, which are regulated under the Clean Air Act.

The Council played an important role in agricultural policy reform, most notably the Administration's continuing efforts to implement the 1996 Farm Act. The Council also advised on the operation of agricultural trade programs, including the sugar program and various farm export subsidy programs.

The Staff of the Council of Economic Advisers

The professional staff of the Council consists of the Chief of Staff, the Senior Statistician, 11 senior economists, 6 staff economists, and 3 research assistants. The professional staff and their areas of concentration at the end of 1996 were:

Chief of Staff and General Counsel

Michele M. Jolin

Senior Economists

S. Lael Brainard	International Economics and Senior Director at the National Economic Council
Steven N. Braun	Director, Macroeconomic Forecasting
Timothy J. Brennan	Regulation, Industrial Organization, and Antitrust
William B. English	Macroeconomics and Finance
Phillip B. Levine	Labor, Welfare, and Education
Mark J. Mazur	Public Finance and Senior Director at the National Economic Council
John D. Montgomery	International Economics
Raymond Prince	Environment and Natural Resources
Christopher J. Ruhm	Health Care, Aging, and Labor
Charles F. Stone	Macroeconomics and Editor, *Weekly Economic Briefing of the President*
David L. Sunding	Agriculture and Natural Resources

Senior Statistician

Catherine H. Furlong

Staff Economists

Carrie S. Cihak	International Economics
Jason L. Furman	Macroeconomics
Cynthia K. Gustafson	Labor, Welfare, and Education
Andrea Richter	International Economics
Cristian J. Santesteban	Industrial Organization, Science and Technology, and Regulation
Caroline M. Thompson	International Economics

Research Assistants

Jennifer C. Daskal
Sarah J. Reber
Diane M. Whitmore

Statistical Office

Mrs. Furlong directs the Statistical Office. The Statistical Office maintains and updates the Council's statistical information, oversees the publication of the *Economic Indicators* and the statistical appendix to the *Economic Report,* and verifies statistics in Presidential and Council memoranda, testimony, and speeches.

Susan P. Clements	Statistician and Information Systems
Linda A. Reilly	Statistical Assistant
Brian A. Amorosi	Research Assistant
Margaret L. Snyder	Statistical Aide

The Administrative Office

Elizabeth A. Kaminski	Administrative Officer
Catherine Fibich	Administrative Assistant

Office of the Chairman

Alice H. Williams	Executive Assistant to the Chairman
Sandra F. Daigle	Executive Assistant to the Chairman and Assistant to the Chief of Staff
Lisa D. Branch	Executive Assistant to Dr. Munnell
Francine P. Obermiller	Executive Assistant to Dr. Frankel

Staff Secretaries

Mary E. Jones
Rosalind V. Rasin
Mary A. Thomas

Mrs. Thomas also served as executive assistant for the *Weekly Economic Briefing of the President*.

Michael Treadway provided editorial assistance in the preparation of the 1997 *Economic Report*. Robert E. Cumby, Georgetown University, David M. Cutler, Harvard University, and Michael A.

Toman, Resources for the Future, served as consultants during the year.

Student interns during the year were Oren Ahoobim, Anthony R. Alvarado, Noelle M. Campbell, Albert C. Chen, George L. Colindres, Mariano-Florentino Cuellar, Ariel S. Glasner, Kara A. Gobi, Minna J. Hahn, Mary K. Lesh, Robert P. Martin, Rachel A. Novak, Christopher J. O'Connor, Angela Sherry, Courtney A. Sweeney, Megan R. Sweeney, James R. Sweet, and Jose A. Villar. The following student interns joined the Council in January to assist with the preparation of the *Economic Report*: James T. Engelhardt, Gregory B. Garvin, and Laura M. Higginson.

DEPARTURES

Peter R. Orszag, who served as Senior Adviser to the Council, returned to the London School of Economics in November and has now joined the National Economic Council staff. The Council's senior economists, in most cases, are on leave of absence from faculty positions at academic institutions or from other government agencies or research institutions. Their tenure with the Council is usually limited to 1 or 2 years. Most of the senior economists who resigned during the year returned to their previous affiliations. They are George B. Frisvold (Department of Agriculture), Thomas J. Kane (Kennedy School of Government, Harvard University), Eileen Mauskopf (Board of Governors of the Federal Reserve System), Robert G. Murphy (Boston College), Marius Schwartz (Georgetown University), and Michael A. Toman (Resources for the Future). Robert S. Dohner accepted a staff position with the Department of the Treasury. Louise M. Sheiner left the Council to serve as Deputy Assistant Secretary of the Treasury and has now rejoined the Board of Governors of the Federal Reserve System.

Staff economists are generally graduate students who spend 1 year with the Council and then return to complete their dissertations. Those who returned to their graduate studies in 1996 are Michael A. Ash (University of California, Berkeley), Jonah B. Gelbach (Massachusetts Institute of Technology), and Scott J. Wallsten (Stanford University). Valerie A. Mercer accepted a position with the International Monetary Fund. Ronald C. Chen began graduate studies at Oxford University.

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 an important vehicle for presenting the Administration's domestic and international economic policies. Annual distribution of the Report in recent years has averaged about 45,000 copies. The Council also has primary responsibility for compiling the monthly

Economic Indicators, which is issued by the Joint Economic Committee of the Congress and has a monthly distribution of approximately 10,000.

Appendix B
STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION

CONTENTS

NATIONAL INCOME OR EXPENDITURE:

Page

AGRICULTURE:

INTERNATIONAL STATISTICS:

General Notes

Detail in these tables may not add to totals because of rounding. In addition, because of the formula used for calculating real gross domestic product (GDP), the chained (1992) dollar estimates for the detailed components do not add to the chained-dollar value of GDP or to any intermediate aggregates.

Unless otherwise noted, all dollar figures are in current dollars.

Symbols used:

p Preliminary.

.... Not available (also, not applicable).

Data in these tables reflect revisions made by the source agencies from February 1996 through late January 1997.

TABLE B–1.—*Gross domestic product, 1959–96*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Personal consumption expenditures				Gross private domestic investment						
							Fixed investment					Change in business inventories
								Nonresidential			Residential	
		Total	Durable goods	Nondurable goods	Services	Total	Total	Total	Structures	Producers' durable equipment		
1959	507.2	318.1	42.7	148.5	127.0	78.8	74.6	46.5	18.1	28.3	28.1	4.2
1960	526.6	332.2	43.3	152.9	136.0	78.8	75.5	49.2	19.6	29.7	26.3	3.2
1961	544.8	342.6	41.8	156.6	144.3	77.9	75.0	48.6	19.7	28.9	26.4	2.9
1962	585.2	363.4	46.9	162.8	153.7	87.9	81.8	52.8	20.8	32.1	29.0	6.1
1963	617.4	383.0	51.6	168.2	163.2	93.4	87.7	55.6	21.2	34.4	32.1	5.7
1964	663.0	411.4	56.7	178.7	176.1	101.7	96.7	62.4	23.7	38.7	34.3	5.0
1965	719.1	444.3	63.3	191.6	189.4	118.0	108.3	74.1	28.3	45.8	34.2	9.7
1966	787.8	481.9	68.3	208.8	204.8	130.4	116.7	84.4	31.3	53.0	32.3	13.8
1967	833.6	509.5	70.4	217.1	222.0	128.0	117.6	85.2	31.5	53.7	32.4	10.5
1968	910.6	559.8	80.8	235.7	243.4	139.9	130.8	92.1	33.6	58.5	38.7	9.1
1969	982.2	604.7	85.9	253.2	265.5	155.0	145.5	102.9	37.7	65.2	42.6	9.5
1970	1,035.6	648.1	85.0	272.0	291.1	150.2	148.1	106.7	40.3	66.4	41.4	2.2
1971	1,125.4	702.5	96.9	285.5	320.1	176.0	167.5	111.7	42.7	69.1	55.8	8.5
1972	1,237.3	770.7	110.4	308.0	352.3	205.6	195.7	126.1	47.2	78.9	69.7	9.9
1973	1,382.6	851.6	123.5	343.1	384.9	242.9	225.4	150.0	55.0	95.1	75.3	17.5
1974	1,496.9	931.2	122.3	384.5	424.4	245.6	231.5	165.6	61.2	104.3	66.0	14.1
1975	1,630.6	1,029.1	133.5	420.6	475.0	225.4	231.7	169.0	61.4	107.6	62.7	–6.3
1976	1,819.0	1,148.8	158.9	458.2	531.8	286.6	269.6	187.2	65.9	121.2	82.5	16.9
1977	2,026.9	1,277.1	181.1	496.9	599.0	356.6	333.5	223.2	74.6	148.7	110.3	23.1
1978	2,291.4	1,428.8	201.4	549.9	677.4	430.8	403.6	272.0	91.4	180.6	131.6	27.2
1979	2,557.5	1,593.5	213.9	624.0	755.6	480.9	464.0	323.0	114.9	208.1	141.0	16.9
1980	2,784.2	1,760.4	213.5	695.5	851.4	465.9	473.5	350.3	133.9	216.4	123.2	–7.6
1981	3,115.9	1,941.3	230.5	758.2	952.6	556.2	528.1	405.4	164.6	240.9	122.6	28.2
1982	3,242.1	2,076.8	239.3	786.8	1,050.7	501.1	515.6	409.9	175.0	234.9	105.7	–14.5
1983	3,514.5	2,283.4	279.8	830.3	1,173.3	547.1	552.0	399.4	152.7	246.7	152.5	–4.9
1984	3,902.4	2,492.3	325.1	883.6	1,283.6	715.6	648.1	468.3	176.0	292.3	179.8	67.5
1985	4,180.7	2,704.8	361.1	927.6	1,416.1	715.1	688.9	502.0	193.3	308.7	186.9	26.2
1986	4,422.2	2,892.7	398.7	957.2	1,536.8	722.5	712.9	494.8	175.8	319.0	218.1	9.6
1987	4,692.3	3,094.5	416.7	1,014.0	1,663.8	747.2	722.9	495.4	172.1	323.3	227.6	24.2
1988	5,049.6	3,349.7	451.0	1,081.1	1,817.6	773.9	763.1	530.6	181.3	349.3	232.5	10.9
1989	5,438.7	3,594.8	472.8	1,163.8	1,958.1	829.2	797.5	566.2	192.3	373.9	231.3	31.7
1990	5,743.8	3,839.3	476.5	1,245.3	2,117.5	799.7	791.6	575.9	200.8	375.1	215.7	8.0
1991	5,916.7	3,975.1	455.2	1,277.6	2,242.3	736.2	738.5	547.3	181.7	365.6	191.2	–2.3
1992	6,244.4	4,219.8	488.5	1,321.8	2,409.4	790.4	783.4	557.9	169.2	388.7	225.6	7.0
1993	6,553.0	4,454.1	530.7	1,368.9	2.554.6	871.1	850.5	598.8	171.8	427.0	251.7	20.6
1994	6,935.7	4,700.9	580.9	1,429.7	2,690.3	1,014.4	954.9	667.2	180.2	487.0	287.7	59.5
1995	7,253.8	4,924.9	606.4	1,485.9	2,832.6	1,065.3	1,028.2	738.5	199.7	538.8	289.8	37.0
1990: I	5,660.4	3,759.2	493.3	1,220.7	2,045.3	822.5	813.9	581.2	201.9	379.3	232.7	8.6
II	5,751.0	3,811.8	477.6	1,230.2	2,104.1	835.2	794.0	571.6	202.4	369.2	222.4	41.2
III	5,782.4	3,879.2	473.2	1,256.2	2,149.8	804.9	791.2	580.3	203.5	376.7	210.9	13.8
IV	5,781.5	3,907.0	461.9	1,274.1	2,171.0	736.1	767.5	570.6	195.4	375.1	196.9	–31.4
1991: I	5,822.1	3,910.7	449.0	1,268.3	2,193.5	723.6	739.7	555.4	192.3	363.1	184.3	–16.1
II	5,892.3	3,961.0	452.7	1,279.7	2,228.6	716.2	736.2	550.2	187.6	362.6	185.9	–19.9
III	5,950.0	4,001.6	462.0	1,283.4	2,256.3	743.9	738.6	544.3	176.1	368.2	194.3	5.3
IV	6,002.3	4,027.1	457.3	1,279.0	2,290.7	760.9	739.5	539.2	170.8	368.4	200.3	21.4
1992: I	6,121.8	4,127.6	474.1	1,303.1	2,350.4	755.2	755.4	544.1	171.6	372.5	211.3	–.3
II	6,201.2	4,183.0	481.3	1,308.4	2,393.3	790.8	780.5	556.8	170.4	386.3	223.7	10.2
III	6,271.7	4,238.9	492.5	1,326.3	2,420.1	799.7	788.1	561.0	167.6	393.4	227.1	11.6
IV	6,383.0	4,329.6	506.2	1,349.5	2,473.9	816.1	809.7	569.6	167.1	402.5	240.1	6.4
1993: I	6,442.6	4,367.6	508.3	1,354.1	2,505.2	843.6	823.8	580.3	170.2	410.1	243.5	19.9
II	6,506.2	4,424.8	525.2	1,364.1	2,535.4	855.9	834.3	591.1	169.7	421.3	243.2	21.6
III	6,574.4	4,481.0	536.7	1,371.3	2,572.9	873.8	851.8	599.2	171.4	427.7	252.6	22.0
IV	6,688.6	4,543.1	552.3	1,386.1	2,604.7	911.2	892.3	624.6	175.8	448.8	267.7	18.8
1994: I	6,776.0	4,600.9	562.6	1,399.7	2,638.6	957.6	917.4	638.8	171.8	467.0	278.5	40.2
II	6,890.5	4,666.2	573.1	1,416.6	2,676.5	1,016.5	942.0	653.5	179.1	474.4	288.5	74.5
III	6,993.1	4,738.3	585.3	1,443.4	2,709.6	1,033.6	968.9	678.5	181.0	497.5	290.4	64.7
IV	7,083.2	4,798.2	602.7	1,459.0	2,736.6	1,050.1	991.4	697.9	188.8	509.1	293.5	58.7
1995: I	7,149.8	4,840.6	593.0	1,471.5	2,776.1	1,072.0	1,013.9	723.6	194.5	529.0	290.4	58.1
II	7,204.9	4,910.5	604.0	1,486.7	2,819.8	1,050.3	1,016.3	734.4	197.6	536.8	281.9	34.0
III	7,309.8	4,957.9	615.8	1,491.2	2,850.9	1,074.8	1,036.6	746.3	202.5	543.8	290.3	38.2
IV	7,350.6	4,990.5	612.8	1,494.2	2,883.5	1,064.0	1.046.2	749.7	204.0	545.7	296.5	17.8
1996: I	7,426.8	5,060.5	625.2	1,522.1	2,913.2	1,068.9	1,070.7	769.0	208.4	560.6	301.7	–1.7
II	7,545.1	5,139.4	637.6	1,544.7	2,957.1	1,096.0	1,088.0	773.8	207.4	566.3	314.2	8.0
III	7,616.3	5,165.4	630.5	1,546.5	2,988.5	1,156.2	1,119.6	807.0	213.5	593.5	312.6	36.6

See next page for continuation of table.

TABLE B–1.—*Gross domestic product, 1959–96*—Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government consumption expenditures and gross investment					Final sales of domestic product	Gross domestic purchases [1]	Addendum: Gross national product [2]	Percent change from preceding period	
					Federal								
	Net exports	Exports	Imports	Total	Total	National defense	Nondefense	State and local				Gross domestic product	Gross domestic purchases [1]
1959	–1.7	20.6	22.3	112.0	67.2	55.7	11.5	44.8	503.0	508.9	510.1	....	....
1960	2.4	25.3	22.8	113.2	65.6	54.9	10.8	47.6	523.3	524.1	529.8	3.8	3.0
1961	3.4	26.0	22.7	120.9	69.1	57.7	11.4	51.8	541.9	541.5	548.4	3.5	3.3
1962	2.4	27.4	25.0	131.4	76.5	62.3	14.2	55.0	579.1	582.8	589.4	7.4	7.6
1963	3.3	29.4	26.1	137.7	78.1	62.2	15.9	59.6	611.7	614.1	621.9	5.5	5.4
1964	5.5	33.6	28.1	144.4	79.4	61.3	18.1	65.0	658.0	657.6	668.0	7.4	7.1
1965	3.9	35.4	31.5	153.0	81.8	62.0	19.7	71.2	709.4	715.3	724.5	8.5	8.8
1966	1.9	38.9	37.1	173.6	94.1	73.4	20.7	79.5	774.0	785.9	793.0	9.5	9.9
1967	1.4	41.4	39.9	194.6	106.6	85.5	21.0	88.1	823.1	832.2	839.1	5.8	5.9
1968	–1.3	45.3	46.6	212.1	113.8	92.0	21.8	98.3	901.4	911.8	916.7	9.2	9.6
1969	–1.2	49.3	50.5	223.8	115.8	92.4	23.4	108.0	972.7	983.4	988.4	7.9	7.8
1970	1.2	57.0	55.8	236.1	115.9	90.6	25.3	120.2	1,033.4	1,034.4	1,042.0	5.4	5.2
1971	–3.0	59.3	62.3	249.9	117.1	88.7	28.3	132.8	1,116.9	1,128.4	1,133.1	8.7	9.1
1972	–8.0	66.2	74.2	268.9	125.1	93.2	31.9	143.8	1,227.4	1,245.3	1,246.0	9.9	10.4
1973	.6	91.8	91.2	287.6	128.2	94.7	33.5	159.4	1,365.2	1,382.0	1,395.4	11.7	11.0
1974	–3.1	124.3	127.5	323.2	139.9	101.9	38.0	183.3	1,482.8	1,500.0	1,512.6	8.3	8.5
1975	13.6	136.3	122.7	362.6	154.5	110.9	43.6	208.1	1,636.9	1,617.1	1,643.9	8.9	7.8
1976	–2.3	148.9	151.1	385.9	162.7	116.1	46.6	223.1	1,802.0	1,821.2	1,836.1	11.5	12.6
1977	–23.7	158.8	182.4	416.9	178.4	125.8	52.6	238.5	2,003.8	2,050.5	2,047.5	11.4	12.6
1978	–26.1	186.1	212.3	457.9	194.4	135.6	58.9	263.4	2,264.2	2,317.5	2,313.5	13.0	13.0
1979	–24.0	228.7	252.7	507.1	215.0	151.2	63.8	292.0	2,540.6	2,581.5	2,590.4	11.6	11.4
1980	–14.9	278.9	293.8	572.8	248.4	174.2	74.2	324.4	2,791.9	2,799.1	2,819.5	8.9	8.4
1981	–15.0	302.8	317.8	633.4	284.1	202.0	82.2	349.2	3,087.8	3,130.9	3,150.6	11.9	11.9
1982	–20.5	282.6	303.2	684.8	313.2	230.9	82.3	371.6	3,256.6	3,262.6	3,273.2	4.1	4.2
1983	–51.7	277.0	328.6	735.7	344.5	255.0	89.4	391.2	3,519.4	3,566.2	3,546.5	8.4	9.3
1984	–102.0	303.1	405.1	796.6	372.6	282.7	89.9	424.0	3,835.0	4,004.5	3,933.5	11.0	12.3
1985	–114.2	303.0	417.2	875.0	410.1	312.4	97.7	464.9	4,154.5	4,294.9	4,201.0	7.1	7.3
1986	–131.5	320.7	452.2	938.5	435.2	332.4	102.9	503.3	4,412.6	4,553.7	4,435.1	5.8	6.0
1987	–142.1	365.7	507.9	992.8	455.7	350.4	105.3	537.2	4,668.1	4,834.5	4,701.3	6.1	6.2
1988	–106.1	447.2	553.2	1,032.0	457.3	354.0	103.3	574.7	5,038.7	5,155.6	5,062.6	7.6	6.6
1989	–80.4	509.3	589.7	1,095.1	477.2	360.6	116.7	617.9	5,407.0	5,519.1	5,452.8	7.7	7.0
1990	–71.3	557.3	628.6	1,176.1	503.6	373.1	130.4	672.6	5,735.8	5,815.1	5,764.9	5.6	5.4
1991	–20.5	601.8	622.3	1,225.9	522.6	383.5	139.1	703.4	5,919.0	5,937.2	5,932.4	3.0	2.1
1992	–29.5	639.4	669.0	1,263.8	528.0	375.8	152.2	735.8	6,237.4	6,274.0	6,255.5	5.5	5.7
1993	–62.7	657.8	720.5	1,290.4	522.6	362.7	159.9	767.8	6,532.4	6,615.7	6,563.5	4.9	5.4
1994	–94.4	719.1	813.5	1,314.7	516.4	352.0	164.3	798.4	6,876.2	7,030.1	6,931.9	5.8	6.3
1995	–94.7	807.4	902.0	1,358.3	516.6	345.5	171.0	841.7	7,216.7	7,348.4	7,246.7	4.6	4.5
1990: I	–74.3	541.6	615.9	1,153.0	496.4	369.7	126.7	656.6	5,651.8	5,734.7	5,681.4	9.1	8.8
II	–60.3	554.8	615.1	1,164.3	500.1	370.6	129.5	664.2	5,709.8	5,811.3	5,767.8	6.6	5.5
III	–78.5	555.5	634.1	1,176.9	501.2	368.9	132.3	675.7	5,768.7	5,861.0	5,796.8	2.2	3.5
IV	–72.0	577.3	649.2	1,210.4	516.7	383.3	133.3	693.7	5,812.9	5,853.5	5,813.6	–.1	–.5
1991: I	–32.9	577.4	610.3	1,220.6	525.6	389.7	136.0	695.0	5,838.2	5,855.0	5,849.0	2.8	.1
II	–12.3	602.7	615.0	1,227.4	528.2	389.3	138.9	699.2	5,912.2	5,904.6	5,904.5	4.9	3.4
III	–22.0	602.6	624.5	1,226.5	520.9	382.1	138.8	705.5	5,944.7	5,972.0	5,959.4	4.0	4.6
IV	–14.8	624.4	639.3	1,229.2	515.5	373.0	142.6	713.6	5,980.9	6,017.1	6,016.6	3.6	3.1
1992: I	–8.9	632.4	641.3	1,247.9	521.8	372.8	149.0	726.1	6,122.1	6,130.7	6,138.3	8.2	7.8
II	–29.0	635.9	664.9	1,256.4	523.2	374.1	149.1	733.2	6,191.0	6,230.2	6,212.2	5.3	6.7
III	–37.6	640.2	677.8	1,270.7	532.0	380.9	151.1	738.7	6,260.1	6,309.3	6,281.1	4.6	5.2
IV	–42.7	649.1	691.8	1,280.0	535.0	375.3	159.7	745.1	6,376.6	6,425.7	6,390.5	7.3	7.6
1993: I	–47.9	646.9	694.8	1,279.3	525.5	365.7	159.8	753.8	6,422.8	6,490.5	6,458.6	3.8	4.1
II	–59.6	660.4	720.0	1,285.1	520.1	362.7	157.4	765.0	6,484.6	6,565.8	6,516.5	4.0	4.7
III	–74.5	645.3	719.8	1,294.1	521.3	361.2	160.1	772.7	6,552.3	6,648.8	6,587.1	4.3	5.2
IV	–68.8	678.7	747.5	1,303.2	523.5	361.3	162.2	779.7	6,669.8	6,757.4	6,691.9	7.1	6.7
1994: I	–78.8	678.9	757.6	1,296.4	511.3	346.7	164.6	785.0	6,735.9	6,854.8	6,781.0	5.3	5.9
II	–93.0	707.4	800.4	1,300.8	509.4	349.3	160.0	791.4	6,816.0	6,983.5	6,888.3	6.9	7.7
III	–107.0	729.2	836.1	1,328.2	523.8	362.3	161.5	804.4	6,928.5	7,100.1	6,987.0	6.1	6.8
IV	–98.7	761.0	859.6	1,333.5	520.9	349.7	171.2	812.6	7,024.6	7,181.9	7,071.4	5.3	4.7
1995: I	–108.7	776.1	884.8	1,345.8	519.7	347.6	172.1	826.1	7,091.7	7,258.4	7,146.8	3.8	4.3
II	–115.3	797.3	912.6	1,359.4	522.0	351.7	170.3	837.3	7,170.9	7,320.2	7,202.4	3.1	3.4
III	–87.6	819.0	906.6	1,364.6	516.8	345.7	171.1	847.7	7,271.5	7,397.3	7,293.4	6.0	4.3
IV	–67.2	837.0	904.2	1,363.4	507.7	337.1	170.6	855.7	7,332.8	7,417.8	7,344.3	2.3	1.1
1996: I	–86.3	839.5	925.8	1,383.7	518.6	343.9	174.7	865.1	7,428.6	7,513.2	7,426.6	4.2	5.2
II	–99.2	850.0	949.2	1,408.8	529.6	353.7	175.8	879.2	7,537.1	7,644.3	7,537.5	6.5	7.2
III	–120.2	844.3	964.5	1,414.8	525.5	348.8	176.7	889.3	7,579.6	7,736.5	7,598.9	3.8	4.9

[1] Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.
[2] GDP plus net receipts of factor income from rest of the world.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–2.—*Real gross domestic product, 1959–96*

[Billions of chained (1992) dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Personal consumption expenditures				Gross private domestic investment						
							Fixed investment					Change in business inventories
								Nonresidential				
		Total	Durable goods	Nondurable goods	Services	Total	Total	Total	Structures	Producers' durable equipment	Residential	
1959	2,212.3	1,394.6	103.1	606.3	687.4	274.2	267.1	147.7	85.8	71.4	131.1	13.5
1960	2,261.7	1,432.6	105.2	615.4	717.4	270.5	269.2	155.9	92.6	74.3	121.8	10.6
1961	2,309.8	1,461.5	101.2	626.7	746.5	265.2	267.9	154.5	93.9	72.5	122.2	8.9
1962	2,449.1	1,533.8	113.0	646.5	783.4	298.5	292.0	168.0	98.1	81.0	133.9	20.0
1963	2,554.0	1,596.6	124.0	660.0	818.7	318.1	313.7	176.4	99.2	87.1	149.6	18.1
1964	2,702.9	1,692.3	135.5	692.5	868.4	344.6	343.7	197.1	109.5	98.1	158.3	15.6
1965	2,874.8	1,799.1	152.6	729.3	914.6	392.5	378.5	231.3	126.9	115.9	153.7	30.2
1966	3,060.2	1,902.0	165.5	769.2	961.0	423.5	399.1	259.4	135.6	133.8	140.0	42.3
1967	3,140.2	1,958.6	168.1	781.4	1,007.6	406.9	391.0	255.3	132.2	132.5	135.6	32.1
1968	3,288.6	2,070.2	186.6	816.9	1,059.6	429.8	418.1	266.4	134.1	140.5	154.0	26.9
1969	3,388.0	2,147.5	193.3	838.6	1,110.8	454.4	442.9	285.6	141.3	152.2	158.6	27.2
1970	3,388.2	2,197.8	187.0	859.1	1,155.4	419.5	432.1	282.8	141.7	149.5	149.1	5.7
1971	3,500.1	2,279.5	205.7	874.5	1,197.9	467.4	464.9	282.4	139.4	150.7	190.0	22.7
1972	3,690.3	2,415.9	231.9	912.9	1,262.5	522.1	520.3	307.7	143.7	169.8	223.7	25.2
1973	3,902.3	2,532.6	255.8	942.9	1,319.4	583.5	567.5	352.5	155.4	201.2	222.3	39.0
1974	3,888.2	2,514.7	238.2	924.5	1,351.2	544.4	530.2	354.4	152.2	205.4	176.4	24.0
1975	3,865.1	2,570.0	238.1	938.3	1,398.3	440.5	471.0	317.3	136.2	183.9	153.5	–11.0
1976	4,081.1	2,714.3	268.5	984.8	1,457.1	536.6	517.6	332.6	139.6	195.2	189.7	29.0
1977	4,279.3	2,829.8	293.4	1,010.4	1,518.2	627.1	593.7	371.8	146.4	225.6	229.8	38.0
1978	4,493.7	2,951.6	308.8	1,045.7	1,589.3	686.0	660.8	422.6	162.3	259.6	245.0	42.3
1979	4,624.0	3,020.2	307.3	1,069.7	1,639.8	704.5	695.6	463.3	182.7	280.7	236.0	23.1
1980	4,611.9	3,009.7	282.6	1,065.1	1,670.7	626.2	648.4	461.1	195.0	268.2	186.1	–10.0
1981	4,724.9	3,046.4	285.8	1,074.3	1,696.1	689.7	660.6	485.7	210.4	278.2	171.2	33.1
1982	4,623.6	3,081.5	285.5	1,080.6	1,728.2	590.4	610.4	464.3	207.2	260.3	140.1	–15.6
1983	4,810.0	3,240.6	327.4	1,112.4	1,809.0	647.8	654.2	456.4	185.7	272.4	197.6	–5.9
1984	5,138.2	3,407.6	374.9	1,151.8	1,883.0	831.6	762.4	535.4	212.2	324.6	226.4	74.8
1985	5,329.5	3,566.5	411.4	1,178.3	1,977.3	829.2	799.3	568.4	227.8	342.4	229.5	29.8
1986	5,489.9	3,708.7	448.4	1,215.9	2,041.4	813.8	805.0	548.5	203.3	345.9	257.0	10.9
1987	5,648.4	3,822.3	454.9	1,239.3	2,126.9	820.5	799.4	542.4	195.9	346.9	257.6	26.2
1988	5,862.9	3,972.7	483.5	1,274.4	2,212.4	826.0	818.3	566.0	196.8	369.2	252.5	11.6
1989	6,060.4	4,064.6	496.2	1,303.5	2,262.3	861.9	832.0	588.8	201.2	387.6	243.2	33.3
1990	6,138.7	4,132.2	493.3	1,316.1	2,321.3	817.3	805.8	585.2	203.3	381.9	220.6	10.4
1991	6,079.0	4,105.8	462.0	1,302.9	2,341.0	737.7	741.3	547.7	181.6	366.2	193.4	–3.0
1992	6,244.4	4,219.8	488.5	1,321.8	2,409.4	790.4	783.4	557.9	169.2	388.7	225.6	7.3
1993	6,386.4	4,339.5	524.1	1,348.8	2,466.7	857.3	836.4	593.6	166.3	427.6	242.7	19.1
1994	6,608.7	4,473.2	562.0	1,390.5	2,521.4	979.6	921.1	652.1	168.8	484.1	268.9	58.9
1995	6,742.9	4,577.8	579.8	1,421.9	2,577.0	1,010.2	975.9	714.3	181.1	534.5	262.8	33.1
1990: I	6,154.1	4,128.9	511.2	1,319.2	2,295.7	844.1	834.7	595.3	206.5	388.8	239.4	11.0
II	6,174.4	4,134.7	495.4	1,316.9	2,321.1	856.1	811.2	583.4	205.5	377.8	227.8	43.8
III	6,145.2	4,148.5	490.4	1,319.8	2,337.3	820.8	803.1	588.1	205.2	383.0	214.9	14.9
IV	6,081.0	4,116.4	476.3	1,308.4	2,331.2	748.1	774.4	573.9	196.0	377.9	200.3	–28.2
1991: I	6,047.9	4,084.5	458.6	1,300.6	2,325.3	725.5	742.6	555.1	192.2	362.9	187.4	–17.5
II	6,074.1	4,110.0	460.5	1,308.0	2,341.5	718.0	739.4	550.9	187.2	363.8	188.3	–20.8
III	6,089.3	4,119.5	467.3	1,307.1	2,345.0	744.9	741.0	545.3	175.5	369.8	195.6	4.9
IV	6,104.4	4,109.1	461.5	1,295.7	2,352.0	762.4	742.0	539.5	171.4	368.1	202.4	21.4
1992: I	6,175.3	4,173.8	476.1	1,314.4	2,383.2	757.9	758.3	544.4	172.7	371.7	213.9	–.1
II	6,214.2	4,196.4	481.1	1,312.0	2,403.2	792.8	782.4	557.5	171.0	386.4	224.9	11.3
III	6,260.9	4,226.7	491.9	1,321.1	2,413.6	798.6	787.3	560.6	167.4	393.1	226.7	12.1
IV	6,327.3	4,282.3	505.0	1,339.8	2,437.6	812.4	805.8	569.1	165.6	403.5	236.7	5.8
1993: I	6,326.4	4,289.7	506.0	1,336.9	2,446.8	834.8	815.4	577.5	167.0	410.5	237.9	18.5
II	6,356.5	4,318.8	519.6	1,344.5	2,454.9	843.2	821.1	586.4	164.8	421.7	234.8	20.8
III	6,393.4	4,359.5	528.9	1,354.0	2,476.7	857.6	835.4	593.1	165.1	428.2	242.2	19.5
IV	6,469.1	4,390.0	541.9	1,359.9	2,488.5	893.5	873.5	617.6	168.2	449.8	255.8	17.4
1994: I	6,508.5	4,420.5	549.6	1,372.9	2,498.5	933.6	892.4	628.5	163.0	466.4	263.6	40.5
II	6,587.6	4,458.7	555.4	1,383.9	2,519.9	984.8	911.4	639.5	169.0	471.1	271.6	74.5
III	6,644.9	4,489.4	563.1	1,397.0	2,530.0	994.2	930.8	660.5	169.1	492.5	270.3	64.5
IV	6,693.9	4,524.0	579.8	1,408.1	2,537.3	1,005.9	949.7	679.7	174.3	506.5	270.3	56.1
1995: I	6,701.0	4,534.8	566.5	1,416.6	2,552.5	1,023.7	969.5	704.4	178.5	527.2	265.9	54.5
II	6,713.5	4,569.9	576.2	1,422.9	2,571.6	996.8	965.7	710.5	180.0	531.7	256.5	30.5
III	6,776.4	4,597.3	589.1	1,424.7	2,584.6	1,015.2	980.0	719.0	182.8	537.4	262.2	33.0
IV	6,780.7	4,609.4	587.5	1,423.2	2,599.3	1,004.9	988.5	723.3	183.2	541.4	266.3	14.6
1996: I	6,814.3	4,649.1	599.2	1,436.1	2,614.7	1,011.9	1,013.3	743.5	186.6	558.3	271.1	–3.0
II	6,892.6	4,687.6	615.6	1,440.9	2,632.3	1,038.6	1,031.1	750.5	184.9	567.5	281.5	7.1
III	6,928.4	4,693.5	611.6	1,442.2	2,640.6	1,093.4	1,057.5	781.4	188.6	595.0	277.8	34.5

See next page for continuation of table.

Table B–2.—*Real gross domestic product, 1959–96*—Continued

[Billions of chained (1992) dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government consumption expenditures and gross investment					Final sales of domestic product	Gross domestic purchases [1]	Addendum: Gross national product [2]	Percent change from preceding period	
					Federal								
	Net exports	Exports	Imports	Total	Total	National defense	Nondefense	State and local				Gross domestic product	Gross domestic purchases [1]
1959	–34.8	71.9	106.6	618.5	360.5	307.6	58.8	256.8	2,206.9	2,270.4	2,224.3	....	....
1960	–21.3	86.8	108.1	617.2	349.4	301.3	54.1	267.2	2,264.2	2.303.1	2,274.8	2.2	1.4
1961	–19.1	88.3	107.3	647.2	363.0	313.8	55.5	283.8	2,318.0	2,349.7	2,324.6	2.1	2.0
1962	–26.5	93.0	119.5	686.0	393.2	332.4	66.8	292.1	2,445.4	2,497.4	2,465.9	6.0	6.3
1963	–22.7	100.0	122.7	701.9	391.8	324.0	72.9	309.7	2,552.4	2,598.9	2,572.0	4.3	4.1
1964	–15.9	113.3	129.2	715.9	385.2	309.9	79.2	330.9	2,705.1	2,740.5	2,722.3	5.8	5.4
1965	–27.4	115.6	143.0	737.6	385.2	303.8	84.6	353.2	2,860.4	2,925.9	2,895.2	6.4	6.8
1966	–40.9	123.4	164.2	804.6	429.1	348.2	85.7	375.9	3,033.5	3,124.9	3,078.9	6.4	6.8
1967	–50.1	126.1	176.2	865.6	471.7	393.5	84.7	394.2	3,125.1	3,214.2	3,159.4	2.6	2.9
1968	–67.2	135.3	202.5	892.4	476.3	400.9	82.5	416.5	3,278.0	3,377.4	3,309.2	4.7	5.1
1969	–71.3	142.7	214.0	887.5	459.9	381.6	84.3	428.0	3,377.2	3,480.1	3,407.8	3.0	3.0
1970	–65.0	158.1	223.1	866.8	427.2	349.0	83.0	440.0	3,406.5	3,469.1	3,407.7	.0	–.3
1971	–75.8	159.2	235.0	851.0	397.0	313.7	86.3	454.4	3,499.8	3,592.5	3,522.2	3.3	3.6
1972	–88.9	172.0	261.0	854.1	390.2	300.3	91.9	464.5	3,689.5	3,794.0	3,714.3	5.4	5.6
1973	–63.0	209.6	272.6	848.4	371.1	281.2	91.5	478.5	3,883.9	3,975.2	3,936.0	5.7	4.8
1974	–35.6	229.8	265.3	862.9	368.8	273.5	96.4	495.6	3,873.4	3,925.7	3,927,1	–.4	–1.2
1975	–7.2	228.2	235.4	876.3	367.9	269.7	99.1	510.0	3,906.4	3,867.2	3,894.5	–.6	–1.5
1976	–39.9	241.6	281.5	876.8	364.3	264.7	100.4	514.3	4,061.7	4,122.9	4,116.9	5.6	6.6
1977	–64.2	247.4	311.6	884.7	370.1	266.4	104.3	516.4	4,240.8	4,351.5	4,320.2	4.9	5.5
1978	–65.6	273.1	338.6	910.6	377.7	266.7	111.4	534.7	4,464.4	4,565.7	4,534.4	5.0	4.9
1979	–45.3	299.0	344.3	924.9	383.3	271.0	112.7	543.5	4,614.4	4,668.2	4,680.8	2.9	2.2
1980	10.1	331.4	321.3	941.4	399.3	280.7	119.0	543.6	4,641.9	4,578.6	4,667.7	–.3	–1.9
1981	5.6	335.3	329.7	947.7	415.9	296.0	120.4	532.8	4,691.6	4,697.3	4,774.1	2.5	2.6
1982	–14.1	311.4	325.5	960.1	429.4	316.5	113.3	531.4	4,651.2	4,622.7	4,665.4	–2.1	–1.6
1983	–63.3	303.3	366.6	987.3	452.7	334.6	118.5	534.9	4,821.2	4,870.7	4,851.2	4.0	5.4
1984	–127.3	328.4	455.7	1,018.4	463.7	348.1	115.9	555.0	5,061.6	5,274.4	5,176.1	6.8	8.3
1985	–147.9	337.3	485.2	1,080.1	495.6	374.1	121.8	584.7	5,296.9	5,488.8	5,352.7	3.7	4.1
1986	–163.9	362.2	526.1	1,135.0	518.4	393.4	125.2	616.9	5,480.9	5,666.1	5,503.4	3.0	3.2
1987	–156.2	402.0	558.2	1,165.9	534.4	409.2	125.3	631.8	5.626.0	5,815.7	5,657.2	2.9	2.6
1988	–114.4	465.8	580.2	1,180.9	524.6	405.5	119.1	656.6	5,855.1	5,983.9	5,876.2	3.8	2.9
1989	–82.7	520.2	603.0	1,213.9	531.5	401.6	130.1	682.6	6,028.7	6,146.1	6,074.0	3.4	2.7
1990	–61.9	564.4	626.3	1,250.4	541.9	401.5	140.5	708.6	6,126.7	6,202.1	6,159.4	1.3	.9
1991	–22.3	599.9	622.2	1,258.0	539.4	397.5	142.0	718.7	6,082.6	6,101.1	6,094.4	–1.0	–1.6
1992	–29.5	639.4	669.0	1,263.8	528.0	375.8	152.2	735.8	6,237.4	6,274.0	6,255.5	2.7	2.8
1993	–72.0	658.2	730.2	1,261.0	509.2	355.4	153.8	751.8	6,365.5	6,457.6	6,397.1	2.3	2.9
1994	–105.7	712.0	817.6	1,260.0	489.8	337.0	152.6	770.5	6,550.7	6,711.8	6,606.0	3.5	3.9
1995	–107.6	775.4	883.0	1,260.2	472.3	319.6	152.3	788.6	6,708.9	6,847.1	6,737.1	2.0	2.0
1990: I	–67.1	555.2	622.3	1,246.5	542.9	404.1	138.9	703.8	6,144.6	6,222.9	6,174.3	4.1	3.2
II	–66.7	566.8	633.5	1,248.2	543.0	402.8	140.4	705.4	6,127.5	6,242.9	6,190.8	1.3	1.3
III	–71.2	561.8	633.0	1,246.8	538.2	396.1	142.2	708.7	6,126.6	6,218.4	6,158.8	–1.9	–1.6
IV	–42.5	573.9	616.4	1,259.9	543.5	403.1	140.5	716.5	6,108.1	6,124.3	6,113.4	–4.1	–5.9
1991: I	–24.3	572.3	596.6	1,262.6	547.3	408.4	139.0	715.5	6,065.4	6,072.2	6,074.8	–2.2	–3.4
II	–17.1	600.3	617.4	1,263.8	547.1	405.0	142.2	716.8	6,095.9	6,091.1	6,085.8	1.7	1.2
III	–29.8	603.6	633.4	1,255.1	536.3	395.0	141.4	718.8	6,085.4	6,119.1	6,098.3	1.0	1.9
IV	–17.9	623.5	641.4	1,250.7	526.9	381.7	145.3	723.8	6,083.8	6,122.3	6,118.7	1.0	.2
1992: I	–14.8	633.0	647.8	1,258.5	525.1	374.2	150.8	733.5	6,175.8	6,190.0	6,191.6	4.7	4.5
II	–32.5	635.8	668.3	1,257.5	523.3	373.3	150.0	734.2	6,203.8	6,246.8	6,225.1	2.5	3.7
III	–30.8	639.7	670.5	1,266.5	529.6	378.7	150.9	736.9	6,249.5	6,291.9	6,270.4	3.0	2.9
IV	–40.0	649.1	689.1	1,272.5	534.0	376.8	157.1	738.5	6,320.7	6,367.3	6,334.8	4.3	4.9
1993: I	–56.0	647.1	703.1	1,257.7	516.1	361.6	154.4	741.6	6,307.1	6,382.1	6,342.5	–.1	.9
II	–64.4	660.0	724.4	1,258.4	509.7	356.9	152.7	748.8	6,334.5	6,420.4	6,366.9	1.9	2.4
III	–86.2	645.5	731.7	1,261.6	505.9	351.6	154.2	755.7	6,371.3	6,478.6	6,406.3	2.3	3.7
IV	–81.5	680.3	761.8	1,266.2	505.0	351.2	153.7	761.3	6,449.2	6,549.3	6,472.5	4.8	4.4
1994: I	–99.3	677.6	777.0	1,252.4	489.9	334.8	154.9	762.7	6,467.7	6,605.9	6,514.0	2.5	3.5
II	–107.3	703.1	810.4	1,249.8	483.3	335.5	147.8	766.8	6,514.9	6,692.3	6,586.2	4.9	5.3
III	–111.7	719.6	831.3	1,271.2	496.7	346.2	150.4	774.7	6,582.1	6,753.7	6,640.0	3.5	3.7
IV	–104.3	747.6	851.9	1,266.6	489.2	331.3	157.5	777.7	6,638.1	6,795.3	6,683.5	3.0	2.5
1995: I	–122.5	752.3	874.9	1,262.7	481.0	325.0	155.6	782.2	6,647.4	6,819.8	6,699.1	.4	1.4
II	–121.4	763.2	884.6	1,265.1	479.4	325.5	153.5	786.3	6,682.4	6,830.9	6,711.9	.7	.7
III	–101.6	783.0	884.5	1,263.4	472.5	319.1	153.1	791.5	6,741.4	6,874.8	6,762.0	3.8	2.6
IV	–84.9	803.1	888.0	1,249.6	456.2	308.8	147.0	794.4	6,764.2	6,862.9	6,775.6	.3	–.7
1996: I	–104.0	806.7	910.7	1,254.7	462.9	311.9	150.6	792.6	6,815.2	6,914.6	6,814.9	2.0	3.0
II	–114.7	817.9	932.6	1,278.2	473.4	319.4	153.7	805.5	6,884.7	7,003.0	6,886.5	4.7	5.2
III	–137.4	816.1	953.5	1,276.1	469.3	314.9	153.9	807.7	6,892.7	7,060.7	6,913.7	2.1	3.3

[1] Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.
[2] GDP plus net receipts of factor income from rest of the world.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–3.—*Chain-type price indexes for gross domestic product, 1959–96*

[Index numbers, 1992=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross domestic product	Personal consumption expenditures				Gross private domestic investment					
		Total	Durable goods	Nondurable goods	Services	Total	Fixed investment				
							Total	Nonresidential			Residential
								Total	Structures	Producers' durable equipment	
1959	23.0	22.8	41.4	24.5	18.5	29.6	27.9	31.5	21.2	39.7	21.4
1960	23.3	23.2	41.2	24.8	19.0	29.7	28.1	31.6	21.1	40.0	21.6
1961	23.6	23.4	41.3	25.0	19.3	29.7	28.0	31.5	21.0	39.9	21.6
1962	23.9	23.7	41.5	25.2	19.6	29.7	28.0	31.5	21.2	39.7	21.6
1963	24.2	24.0	41.6	25.5	19.9	29.6	28.0	31.5	21.4	39.5	21.5
1964	24.6	24.3	41.8	25.8	20.3	29.8	28.1	31.7	21.7	39.5	21.6
1965	25.0	24.7	41.4	26.3	20.7	30.2	28.6	32.1	22.3	39.6	22.3
1966	25.7	25.3	41.3	27.1	21.3	30.8	29.2	32.5	23.1	39.7	23.1
1967	26.6	26.0	41.9	27.8	22.0	31.6	30.1	33.4	23.8	40.6	23.9
1968	27.7	27.0	43.3	28.9	23.0	32.8	31.3	34.6	25.0	41.7	25.1
1969	29.0	28.2	44.5	30.2	23.9	34.4	32.9	36.0	26.7	42.9	26.9
1970	30.6	29.5	45.4	31.7	25.2	35.8	34.3	37.8	28.4	44.5	27.7
1971	32.1	30.8	47.1	32.6	26.7	37.6	36.0	39.6	30.6	45.9	29.4
1972	33.5	31.9	47.6	33.7	27.9	39.3	37.6	41.0	32.8	46.5	31.1
1973	35.4	33.6	48.3	36.4	29.2	41.3	39.7	42.6	35.4	47.3	33.9
1974	38.5	37.0	51.3	41.6	31.4	45.3	43.7	46.8	40.2	50.9	37.4
1975	42.2	40.0	56.0	44.8	34.0	51.0	49.2	53.3	45.0	58.6	40.9
1976	44.6	42.3	59.2	46.5	36.5	53.8	52.1	56.3	47.2	62.2	43.5
1977	47.5	45.1	61.7	49.2	39.5	57.5	56.2	60.0	50.9	65.9	48.0
1978	50.9	48.4	65.2	52.6	42.6	62.4	61.1	64.4	56.3	69.6	53.7
1979	55.3	52.8	69.6	58.3	46.1	68.0	66.7	69.7	62.9	74.1	59.7
1980	60.4	58.5	75.6	65.3	51.0	74.5	73.0	76.0	68.7	80.7	66.2
1981	66.1	63.7	80.6	70.6	56.2	81.4	79.9	83.5	78.2	86.6	71.6
1982	70.2	67.4	83.8	72.8	60.8	85.6	84.5	88.3	84.4	90.2	75.5
1983	73.2	70.5	85.5	74.6	64.9	85.4	84.4	87.5	82.2	90.6	77.2
1984	75.9	73.1	86.7	76.7	68.2	86.0	85.0	87.5	82.9	90.0	79.4
1985	78.6	75.8	87.8	78.7	71.6	87.0	86.2	88.3	84.9	90.1	81.5
1986	80.6	78.0	88.9	78.7	75.3	89.0	88.6	90.2	86.5	92.2	84.9
1987	83.1	81.0	91.6	81.8	78.2	91.0	90.4	91.3	87.9	93.2	88.3
1988	86.1	84.3	93.3	84.8	82.2	93.5	93.2	93.7	92.1	94.6	92.1
1989	89.7	88.4	95.3	89.3	86.6	96.1	95.9	96.2	95.6	96.4	95.1
1990	93.6	92.9	96.6	94.6	91.2	98.4	98.2	98.4	98.8	98.2	97.8
1991	97.3	96.8	98.5	98.1	95.8	99.7	99.6	99.9	100.1	99.8	98.8
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	102.6	102.6	101.3	101.5	103.6	101.7	101.7	100.9	103.3	99.9	103.7
1994	105.0	105.1	103.4	102.8	106.7	103.6	103.7	102.3	106.7	100.6	107.0
1995	107.6	107.6	104.6	104.5	109.9	105.4	105.4	103.4	110.2	100.8	110.3
1990: I	92.0	91.0	96.5	92.6	89.1	97.6	97.5	97.6	97.8	97.5	97.2
II	93.2	92.2	96.4	93.4	90.7	98.0	97.9	98.0	98.5	97.7	97.6
III	94.2	93.5	96.5	95.2	92.0	98.6	98.5	98.7	99.2	98.4	98.1
IV	95.1	94.9	96.9	97.4	93.1	99.3	99.1	99.4	99.7	99.3	98.3
1991: I	96.3	95.7	97.9	97.5	94.3	99.7	99.6	100.1	100.1	100.1	98.4
II	97.0	96.4	98.4	97.8	95.2	99.7	99.6	99.9	100.2	99.8	98.7
III	97.7	97.1	98.8	98.2	96.2	99.7	99.7	99.8	100.4	99.5	99.3
IV	98.3	98.0	99.1	98.7	97.4	99.7	99.6	99.9	99.7	99.9	99.0
1992: I	99.1	98.9	99.6	99.2	98.6	99.6	99.6	99.9	99.3	100.2	98.8
II	99.8	99.7	100.1	99.7	99.6	99.8	99.8	99.9	99.7	100.0	99.5
III	100.2	100.3	100.1	100.4	100.3	100.1	100.1	100.1	100.1	100.1	100.2
IV	100.9	101.1	100.2	100.7	101.5	100.5	100.5	100.1	100.9	99.8	101.5
1993: I	101.8	101.8	100.5	101.3	102.4	101.0	101.0	100.5	101.9	99.9	102.3
II	102.4	102.5	101.1	101.5	103.3	101.6	101.6	100.8	103.0	99.9	103.6
III	102.8	102.8	101.5	101.3	103.9	101.9	102.0	101.0	103.8	99.9	104.3
IV	103.4	103.5	101.9	101.9	104.7	102.1	102.2	101.1	104.6	99.8	104.7
1994: I	104.1	104.1	102.4	102.0	105.6	102.8	102.8	101.6	105.5	100.1	105.7
II	104.6	104.7	103.2	102.4	106.2	103.3	103.4	102.2	106.0	100.7	106.2
III	105.2	105.5	104.0	103.3	107.1	104.0	104.1	102.8	107.1	101.1	107.4
IV	105.8	106.1	103.9	103.6	107.9	104.3	104.4	102.7	108.4	100.5	108.6
1995: I	106.7	106.7	104.7	103.9	108.8	104.6	104.6	102.7	109.0	100.3	109.2
II	107.3	107.5	104.8	104.5	109.7	105.3	105.2	103.4	109.8	100.9	109.9
III	107.9	107.8	104.5	104.7	110.3	105.8	105.8	103.8	110.8	101.2	110.7
IV	108.4	108.3	104.3	105.0	110.9	105.9	105.9	103.7	111.3	100.9	111.3
1996: I	109.0	108.9	104.6	106.0	111.5	105.8	105.9	103.7	111.7	100.7	111.3
II	109.6	109.8	104.1	107.3	112.4	105.8	106.0	103.7	112.2	100.6	111.7
III	110.2	110.2	104.0	107.3	113.2	106.4	106.6	104.2	113.2	100.9	112.6

See next page for continuation of table.

TABLE B–3.—*Chain-type price indexes for gross domestic product, 1959–96*—Continued

[Index numbers, 1992=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Exports and imports of goods and services: Exports	Exports and imports of goods and services: Imports	Government consumption expenditures and gross investment: Total	Government: Federal: Total	Government: Federal: National defense	Government: Federal: Nondefense	Government: State and local	Final sales of domestic product	Gross domestic purchases [1]: Total	Gross domestic purchases [1]: Less food and energy	Gross national product	Percent change [2]: Gross domestic product	Percent change [2]: Gross domestic purchases: Total	Percent change [2]: Gross domestic purchases: Less food and energy
1959	28.7	20.9	18.1	18.6	18.1	19.5	17.4	22.8	22.5	....	23.0	....	....	....
1960	29.1	21.1	18.3	18.8	18.2	19.8	17.8	23.1	22.8	....	23.4	1.4	1.4	....
1961	29.5	21.1	18.7	19.0	18.4	20.5	18.2	23.4	23.1	....	23.6	1.2	1.1	....
1962	29.5	20.9	19.1	19.4	18.7	21.1	18.8	23.7	23.4	....	23.9	1.3	1.2	....
1963	29.4	21.3	19.6	19.9	19.2	21.7	19.3	24.0	23.7	....	24.2	1.2	1.3	....
1964	29.6	21.7	20.2	20.6	19.8	22.8	19.6	24.3	24.0	....	24.6	1.5	1.5	....
1965	30.6	22.1	20.7	21.2	20.4	23.2	20.2	24.8	24.5	....	25.0	1.9	1.8	....
1966	31.6	22.6	21.6	21.9	21.1	24.0	21.1	25.5	25.1	....	25.8	2.8	2.8	....
1967	32.8	22.7	22.5	22.6	21.7	24.7	22.3	26.3	25.9	....	26.6	3.2	3.0	....
1968	33.5	23.0	23.7	23.8	22.9	26.3	23.6	27.5	27.0	....	27.7	4.4	4.3	....
1969	34.5	23.6	25.2	25.1	24.2	27.7	25.2	28.8	28.3	....	29.0	4.7	4.7	....
1970	36.0	25.0	27.2	27.1	25.9	30.3	27.3	30.3	29.8	....	30.6	5.3	5.4	....
1971	37.3	26.5	29.3	29.4	28.2	32.7	29.2	31.9	31.4	....	32.2	5.2	5.3	....
1972	38.5	28.4	31.5	32.0	31.0	34.5	31.0	33.3	32.8	....	33.5	4.2	4.5	....
1973	43.8	33.4	33.9	34.5	33.7	36.5	33.3	35.1	34.7	....	35.4	5.6	5.8	....
1974	54.1	48.0	37.4	37.9	37.2	39.3	37.0	38.3	38.2	....	38.5	8.9	10.2	....
1975	59.7	52.1	41.4	41.9	41.1	43.8	40.8	41.9	41.8	....	42.2	9.4	9.3	....
1976	61.6	53.7	44.0	44.6	43.9	46.3	43.4	44.4	44.2	....	44.6	5.8	5.8	....
1977	64.2	58.5	47.1	48.2	47.2	50.3	46.2	47.2	47.2	....	47.5	6.4	6.8	....
1978	68.2	62.7	50.3	51.5	50.8	52.8	49.3	50.7	50.7	....	51.0	7.3	7.4	....
1979	76.5	73.4	54.8	56.1	55.8	56.6	53.7	55.1	55.3	....	55.3	8.5	9.0	....
1980	84.2	91.4	60.9	62.2	62.0	62.3	59.7	60.1	61.1	....	60.4	9.3	10.7	....
1981	90.3	96.4	66.8	68.3	68.2	68.3	65.6	65.8	66.8	....	66.1	9.4	9.2	....
1982	90.8	93.1	71.3	72.9	73.0	72.6	69.9	70.0	70.7	69.0	70.2	6.3	5.9	....
1983	91.3	89.6	74.5	76.1	76.2	75.4	73.2	73.0	73.3	72.0	73.2	4.2	3.8	4.3
1984	92.3	88.9	78.2	80.4	81.2	77.5	76.4	75.8	75.9	74.6	76.0	3.8	3.5	3.7
1985	89.8	86.0	81.0	82.7	83.5	80.2	79.5	78.4	78.4	77.3	78.6	3.4	3.2	3.5
1986	88.5	86.0	82.7	84.0	84.5	82.2	81.6	80.5	80.4	80.1	80.6	2.6	2.6	3.6
1987	91.0	91.0	85.2	85.3	85.6	84.0	85.0	83.0	83.1	82.9	83.1	3.1	3.4	3.5
1988	96.0	95.3	87.4	87.2	87.3	86.7	87.5	86.1	86.1	86.1	86.1	3.7	3.6	3.9
1989	97.9	97.8	90.2	89.8	89.8	89.7	90.5	89.7	89.8	89.6	89.8	4.2	4.2	4.0
1990	98.7	100.4	94.1	92.9	92.9	92.8	94.9	93.6	93.8	93.3	93.7	4.4	4.5	4.2
1991	100.3	100.0	97.4	96.9	96.5	97.9	97.9	97.3	97.3	97.0	97.3	3.9	3.7	3.9
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2.8	2.8	3.1
1993	99.9	98.7	102.3	102.6	102.1	104.0	102.1	102.6	102.5	102.6	102.6	2.6	2.5	2.6
1994	101.0	99.5	104.3	105.4	104.5	107.7	103.6	105.0	104.8	105.1	104.9	2.3	2.2	2.4
1995	104.1	102.2	107.8	109.4	108.1	112.3	106.7	107.6	107.3	107.7	107.6	2.5	2.4	2.5
1990: I	97.5	98.8	92.5	91.4	91.5	91.2	93.3	92.0	92.2	91.8	92.1	4.9	5.4	4.4
II	97.9	97.1	93.3	92.1	92.1	92.3	94.2	93.2	93.1	92.9	93.2	5.2	4.2	4.9
III	98.9	100.0	94.4	93.1	93.1	93.0	95.3	94.2	94.3	93.9	94.2	4.3	5.2	4.3
IV	100.6	105.6	96.1	95.0	95.0	94.9	96.8	95.1	95.7	94.9	95.2	4.1	5.9	4.3
1991: I	100.9	102.2	96.6	95.9	95.4	97.5	97.1	96.2	96.4	95.9	96.3	4.8	3.1	4.4
II	100.5	99.7	97.2	96.6	96.1	97.9	97.6	97.0	97.0	96.6	97.0	3.2	2.2	3.0
III	99.8	98.5	97.7	97.1	96.7	98.3	98.2	97.7	97.6	97.4	97.7	2.8	2.6	3.2
IV	100.1	99.6	98.3	97.8	97.7	98.2	98.6	98.3	98.3	98.1	98.3	2.5	2.9	3.1
1992: I	99.9	99.0	99.2	99.4	99.6	98.8	99.0	99.1	99.0	99.0	99.1	3.4	3.2	3.8
II	100.1	99.6	99.9	100.0	100.2	99.5	99.9	99.8	99.8	99.8	99.8	2.8	2.9	2.9
III	100.1	101.0	100.3	100.4	100.6	100.1	100.2	100.2	100.3	100.3	100.2	1.5	2.1	2.0
IV	100.0	100.4	100.6	100.2	99.6	101.6	100.9	100.9	100.9	100.9	100.9	2.8	2.6	2.8
1993: I	100.0	98.8	101.7	101.8	101.1	103.4	101.7	101.8	101.7	101.8	101.8	3.8	3.1	3.5
II	100.1	99.4	102.1	102.0	101.6	103.1	102.2	102.4	102.3	102.4	102.4	2.2	2.4	2.5
III	99.9	98.4	102.6	103.0	102.7	103.8	102.3	102.8	102.6	102.9	102.8	1.8	1.3	1.8
IV	99.7	98.1	102.9	103.7	102.9	105.6	102.4	103.4	103.2	103.4	103.4	2.3	2.2	2.1
1994: I	100.2	97.6	103.5	104.4	103.6	106.3	102.9	104.2	103.8	104.1	104.1	2.9	2.4	2.7
II	100.7	98.9	104.1	105.4	104.1	108.3	103.2	104.6	104.4	104.7	104.6	1.9	2.3	2.5
III	101.3	100.6	104.5	105.5	104.7	107.4	103.8	105.3	105.1	105.4	105.2	2.4	3.0	2.5
IV	101.8	100.9	105.3	106.5	105.5	108.7	104.5	105.8	105.7	105.9	105.8	2.1	2.0	2.1
1995: I	103.1	101.1	106.6	108.1	106.9	110.6	105.6	106.7	106.4	106.7	106.7	3.3	2.8	3.0
II	104.5	103.2	107.4	108.9	108.1	110.9	106.5	107.3	107.2	107.5	107.3	2.4	2.8	2.8
III	104.6	102.5	108.0	109.3	108.3	111.7	107.1	107.9	107.6	108.0	107.8	2.1	1.6	2.0
IV	104.3	101.9	109.1	111.3	109.2	116.0	107.7	108.4	108.1	108.6	108.4	2.1	1.9	2.1
1996: I	104.4	101.9	110.2	111.8	110.0	116.0	109.2	109.1	108.7	109.1	109.0	2.3	2.3	1.8
II	104.7	102.1	110.1	111.6	110.4	114.4	109.2	109.7	109.3	109.4	109.6	2.2	2.1	1.2
III	104.3	101.5	110.8	111.9	110.6	114.8	110.1	110.2	109.8	109.9	110.2	2.0	1.9	2.0

[1] Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.
[2] Percent changes shown here are based on unrounded data. Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–4.—*Quantity and price indexes for gross domestic product, and percent changes, 1959–96*

[Quarterly data are seasonally adjusted]

Year or quarter	Gross domestic product: Index numbers, 1992=100: Current dollars	Chain-type quantity index	Chain-type price index	Implicit price deflator	Percent change from preceding period [1]: Current dollars	Chain-type quantity index	Chain-type price index	Implicit price deflator
1959	8.1	35.4	23.0	22.9	....	....	....	....
1960	8.4	36.2	23.3	23.3	3.8	2.2	1.4	1.5
1961	8.7	37.0	23.6	23.6	3.5	2.1	1.2	1.3
1962	9.4	39.2	23.9	23.9	7.4	6.0	1.3	1.3
1963	9.9	40.9	24.2	24.2	5.5	4.3	1.2	1.2
1964	10.6	43.3	24.6	24.5	7.4	5.8	1.5	1.5
1965	11.5	46.0	25.0	25.0	8.5	6.4	1.9	2.0
1966	12.6	49.0	25.7	25.7	9.5	6.4	2.8	2.9
1967	13.3	50.3	26.6	26.5	5.8	2.6	3.2	3.1
1968	14.6	52.7	27.7	27.7	9.2	4.7	4.4	4.3
1969	15.7	54.3	29.0	29.0	7.9	3.0	4.7	4.7
1970	16.6	54.3	30.6	30.6	5.4	.0	5.3	5.4
1971	18.0	56.1	32.1	32.2	8.7	3.3	5.2	5.2
1972	19.8	59.1	33.5	33.5	9.9	5.4	4.2	4.3
1973	22.1	62.5	35.4	35.4	11.7	5.7	5.6	5.7
1974	24.0	62.3	38.5	38.5	8.3	–.4	8.9	8.7
1975	26.1	61.9	42.2	42.2	8.9	–.6	9.4	9.6
1976	29.1	65.4	44.6	44.6	11.5	5.6	5.8	5.6
1977	32.5	68.5	47.5	47.4	11.4	4.9	6.4	6.3
1978	36.7	72.0	50.9	51.0	13.0	5.0	7.3	7.7
1979	41.0	74.1	55.3	55.3	11.6	2.9	8.5	8.5
1980	44.6	73.9	60.4	60.4	8.9	–.3	9.3	9.2
1981	49.9	75.7	66.1	65.9	11.9	2.5	9.4	9.2
1982	51.9	74.0	70.2	70.1	4.1	–2.1	6.3	6.3
1983	56.3	77.0	73.2	73.1	8.4	4.0	4.2	4.2
1984	62.5	82.3	75.9	75.9	11.0	6.8	3.8	3.9
1985	67.0	85.3	78.6	78.4	7.1	3.7	3.4	3.3
1986	70.8	87.9	80.6	80.6	5.8	3.0	2.6	2.7
1987	75.1	90.5	83.1	83.1	6.1	2.9	3.1	3.1
1988	80.9	93.9	86.1	86.1	7.6	3.8	3.7	3.7
1989	87.1	97.1	89.7	89.7	7.7	3.4	4.2	4.2
1990	92.0	98.3	93.6	93.6	5.6	1.3	4.4	4.3
1991	94.8	97.3	97.3	97.3	3.0	–1.0	3.9	4.0
1992	100.0	100.0	100.0	100.0	5.5	2.7	2.8	2.7
1993	104.9	102.3	102.6	102.6	4.9	2.3	2.6	2.6
1994	111.1	105.8	105.0	104.9	5.8	3.5	2.3	2.3
1995	116.2	108.0	107.6	107.6	4.6	2.0	2.5	2.5
1990: I	90.6	98.6	92.0	92.0	9.1	4.1	4.9	4.9
II	92.1	98.9	93.2	93.1	6.6	1.3	5.2	5.2
III	92.6	98.4	94.2	94.1	2.2	–1.9	4.3	4.2
IV	92.6	97.4	95.1	95.1	–.1	–4.1	4.1	4.2
1991: I	93.2	96.9	96.3	96.3	2.8	–2.2	4.8	5.1
II	94.4	97.3	97.0	97.0	4.9	1.7	3.2	3.1
III	95.3	97.5	97.7	97.7	4.0	1.0	2.8	2.9
IV	96.1	97.8	98.3	98.3	3.6	1.0	2.5	2.5
1992: I	98.0	98.9	99.1	99.1	8.2	4.7	3.4	3.3
II	99.3	99.5	99.8	99.8	5.3	2.5	2.8	2.7
III	100.4	100.3	100.2	100.2	4.6	3.0	1.5	1.5
IV	102.2	101.3	100.9	100.9	7.3	4.3	2.8	2.9
1993: I	103.2	101.3	101.8	101.8	3.8	–.1	3.8	3.8
II	104.2	101.8	102.4	102.4	4.0	1.9	2.2	2.1
III	105.3	102.4	102.8	102.8	4.3	2.3	1.8	1.9
IV	107.1	103.6	103.4	103.4	7.1	4.8	2.3	2.2
1994: I	108.5	104.2	104.1	104.1	5.3	2.5	2.9	2.8
II	110.3	105.5	104.6	104.6	6.9	4.9	1.9	1.9
III	112.0	106.4	105.2	105.2	6.1	3.5	2.4	2.5
IV	113.4	107.2	105.8	105.8	5.3	3.0	2.1	2.2
1995: I	114.5	107.3	106.7	106.7	3.8	.4	3.3	3.4
II	115.4	107.5	107.3	107.3	3.1	.7	2.4	2.4
III	117.1	108.5	107.9	107.9	6.0	3.8	2.1	2.1
IV	117.7	108.6	108.4	108.4	2.3	.3	2.1	2.0
1996: I	118.9	109.1	109.0	109.0	4.2	2.0	2.3	2.2
II	120.8	110.4	109.6	109.5	6.5	4.7	2.2	1.8
III	122.0	111.0	110.2	109.9	3.8	2.1	2.0	1.7

[1] Percent changes shown here are based on unrounded data. Quarterly percent changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–5.—*Percent changes in real gross domestic product, 1960–96*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Personal consumption expenditures				Gross private domestic investment				Exports and imports of goods and services		Government consumption expenditures and gross investment		
						Nonresidential fixed								
		Total	Durable goods	Nondurable goods	Services	Total	Structures	Producers' durable equipment	Residential	Exports	Imports	Total	Federal	State and local
1960	2.2	2.7	2.0	1.5	4.4	5.6	7.9	4.1	–7.1	20.8	1.3	–0.2	–3.1	4.1
1961	2.1	2.0	–3.8	1.8	4.1	–.9	1.4	–2.4	.3	1.7	–.7	4.9	3.9	6.2
1962	6.0	4.9	11.7	3.1	4.9	8.7	4.5	11.6	9.6	5.4	11.3	6.0	8.3	2.9
1963	4.3	4.1	9.7	2.1	4.5	5.0	1.1	7.6	11.8	7.5	2.7	2.3	–.4	6.0
1964	5.8	6.0	9.2	4.9	6.1	11.8	10.4	12.6	5.8	13.3	5.3	2.0	–1.7	6.8
1965	6.4	6.3	12.7	5.3	5.3	17.3	15.9	18.2	–2.9	2.0	10.6	3.0	.0	6.7
1966	6.4	5.7	8.5	5.5	5.1	12.1	6.8	15.5	–8.9	6.7	14.9	9.1	11.4	6.4
1967	2.6	3.0	1.6	1.6	4.8	–1.6	–2.5	–1.0	–3.1	2.2	7.3	7.6	9.9	4.9
1968	4.7	5.7	11.0	4.5	5.2	4.3	1.4	6.1	13.6	7.3	14.9	3.1	1.0	5.7
1969	3.0	3.7	3.6	2.7	4.8	7.2	5.4	8.3	3.0	5.5	5.7	–.6	–3.4	2.8
1970	.0	2.3	–3.2	2.4	4.0	–1.0	.3	–1.8	–6.0	10.8	4.3	–2.3	–7.1	2.8
1971	3.3	3.7	10.0	1.8	3.7	–.1	–1.6	.8	27.4	.7	5.3	–1.8	–7.1	3.3
1972	5.4	6.0	12.7	4.4	5.4	9.0	3.1	12.7	17.8	8.1	11.0	.4	–1.7	2.2
1973	5.7	4.8	10.3	3.3	4.5	14.6	8.2	18.5	–.6	21.8	4.5	–.7	–4.9	3.0
1974	–.4	–.7	–6.9	–2.0	2.4	.5	–2.1	2.1	–20.6	9.6	–2.7	1.7	–.6	3.6
1975	–.6	2.2	.0	1.5	3.5	–10.5	–10.5	–10.5	–13.0	–.7	–11.3	1.5	–.2	2.9
1976	5.6	5.6	12.8	5.0	4.2	4.8	2.5	6.1	23.6	5.9	19.6	.1	–1.0	.8
1977	4.9	4.3	9.3	2.6	4.2	11.8	4.9	15.6	21.2	2.4	10.7	.9	1.6	.4
1978	5.0	4.3	5.3	3.5	4.7	13.7	10.9	15.1	6.6	10.4	8.7	2.9	2.1	3.6
1979	2.9	2.3	–.5	2.3	3.2	9.6	12.6	8.1	–3.7	9.5	1.7	1.6	1.5	1.6
1980	–.3	–.3	–8.0	–.4	1.9	–.5	6.7	–4.4	–21.1	10.8	–6.7	1.8	4.2	.0
1981	2.5	1.2	1.2	.9	1.5	5.3	7.9	3.7	–8.0	1.2	2.6	.7	4.2	–2.0
1982	–2.1	1.2	–.1	.6	1.9	–4.4	–1.5	–6.4	–18.2	–7.1	–1.3	1.3	3.2	–.3
1983	4.0	5.2	14.7	2.9	4.7	–1.7	–10.4	4.6	41.1	–2.6	12.6	2.8	5.4	.7
1984	6.8	5.2	14.5	3.5	4.1	17.3	14.3	19.2	14.6	8.3	24.3	3.1	2.4	3.8
1985	3.7	4.7	9.7	2.3	5.0	6.2	7.3	5.5	1.4	2.7	6.5	6.1	6.9	5.3
1986	3.0	4.0	9.0	3.2	3.2	–3.5	–10.8	1.0	12.0	7.4	8.4	5.1	4.6	5.5
1987	2.9	3.1	1.5	1.9	4.2	–1.1	–3.6	.3	.2	11.0	6.1	2.7	3.1	2.4
1988	3.8	3.9	6.3	2.8	4.0	4.4	.5	6.4	–2.0	15.9	3.9	1.3	–1.8	3.9
1989	3.4	2.3	2.6	2.3	2.3	4.0	2.2	5.0	–3.7	11.7	3.9	2.8	1.3	4.0
1990	1.3	1.7	–.6	1.0	2.6	–.6	1.1	–1.5	–9.3	8.5	3.9	3.0	2.0	3.8
1991	–1.0	–.6	–6.4	–1.0	.8	–6.4	–10.7	–4.1	–12.3	6.3	–.7	.6	–.5	1.4
1992	2.7	2.8	5.8	1.5	2.9	1.9	–6.8	6.2	16.6	6.6	7.5	.5	–2.1	2.4
1993	2.3	2.8	7.3	2.0	2.4	6.4	–1.7	10.0	7.6	2.9	9.2	–.2	–3.6	2.2
1994	3.5	3.1	7.2	3.1	2.2	9.8	1.5	13.2	10.8	8.2	12.0	–.1	–3.8	2.5
1995	2.0	2.3	3.2	2.3	2.2	9.5	7.3	10.4	–2.3	8.9	8.0	.0	–3.6	2.4
1990: I	4.1	3.4	16.3	1.3	1.7	4.5	6.8	3.3	5.9	15.5	5.9	6.0	6.1	6.0
II	1.3	.6	–11.8	–.7	4.5	–7.8	–1.9	–10.8	–18.0	8.6	7.4	.5	.1	.9
III	–1.9	1.3	–4.0	.9	2.8	3.3	–.7	5.5	–20.8	–3.5	–.3	–.4	–3.5	1.9
IV	–4.1	–3.1	–11.0	–3.4	–1.0	–9.3	–16.6	–5.2	–24.5	8.9	–10.1	4.3	4.0	4.5
1991: I	–2.2	–3.1	–14.1	–2.4	–1.0	–12.5	–7.7	–14.9	–23.4	–1.1	–12.2	.9	2.8	–.6
II	1.7	2.5	1.7	2.3	2.8	–3.0	–10.0	.9	2.0	21.0	14.7	.4	–.1	.7
III	1.0	.9	6.1	–.3	.6	–4.0	–22.7	6.8	16.4	2.3	10.8	–2.7	–7.7	1.2
IV	1.0	–1.0	–4.9	–3.4	1.2	–4.1	–8.9	–1.8	14.7	13.8	5.1	–1.4	–6.8	2.8
1992: I	4.7	6.4	13.3	5.9	5.4	3.6	2.9	3.9	24.7	6.3	4.1	2.5	–1.4	5.4
II	2.5	2.2	4.3	–.7	3.4	10.0	–3.9	16.9	22.2	1.8	13.3	–.3	–1.4	.4
III	3.0	2.9	9.3	2.8	1.7	2.2	–8.1	7.1	3.3	2.5	1.3	2.9	4.9	1.4
IV	4.3	5.4	11.0	5.8	4.0	6.2	–4.3	11.0	18.7	6.0	11.6	1.9	3.4	.9
1993: I	–.1	.7	.8	–.9	1.5	6.0	3.5	7.1	2.1	–1.3	8.3	–4.6	–12.7	1.7
II	1.9	2.7	11.2	2.3	1.3	6.3	–5.3	11.4	–5.1	8.3	12.7	.2	–4.9	3.9
III	2.3	3.8	7.3	2.8	3.6	4.7	.8	6.3	13.2	–8.5	4.1	1.0	–2.9	3.8
IV	4.8	2.8	10.2	1.7	1.9	17.5	7.5	21.7	24.3	23.4	17.5	1.5	–.7	3.0
1994: I	2.5	2.8	5.8	3.9	1.6	7.3	–11.8	15.5	12.8	–1.5	8.2	–4.3	–11.4	.7
II	4.9	3.5	4.3	3.2	3.5	7.1	15.7	4.1	12.7	15.9	18.4	–.8	–5.3	2.2
III	3.5	2.8	5.6	3.8	1.6	13.8	.2	19.4	–1.8	9.7	10.7	7.0	11.5	4.2
IV	3.0	3.1	12.4	3.2	1.2	12.2	13.0	11.9	–.1	16.5	10.3	–1.4	–5.9	1.6
1995: I	.4	1.0	–8.9	2.4	2.4	15.4	9.9	17.4	–6.3	2.6	11.2	–1.2	–6.5	2.3
II	.7	3.1	7.0	1.8	3.0	3.5	3.4	3.5	–13.4	5.9	4.5	.8	–1.3	2.1
III	3.8	2.4	9.3	.5	2.0	4.9	6.3	4.3	9.2	10.7	.0	–.6	–5.6	2.7
IV	.3	1.1	–1.0	–.4	2.3	2.5	1.0	3.0	6.4	10.7	1.6	–4.3	–13.2	1.5
1996: I	2.0	3.5	8.2	3.7	2.4	11.6	7.7	13.1	7.4	1.8	10.6	1.6	6.0	–.9
II	4.7	3.4	11.4	1.3	2.7	3.8	–3.7	6.7	16.3	5.6	9.9	7.7	9.4	6.7
III	2.1	.5	–2.6	.4	1.3	17.5	8.4	20.9	–5.2	–.9	9.3	–.6	–3.5	1.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–6.—*Gross domestic product by major type of product, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Final sales of domestic product	Change in business inventories	Goods[1] Total: Total	Goods[1] Total: Final sales	Goods[1] Total: Change in business inventories	Goods[1] Durable goods: Final sales	Goods[1] Durable goods: Change in business inventories	Goods[1] Nondurable goods: Final sales	Goods[1] Nondurable goods: Change in business inventories	Services[1]	Structures
1959	507.2	503.0	4.2	252.0	247.8	4.2	92.3	3.1	155.5	1.1	192.7	62.5
1960	526.6	523.3	3.2	257.8	254.6	3.2	95.1	1.7	159.5	1.6	206.8	61.9
1961	544.8	541.9	2.9	260.4	257.5	2.9	94.3	–.1	163.2	3.0	220.8	63.6
1962	585.2	579.1	6.1	281.2	275.1	6.1	104.5	3.4	170.7	2.7	236.1	67.8
1963	617.4	611.7	5.7	292.7	287.1	5.7	111.0	2.7	176.1	3.0	252.0	72.7
1964	663.0	658.0	5.0	313.2	308.1	5.0	120.5	4.0	187.6	1.0	271.4	78.4
1965	719.1	709.4	9.7	342.9	333.3	9.7	133.3	6.7	199.9	3.0	291.5	84.7
1966	787.8	774.0	13.8	380.6	366.8	13.8	149.0	10.2	217.8	3.6	319.2	88.0
1967	833.6	823.1	10.5	394.5	384.0	10.5	153.8	5.5	230.2	5.0	349.5	89.6
1968	910.6	901.4	9.1	426.7	417.6	9.1	167.8	4.6	249.8	4.5	383.9	100.0
1969	982.2	972.7	9.5	455.8	446.2	9.5	178.6	6.3	267.6	3.2	418.2	108.3
1970	1,035.6	1,033.4	2.2	467.5	465.3	2.2	180.2	.0	285.1	2.2	458.5	109.7
1971	1,125.4	1,116.9	8.5	493.2	484.7	8.5	187.0	3.2	297.7	5.3	503.8	128.4
1972	1,237.3	1,227.4	9.9	539.8	529.9	9.9	209.3	7.2	320.6	2.7	550.5	146.9
1973	1,382.6	1,365.2	17.5	619.2	601.8	17.5	241.4	14.6	360.3	2.9	600.5	162.9
1974	1,496.9	1,482.8	14.1	665.7	651.6	14.1	256.7	11.0	394.9	3.1	665.6	165.6
1975	1,630.6	1,636.9	–6.3	718.1	724.5	–6.3	288.1	–7.5	436.4	1.2	745.8	166.7
1976	1,819.0	1,802.0	16.9	804.0	787.1	16.9	322.5	10.6	464.6	6.3	823.8	191.2
1977	2,026.9	2,003.8	23.1	883.7	860.6	23.1	366.9	10.2	493.7	12.8	916.4	226.8
1978	2,291.4	2,264.2	27.2	996.5	969.3	27.2	416.9	20.3	552.5	6.9	1,023.1	271.8
1979	2,557.5	2,540.6	16.9	1,115.2	1,098.3	16.9	475.0	12.5	623.3	4.3	1,131.7	310.6
1980	2,784.2	2,791.9	–7.6	1,191.1	1,198.7	–7.6	502.9	–2.7	695.8	–4.9	1,274.1	319.1
1981	3,115.9	3,087.8	28.2	1,342.6	1,314.5	28.2	546.0	7.5	768.4	20.6	1,423.3	350.0
1982	3,242.1	3,256.6	–14.5	1,333.2	1,347.7	–14.5	544.4	–15.5	803.3	1.0	1,566.9	342.0
1983	3,514.5	3,519.4	–4.9	1,426.9	1,431.8	–4.9	586.1	4.0	845.7	–8.9	1,720.9	366.8
1984	3,902.4	3,835.0	67.5	1,607.0	1,539.6	67.5	655.1	43.6	884.5	23.9	1,871.8	423.6
1985	4,180.7	4,154.5	26.2	1,669.8	1,643.6	26.2	713.2	8.6	930.4	17.6	2,054.6	456.3
1986	4,422.2	4,412.6	9.6	1,720.6	1,711.0	9.6	741.3	.6	969.7	9.0	2,224.2	477.4
1987	4,692.3	4,668.1	24.2	1,804.8	1,780.6	24.2	764.7	21.5	1,015.9	2.8	2,398.1	489.3
1988	5,049.6	5,038.7	10.9	1,942.9	1,932.0	10.9	837.0	16.4	1,095.0	–5.5	2,600.0	506.7
1989	5,438.7	5,407.0	31.7	2,124.0	2,092.3	31.7	907.3	21.3	1,185.0	10.5	2,795.3	519.4
1990	5,743.8	5,735.8	8.0	2,203.8	2,195.8	8.0	935.7	2.5	1,260.1	5.6	3,016.9	523.1
1991	5,916.7	5,919.0	–2.3	2,234.0	2,236.3	–2.3	926.6	–16.6	1,309.7	14.3	3,201.3	481.4
1992	6,244.4	6,237.4	7.0	2,321.0	2,314.0	7.0	965.9	–10.9	1,348.1	17.9	3,411.1	512.3
1993	6,553.0	6,532.4	20.6	2,422.0	2,401.4	20.6	1,014.3	15.7	1,387.2	4.9	3,584.0	547.0
1994	6,935.7	6,876.2	59.5	2,593.9	2,534.4	59.5	1,086.1	31.9	1,448.3	27.6	3,746.5	595.3
1995	7,253.8	7,216.7	37.0	2,699.2	2,662.2	37.0	1,147.3	34.8	1,514.9	2.2	3,926.9	627.6
1990: I	5,660.4	5,651.8	8.6	2,194.9	2,186.3	8.6	957.9	1.4	1,228.4	7.2	2,924.9	540.6
II	5,751.0	5,709.8	41.2	2,223.6	2,182.4	41.2	932.7	16.9	1,249.7	24.3	2,997.8	529.6
III	5,782.4	5,768.7	13.8	2,210.7	2,196.9	13.8	929.3	9.9	1,267.7	3.9	3,051.3	520.5
IV	5,781.5	5,812.9	–31.4	2,186.1	2,217.5	–31.4	922.9	–18.4	1,294.6	–13.1	3,093.7	501.7
1991: I	5,822.1	5,838.2	–16.1	2,207.9	2,224.0	–16.1	912.1	–38.7	1,311.8	22.6	3,131.6	482.6
II	5,892.3	5,912.2	–19.9	2,225.1	2,245.0	–19.9	936.0	–29.5	1,309.0	9.5	3,186.7	480.5
III	5,950.0	5,944.7	5.3	2,249.2	2,243.9	5.3	933.6	5.9	1,310.3	–.6	3,221.9	478.9
IV	6,002.3	5,980.9	21.4	2,253.8	2,232.4	21.4	924.8	–4.2	1,307.6	25.5	3,264.9	483.6
1992: I	6,121.8	6,122.1	–.3	2,281.1	2,281.4	–.3	944.6	–18.8	1,336.8	18.5	3,338.4	502.3
II	6,201.2	6,191.0	10.2	2,301.3	2,291.0	10.2	955.7	1.1	1,335.4	9.1	3,387.5	512.4
III	6,271.7	6,260.1	11.6	2,329.4	2,317.8	11.6	969.2	–11.1	1,348.6	22.7	3,432.1	510.1
IV	6,383.0	6,376.6	6.4	2,372.2	2,365.8	6.4	994.2	–14.9	1,371.6	21.3	3,486.4	524.4
1993: I	6,442.6	6,422.8	19.9	2,382.2	2,362.3	19.9	985.8	13.1	1,376.5	6.8	3,528.9	531.5
II	6,506.2	6,484.6	21.6	2,414.2	2,392.6	21.6	1,015.3	11.3	1,377.3	10.3	3,556.7	535.4
III	6,574.4	6,552.3	22.0	2,417.4	2,395.4	22.0	1,009.3	14.2	1,386.0	7.9	3,607.5	549.5
IV	6,688.6	6,669.8	18.8	2,474.3	2,455.4	18.8	1,046.6	24.3	1,408.8	–5.5	3,642.7	571.6
1994: I	6,776.0	6,735.9	40.2	2,523.2	2,483.0	40.2	1,061.5	25.1	1,421.5	15.1	3,678.2	574.7
II	6,890.5	6,816.0	74.5	2,574.7	2,500.1	74.5	1,069.5	35.1	1,430.6	39.5	3,724.0	591.9
III	6,993.1	6,928.5	64.7	2,619.3	2,554.6	64.7	1,101.3	34.2	1,453.3	30.5	3,773.4	600.5
IV	7,083.2	7,024.6	58.7	2,658.6	2,600.0	58.7	1,112.3	33.1	1,487.7	25.6	3,810.5	614.1
1995: I	7,149.8	7,091.7	58.1	2,673.9	2,615.8	58.1	1,116.9	54.4	1,498.8	3.7	3,856.2	619.8
II	7,204.9	7,170.9	34.0	2,680.2	2,646.2	34.0	1,138.6	28.5	1,507.7	5.4	3,908.9	615.7
III	7,309.8	7,271.5	38.2	2,727.0	2,688.8	38.2	1,167.2	29.2	1,521.6	9.1	3,950.2	632.6
IV	7,350.6	7,332.8	17.8	2,715.8	2,698.0	17.8	1,166.4	27.3	1,531.7	–9.4	3,992.4	642.3
1996: I	7,426.8	7,428.6	–1.7	2,747.5	2,749.3	–1.7	1,192.1	12.3	1,557.1	–14.0	4,027.9	651.4
II	7,545.1	7,537.1	8.0	2,790.1	2,782.0	8.0	1,219.1	9.9	1,562.9	–1.9	4,087.0	668.0
III	7,616.3	7,579.6	36.6	2,821.6	2,785.0	36.6	1,225.5	34.7	1,559.5	2.0	4,122.0	672.6

[1] Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–7.—*Real gross domestic product by major type of product, 1959–96*

[Billions of chained (1992) dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Final sales of domestic product	Change in business inventories	Goods[1] Total: Total	Goods[1] Total: Final sales	Goods[1] Total: Change in business inventories	Goods[1] Durable goods: Final sales	Goods[1] Durable goods: Change in business inventories	Goods[1] Nondurable goods: Final sales	Goods[1] Nondurable goods: Change in business inventories	Services[1]	Structures
1959	2,212.3	2,206.9	13.5	786.4	780.9	13.5	221.1	9.9	595.6	3.5	1,115.3	299.4
1960	2,261.7	2,264.2	10.6	795.6	795.6	10.6	227.3	5.2	602.6	5.3	1,167.1	296.5
1961	2,309.8	2,318.0	8.9	796.0	799.7	8.9	224.3	–.1	612.1	9.3	1,219.9	304.7
1962	2,449.1	2,445.4	20.0	853.5	848.6	20.0	247.7	10.7	634.7	9.1	1,277.5	322.2
1963	2,554.0	2,552.4	18.1	882.4	878.8	18.1	262.0	8.3	648.2	9.8	1,336.9	343.9
1964	2,702.9	2,705.1	15.6	936.7	935.8	15.6	283.8	12.1	682.7	3.0	1,406.3	367.0
1965	2,874.8	2,860.4	30.2	1,013.0	999.9	30.2	313.9	20.4	713.4	9.2	1,472.5	385.4
1966	3,060.2	3,033.5	42.3	1,099.9	1,077.9	42.3	350.0	30.9	751.8	10.9	1,557.8	385.9
1967	3,140.2	3,125.1	32.1	1,114.7	1,101.2	32.1	359.2	16.3	765.4	15.6	1,639.4	380.2
1968	3,288.6	3,278.0	26.9	1,166.6	1,156.5	26.9	378.7	13.2	801.8	13.6	1,712.0	403.6
1969	3,388.0	3,377.2	27.2	1,200.3	1,189.9	27.2	391.2	17.4	822.6	9.6	1,774.1	408.8
1970	3,388.2	3,406.5	5.7	1,181.6	1,193.4	5.7	383.2	–.1	837.8	5.9	1,824.0	391.1
1971	3,500.1	3,499.8	22.7	1,209.3	1,206.1	22.7	385.8	8.0	848.8	14.8	1,875.8	427.4
1972	3,690.3	3,689.5	25.2	1,296.5	1,293.2	25.2	431.8	18.0	885.4	7.2	1,936.1	459.0
1973	3,902.3	3,883.9	39.0	1,413.2	1,396.0	39.0	496.6	34.6	916.7	6.0	2,004.4	469.0
1974	3,888.2	3,873.4	24.0	1,400.9	1,386.5	24.0	496.9	20.6	905.9	4.5	2,063.3	420.5
1975	3,865.1	3,906.4	–11.0	1,373.4	1,404.4	–11.0	495.8	–13.9	926.7	2.3	2,123.5	382.3
1976	4,081.1	4,061.7	29.0	1,478.3	1,459.9	29.0	520.9	18.9	956.4	10.2	2,182.9	418.3
1977	4,279.3	4,240.8	38.0	1,560.0	1,525.7	38.0	567.0	17.2	970.8	20.8	2,250.5	458.7
1978	4,493.7	4,464.4	42.3	1,644.4	1,617.8	42.3	615.3	31.7	1,011.7	10.5	2,334.3	498.1
1979	4,624.0	4,614.4	23.1	1,700.6	1,690.7	23.1	654.6	18.4	1,042.9	5.1	2,391.3	511.7
1980	4,611.9	4,641.9	–10.0	1,687.4	1,711.2	–10.0	638.1	–3.6	1,085.6	–6.3	2,441.4	475.9
1981	4,724.9	4,691.6	33.1	1,765.7	1,735.1	33.1	638.8	9.1	1,111.0	23.6	2,475.8	468.8
1982	4,623.6	4,651.2	–15.6	1,684.1	1,706.7	–15.6	604.4	–17.8	1,122.6	2.0	2,518.7	428.5
1983	4,810.0	4,821.2	–5.9	1,754.8	1,762.6	–5.9	637.6	4.9	1,142.6	–10.4	2,598.4	460.7
1984	5,138.2	5,061.6	74.8	1,924.8	1,853.3	74.8	703.1	49.7	1,160.9	25.6	2,678.0	523.1
1985	5,329.5	5,296.9	29.8	1,971.7	1,940.6	29.8	758.2	10.0	1,189.0	19.7	2,797.8	550.3
1986	5,489.9	5,480.9	10.9	2,020.9	2,011.7	10.9	793.6	.9	1,223.5	10.2	2,903.2	558.4
1987	5,648.4	5,626.0	26.2	2,076.9	2,055.0	26.2	819.8	23.5	1,239.2	2.2	3,011.6	554.6
1988	5,862.9	5,855.1	11.6	2,178.9	2,171.0	11.6	897.0	17.6	1,274.8	–6.2	3,128.6	550.8
1989	6,060.4	6,028.7	33.3	2,300.2	2,269.2	33.3	951.9	22.4	1,317.2	11.0	3,208.5	546.0
1990	6,138.7	6,126.7	10.4	2,307.1	2,295.4	10.4	963.9	2.7	1,331.3	7.6	3,295.4	533.3
1991	6,079.0	6,082.6	–3.0	2,262.3	2,265.9	–3.0	934.2	–16.6	1,331.8	13.4	3,332.3	484.5
1992	6,244.4	6,237.4	7.3	2,321.0	2,314.0	7.3	965.9	–10.9	1,348.1	18.3	3,411.1	512.3
1993	6,386.4	6,365.5	19.1	2,390.0	2,369.0	19.1	1,007.4	15.4	1,361.7	3.7	3,467.1	529.4
1994	6,608.7	6,550.7	58.9	2,524.3	2,465.6	58.9	1,068.1	30.6	1,397.8	28.2	3,526.1	559.8
1995	6,742.9	6,708.9	33.1	2,589.2	2,555.1	33.1	1,124.1	32.8	1,431.8	.2	3,583.9	571.8
1990: I	6,154.1	6,144.6	11.0	2,328.3	2,318.8	11.0	991.4	1.9	1,326.5	9.1	3,264.8	555.9
II	6,174.4	6,127.5	43.8	2,335.6	2,289.5	43.8	963.8	17.3	1,325.5	26.3	3,293.9	541.4
III	6,145.2	6,126.6	14.9	2,304.6	2,286.4	14.9	955.6	10.2	1,330.8	4.7	3,310.1	528.2
IV	6,081.0	6,108.1	–28.2	2,260.1	2,286.8	–28.2	944.7	–18.4	1,342.2	–9.9	3,312.7	507.5
1991: I	6,047.9	6,065.4	–17.5	2,251.8	2,269.0	–17.5	926.0	–38.9	1,343.3	21.0	3,308.8	487.3
II	6,074.1	6,095.9	–20.8	2,256.1	2,277.7	–20.8	944.9	–29.5	1,332.8	8.4	3,335.0	483.4
III	6,089.3	6,085.4	4.9	2,271.1	2,267.2	4.9	938.2	6.1	1,329.0	–1.3	3,338.3	480.1
IV	6,104.4	6,083.8	21.4	2,270.1	2,249.6	21.4	927.5	–4.2	1,322.1	25.6	3,347.2	487.3
1992: I	6,175.3	6,175.8	–.1	2,288.9	2,289.3	–.1	945.2	–18.7	1,344.2	18.6	3,379.4	507.1
II	6,214.2	6,203.8	11.3	2,301.1	2,290.7	11.3	953.8	1.2	1,336.9	10.1	3,398.6	514.4
III	6,260.9	6,249.5	12.1	2,327.4	2,316.0	12.1	970.0	–11.4	1,346.0	23.7	3,424.2	509.4
IV	6,327.3	6,320.7	5.8	2,366.7	2,360.1	5.8	994.8	–14.8	1,365.3	20.8	3,442.3	518.5
1993: I	6,326.4	6,307.1	18.5	2,356.7	2,337.3	18.5	982.1	13.1	1,355.2	5.4	3,448.9	520.9
II	6,356.5	6,334.5	20.8	2,386.5	2,364.4	20.8	1,008.5	11.2	1,356.0	9.7	3,451.0	519.3
III	6,393.4	6,371.3	19.5	2,385.6	2,363.4	19.5	1,000.9	13.5	1,362.5	6.1	3,478.3	529.5
IV	6,469.1	6,449.2	17.4	2,431.1	2,411.1	17.4	1,038.0	23.6	1,373.3	–6.4	3,490.3	548.1
1994: I	6,508.5	6,467.7	40.5	2,467.2	2,425.9	40.5	1,047.5	24.3	1,378.6	16.2	3,495.6	546.6
II	6,587.6	6,514.9	74.5	2,510.9	2,437.3	74.5	1,050.0	33.9	1,387.5	40.7	3,517.3	560.6
III	6,644.9	6,582.1	64.5	2,542.6	2,478.9	64.5	1,078.9	32.9	1,400.5	31.6	3,541.1	562.8
IV	6,693.9	6,638.1	56.1	2,576.5	2,520.2	56.1	1,095.9	31.5	1,424.7	24.5	3,550.5	569.1
1995: I	6,701.0	6,647.4	54.5	2,576.2	2,522.0	54.5	1,095.2	51.5	1,427.1	2.7	3,556.1	570.8
II	6,713.5	6,682.4	30.5	2,573.0	2,542.0	30.5	1,115.4	26.7	1,427.3	3.6	3,579.0	563.4
III	6,776.4	6,741.4	33.0	2,610.2	2,575.0	33.0	1,142.9	27.0	1,433.2	5.8	3,595.1	573.7
IV	6,780.7	6,764.2	14.6	2,597.5	2,581.5	14.6	1,143.0	25.8	1,439.4	–11.4	3,605.6	579.4
1996: I	6,814.3	6,815.2	–3.0	2,615.7	2,617.6	–3.0	1,166.3	11.8	1,452.6	–14.7	3,614.2	586.4
II	6,892.6	6,884.7	7.1	2,647.1	2,640.0	7.1	1,196.4	9.3	1,445.7	–2.2	3,648.8	598.8
III	6,928.4	6,892.7	34.5	2,682.1	2,646.2	34.5	1,206.9	33.0	1,441.7	1.5	3,652.0	597.5

[1] Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–8.—*Gross domestic product by sector, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Business[1]					Households and institutions			General government[2]		
		Total	Nonfarm[1]			Farm	Total	Private households	Nonprofit institutions	Total	Federal	State and local
			Total[1]	Nonfarm less housing	Housing							
1959	507.2	436.9	418.0	382.4	35.6	18.9	12.4	3.6	8.9	57.9	31.8	26.1
1960	526.6	451.1	431.3	392.7	38.6	19.8	13.9	3.8	10.1	61.5	32.9	28.6
1961	544.8	464.9	444.8	403.4	41.4	20.1	14.5	3.7	10.7	65.5	34.2	31.3
1962	585.2	499.5	479.3	434.7	44.6	20.2	15.6	3.8	11.8	70.1	36.3	33.8
1963	617.4	525.9	505.5	458.1	47.4	20.4	16.7	3.8	12.8	74.8	38.1	36.7
1964	663.0	564.7	545.5	495.3	50.2	19.3	17.9	3.9	14.0	80.4	40.5	40.0
1965	719.1	613.8	591.9	538.4	53.5	21.9	19.3	4.0	15.3	86.0	42.3	43.7
1966	787.8	670.4	647.5	590.6	57.0	22.9	21.3	4.0	17.2	96.1	47.1	49.0
1967	833.6	703.7	681.5	620.6	60.8	22.2	23.4	4.2	19.2	106.5	51.6	54.9
1968	910.6	766.1	743.4	678.6	64.8	22.7	26.1	4.4	21.7	118.4	56.5	61.9
1969	982.2	823.3	798.1	728.2	69.9	25.2	29.5	4.4	25.0	129.5	60.2	69.3
1970	1,035.6	860.3	834.1	759.2	74.9	26.2	32.4	4.5	27.9	142.9	64.3	78.7
1971	1,125.4	933.9	905.8	824.1	81.7	28.1	35.6	4.6	31.1	155.9	68.2	87.7
1972	1,237.3	1,028.3	995.6	906.9	88.7	32.6	39.0	4.6	34.3	170.1	73.1	96.9
1973	1,382.6	1,154.6	1,104.9	1,007.9	96.9	49.8	43.0	4.8	38.2	185.0	76.9	108.1
1974	1,496.9	1,246.0	1,198.6	1,092.8	105.9	47.4	47.2	4.6	42.6	203.7	83.5	120.3
1975	1,630.6	1,351.5	1,302.7	1,188.4	114.3	48.8	52.0	4.6	47.4	227.1	91.7	135.4
1976	1,819.0	1,516.0	1,469.6	1,344.6	125.0	46.4	57.1	5.4	51.7	245.8	97.9	147.9
1977	2,026.9	1,697.5	1,650.3	1,510.9	139.4	47.2	62.4	5.9	56.5	266.9	106.1	160.9
1978	2,291.4	1,931.9	1,877.1	1,721.3	155.8	54.7	69.8	6.5	63.2	289.7	113.8	175.9
1979	2,557.5	2,164.1	2,099.7	1,923.6	176.1	64.5	77.3	6.4	71.0	316.0	122.3	193.7
1980	2,784.2	2,346.3	2,290.2	2,085.0	205.1	56.1	87.1	6.1	81.0	350.8	135.6	215.2
1981	3,115.9	2,631.8	2,561.9	2,326.6	235.3	69.9	97.6	6.2	91.5	386.4	151.0	235.4
1982	3,242.1	2,714.7	2,649.5	2,390.0	259.5	65.1	108.2	6.3	102.0	419.2	164.0	255.2
1983	3,514.5	2,950.0	2,900.8	2,624.1	276.7	49.2	119.2	6.3	112.9	445.3	173.5	271.8
1984	3,902.4	3,289.6	3,221.1	2,918.6	302.5	68.5	131.2	7.3	123.9	481.7	190.8	290.9
1985	4,180.7	3,520.2	3,453.1	3,121.1	332.0	67.1	140.9	7.3	133.6	519.6	203.6	316.0
1986	4,422.2	3,716.7	3,653.7	3,295.2	358.5	63.0	153.7	7.7	145.9	551.9	211.1	340.7
1987	4,692.3	3,933.1	3,868.0	3,481.6	386.4	65.1	173.3	7.7	165.6	586.0	221.3	364.7
1988	5,049.6	4,233.4	4,169.6	3,750.4	419.2	63.8	195.1	8.3	186.8	621.0	230.0	391.0
1989	5,438.7	4,563.7	4,487.5	4,036.1	451.4	76.2	214.6	8.9	205.7	660.3	240.5	419.8
1990	5,743.8	4,796.9	4,717.3	4,234.1	483.2	79.6	237.9	9.4	228.5	709.0	252.7	456.3
1991	5,916.7	4,908.5	4,835.6	4,325.7	509.9	72.9	257.4	9.1	248.3	750.7	268.1	482.6
1992	6,244.4	5,184.4	5,103.8	4,560.6	543.2	80.6	279.1	10.1	269.0	781.0	274.4	506.6
1993	6,553.0	5,451.6	5,379.5	4,821.9	557.6	72.1	294.9	10.7	284.2	806.5	276.6	529.9
1994	6,935.7	5,798.4	5,716.1	5,123.0	593.1	82.3	310.3	10.8	299.5	827.0	275.7	551.4
1995	7,253.8	6,078.2	5,999.6	5,375.0	624.6	78.6	323.0	11.1	311.8	852.6	278.2	574.4
1990: I	5,660.4	4,739.6	4,660.9	4,192.1	468.8	78.7	228.6	9.3	219.3	692.3	248.7	443.5
II	5,751.0	4,812.7	4,730.1	4,252.0	478.1	82.6	235.5	9.5	226.0	702.8	250.4	452.4
III	5,782.4	4,825.7	4,746.1	4,256.4	489.7	79.6	242.8	9.4	233.4	713.9	253.1	460.8
IV	5,781.5	4,809.7	4,732.1	4,236.1	496.0	77.6	244.8	9.4	235.4	727.0	258.5	468.4
1991: I	5,822.1	4,830.5	4,759.9	4,259.3	500.6	70.6	249.2	9.0	240.1	742.4	267.9	474.5
II	5,892.3	4,887.5	4,810.5	4,305.6	504.9	77.0	255.7	9.0	246.7	749.1	268.5	480.6
III	5,950.0	4,937.6	4,866.8	4,354.5	512.3	70.7	259.7	9.1	250.6	752.8	268.1	484.7
IV	6,002.3	4,978.6	4,905.1	4,383.3	521.8	73.5	265.1	9.3	255.9	758.6	267.9	490.6
1992: I	6,121.8	5,080.1	5,000.9	4,475.0	525.9	79.1	270.1	9.7	260.4	771.7	274.4	497.3
II	6,201.2	5,143.0	5,062.7	4,531.5	531.2	80.3	278.3	10.0	268.3	780.0	275.8	504.2
III	6,271.7	5,205.2	5,121.0	4,549.7	571.3	84.2	281.7	10.2	271.5	784.8	275.2	509.6
IV	6,383.0	5,309.2	5,230.6	4,686.2	544.4	78.7	286.2	10.4	275.8	787.6	272.1	515.5
1993: I	6,442.6	5,351.4	5,279.7	4,723.7	555.9	71.7	290.5	10.5	280.0	800.7	278.8	522.0
II	6,506.2	5,411.8	5,336.7	4,781.8	554.9	75.1	290.8	10.6	280.2	803.6	275.9	527.7
III	6,574.4	5,465.9	5,400.8	4,843.1	557.7	65.1	298.7	10.7	288.0	809.7	276.9	532.9
IV	6,688.6	5,577.3	5,500.7	4,938.8	561.9	76.6	299.4	10.8	288.6	812.0	275.0	537.0
1994: I	6,776.0	5,649.5	5,562.4	4,971.6	590.9	87.1	306.0	10.8	295.2	820.5	277.1	543.4
II	6,890.5	5,755.5	5,673.1	5,089.8	583.3	82.4	309.5	10.9	298.6	825.5	277.2	548.3
III	6,993.1	5,852.7	5,773.1	5,178.7	594.4	79.6	312.3	10.9	301.4	828.2	274.0	554.2
IV	7,083.2	5,935.8	5,855.8	5,251.9	603.9	80.0	313.4	10.8	302.6	834.0	274.3	559.7
1995: I	7,149.8	5,988.0	5,911.3	5,298.0	613.3	76.6	316.7	10.9	305.8	845.1	278.6	566.5
II	7,204.9	6,033.1	5,956.3	5,335.8	620.5	76.8	321.3	11.0	310.3	850.4	278.9	571.6
III	7,309.8	6,129.6	6,051.0	5,425.9	625.1	78.6	324.3	11.2	313.1	855.9	278.8	577.1
IV	7,350.6	6,162.1	6,079.8	5,440.4	639.4	82.2	329.6	11.3	318.2	859.0	276.8	582.2
1996: I	7,426.8	6,226.3	6,137.3	5,496.9	640.4	89.1	333.5	11.5	322.0	867.0	279.0	588.0
II	7,545.1	6,334.6	6,237.0	5,591.6	645.4	97.6	338.3	11.6	326.7	872.2	277.8	594.4
III	7,616.3	6,394.2	6,290.3	5,634.9	655.4	103.9	343.2	11.8	331.4	878.9	276.6	602.3

[1] Gross domestic business product equals gross domestic product less gross product of households and institutions and of general government. Nonfarm product equals gross domestic business product less gross farm product.
[2] Equals compensation of general government employees plus general government consumption of fixed capital.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–9.—*Real gross domestic product by sector, 1959–96*

[Billions of chained (1992) dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Business[1]					Households and institutions			General government[2]		
		Total	Nonfarm[1]			Farm	Total	Private house-holds	Non-profit institu-tions	Total	Federal	State and local
			Total[1]	Nonfarm less housing	Hous-ing							
1959	2,212.3	1,723.6	1,677.8	1,525.1	149.8	34.0	105.0	18.5	78.6	415.1	232.1	186.4
1960	2,261.7	1,757.1	1,711.2	1,548.6	160.0	34.3	112.1	18.6	85.9	429.3	236.4	196.2
1961	2,309.8	1,791.7	1,748.7	1,577.0	169.4	33.5	113.1	18.1	87.8	444.6	241.5	206.4
1962	2,449.1	1,906.5	1,868.2	1,685.3	180.4	32.6	117.2	17.9	92.3	461.8	251.7	213.6
1963	2,554.0	1,992.8	1,953.3	1,760.9	189.9	33.9	120.1	17.7	95.6	475.7	254.3	224.6
1964	2,702.9	2,117.6	2,083.3	1,881.6	198.9	32.7	123.4	17.5	99.4	492.4	256.8	238.4
1965	2,874.8	2,263.0	2,227.6	2,014.3	210.0	34.5	127.9	16.9	105.0	509.3	258.8	253.0
1966	3,060.2	2,410.9	2,383.9	2,159.9	220.3	32.5	132.6	16.3	110.9	542.1	276.4	268.4
1967	3,140.2	2,463.9	2,430.1	2,195.6	231.2	35.8	136.9	16.3	115.2	571.1	295.1	279.2
1968	3,288.6	2,585.4	2,554.6	2,310.5	240.3	35.5	141.0	15.5	120.6	592.6	300.6	294.8
1969	3,388.0	2,665.6	2,634.4	2,379.8	251.1	36.4	145.5	14.7	126.5	607.3	301.7	307.8
1970	3,388.2	2,665.1	2,634.9	2,373.4	258.7	35.9	144.0	13.8	126.4	609.7	288.9	321.5
1971	3,500.1	2,768.0	2,736.2	2,464.0	269.3	37.5	147.2	13.1	130.6	611.3	276.1	334.9
1972	3,690.3	2,946.8	2,920.2	2,633.9	282.7	36.9	151.4	12.7	135.4	611.5	263.5	347.4
1973	3,902.3	3,145.7	3,126.9	2,826.7	295.9	36.3	154.9	12.4	139.6	614.8	253.8	360.2
1974	3,888.2	3,122.6	3,094.9	2,781.0	311.7	38.7	156.1	10.7	143.2	625.2	252.0	372.6
1975	3,865.1	3,091.8	3,049.7	2,733.3	315.4	43.4	161.2	10.1	149.2	631.1	249.0	381.7
1976	4,081.1	3,296.6	3,255.9	2,929.2	323.4	44.6	163.0	10.4	150.6	634.3	247.5	386.4
1977	4,279.3	3,481.4	3,431.3	3,093.2	333.6	50.2	167.5	10.5	155.0	639.1	246.3	392.6
1978	4,493.7	3,678.8	3,651.6	3,294.6	351.7	41.7	170.3	10.8	157.5	649.2	247.3	401.8
1979	4,624.0	3,798.4	3,762.6	3,387.7	370.7	46.3	173.7	9.4	163.1	654.2	245.1	409.3
1980	4,611.9	3,777.0	3,740.8	3,345.6	395.6	46.2	178.7	8.3	169.8	660.9	246.7	414.5
1981	4,724.9	3,882.5	3,816.0	3,406.1	411.6	63.3	182.7	7.8	174.7	662.3	248.3	414.2
1982	4,623.6	3,776.0	3,705.4	3,291.4	418.7	65.2	188.0	7.6	180.4	666.6	250.3	416.4
1983	4,810.0	3,952.8	3,915.7	3,496.4	421.3	45.0	192.3	7.6	184.8	668.7	254.2	414.4
1984	5,138.2	4,264.2	4,211.3	3,774.2	437.5	56.4	197.1	8.7	188.2	676.0	258.2	417.6
1985	5,329.5	4,431.3	4,357.5	3,906.0	451.9	71.9	203.4	8.7	194.6	693.2	263.9	429.2
1986	5,489.9	4,565.2	4,500.0	4,040.2	459.7	65.5	213.5	9.0	204.3	709.9	266.9	443.0
1987	5,648.4	4,698.8	4,636.1	4,162.1	473.9	63.7	224.1	8.9	215.2	724.2	272.3	452.0
1988	5,862.9	4,880.0	4,826.8	4,335.7	491.0	56.6	240.6	9.5	231.0	741.3	274.1	467.3
1989	6,060.4	5,047.8	4,984.8	4,477.8	506.8	64.8	253.4	10.1	243.3	758.1	276.2	481.9
1990	6,138.7	5,099.4	5,026.5	4,510.5	515.9	72.9	264.1	10.2	253.8	774.7	280.3	494.5
1991	6,079.0	5,025.9	4,954.9	4,428.1	526.8	71.2	272.1	9.4	262.6	781.1	281.0	500.1
1992	6,244.4	5,184.4	5,103.8	4,560.6	543.2	80.6	279.1	10.1	269.0	781.0	274.4	506.6
1993	6,386.4	5,315.7	5,244.7	4,702.0	542.6	71.0	287.9	10.3	277.5	782.9	267.3	515.6
1994	6,608.7	5,530.3	5,446.7	4,885.3	561.3	83.9	296.2	10.2	286.0	782.4	256.8	525.8
1995	6,742.9	5,663.4	5,587.2	5,013.4	573.8	76.0	302.5	10.1	292.3	777.5	246.4	531.7
1990: I	6,154.1	5,123.5	5,055.1	4,544.1	510.8	69.4	259.3	10.3	249.0	770.3	279.8	490.5
II	6,174.4	5,137.7	5,063.4	4,549.6	513.6	74.1	262.7	10.4	252.3	773.3	280.0	493.4
III	6,145.2	5,101.6	5,028.8	4,511.3	517.4	72.7	266.5	10.2	256.2	776.7	280.9	495.9
IV	6,081.0	5,034.7	4,958.9	4,437.2	521.7	75.3	267.8	10.0	257.8	778.5	280.4	498.1
1991: I	6,047.9	4,995.5	4,924.8	4,401.6	523.2	70.9	269.0	9.5	259.5	783.7	284.9	498.9
II	6,074.1	5,020.2	4,947.2	4,423.1	524.1	73.1	271.6	9.4	262.2	782.5	282.3	500.2
III	6,089.3	5,037.2	4,968.1	4,440.4	527.7	69.3	272.8	9.4	263.4	779.3	279.4	499.9
IV	6,104.4	5,050.8	4,979.6	4,447.5	532.2	71.4	274.9	9.5	265.4	778.9	277.5	501.5
1992: I	6,175.3	5,118.7	5,039.7	4,508.4	531.3	79.0	277.3	9.9	267.4	779.3	275.8	503.5
II	6,214.2	5,156.7	5,075.3	4,542.4	532.9	81.4	277.2	10.1	267.1	780.3	275.0	505.3
III	6,260.9	5,198.8	5,115.8	4,545.7	570.1	83.0	279.8	10.1	269.6	782.3	274.0	508.4
IV	6,327.3	5,263.3	5,184.4	4,645.9	538.5	78.9	282.0	10.3	271.7	782.0	272.7	509.3
1993: I	6,326.4	5,259.8	5,184.3	4,638.2	546.1	75.6	283.5	10.3	273.1	783.2	271.5	511.7
II	6,356.5	5,286.2	5,212.7	4,671.5	541.2	73.7	287.1	10.4	276.7	783.2	269.0	514.3
III	6,393.4	5,320.3	5,259.1	4,717.9	541.2	60.8	289.6	10.3	279.2	783.6	266.4	517.3
IV	6,469.1	5,396.3	5,322.5	4,780.7	541.9	73.8	291.4	10.3	281.1	781.5	262.3	519.2
1994: I	6,508.5	5,432.0	5,347.9	4,783.4	564.4	84.6	293.5	10.3	283.2	783.1	261.1	522.2
II	6,587.6	5,509.1	5,424.8	4,870.7	554.1	84.8	295.9	10.3	285.6	782.7	258.1	524.7
III	6,644.9	5,565.1	5,481.1	4,920.1	561.1	84.4	296.8	10.2	286.7	783.2	255.9	527.5
IV	6,693.9	5,614.7	5,532.8	4,967.2	565.7	82.1	298.8	10.1	288.7	780.7	252.0	529.0
1995: I	6,701.0	5,621.2	5,542.4	4,973.3	569.1	78.9	300.1	10.0	290.1	780.1	250.2	530.2
II	6,713.5	5,632.7	5,556.1	4,984.3	571.7	76.4	301.6	10.1	291.5	779.6	249.1	530.9
III	6,776.4	5,694.1	5,620.2	5,046.7	573.6	73.5	303.1	10.2	292.9	779.7	247.7	532.5
IV	6,780.7	5,705.7	5,630.0	5,049.4	580.7	75.3	305.0	10.2	294.8	770.8	238.6	533.0
1996: I	6,814.3	5,741.6	5,662.4	5,085.1	577.4	79.1	305.5	10.3	295.3	768.0	238.7	530.0
II	6,892.6	5,807.3	5,724.5	5,146.2	578.6	82.8	308.4	10.3	298.1	777.7	240.4	538.1
III	6,928.4	5,841.2	5,754.3	5,170.8	583.7	87.1	310.1	10.3	299.8	778.1	239.0	539.9

[1] Gross domestic business product equals gross domestic product less gross product of households and institutions and of general government. Nonfarm product equals gross domestic business product less gross farm product.

[2] Equals compensation of general government employees plus general government consumption of fixed capital.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–10.—*Gross domestic product by industry, 1959–94*

[Billions of dollars]

Year	Gross domestic product	Private industries												Government
		Agriculture, forestry, and fishing	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Statistical discrepancy [1]	
					Total	Durable goods	Nondurable goods							
Based on 1972 SIC:														
1959	507.2	20.3	12.5	23.7	140.3	81.7	58.6	45.0	36.1	49.1	69.0	48.4	–2.1	64.8
1960	526.6	21.3	12.9	24.2	142.5	82.6	59.9	47.3	37.7	50.4	73.6	51.6	–3.7	68.9
1961	544.8	21.7	13.0	25.2	142.9	81.7	61.3	48.8	38.8	51.7	78.1	55.0	–3.3	73.0
1962	585.2	22.1	13.2	27.0	156.7	92.1	64.6	51.9	41.4	55.4	82.6	59.3	–2.4	78.2
1963	617.4	22.3	13.5	28.8	166.1	98.3	67.8	54.8	43.1	57.9	87.1	63.4	–3.5	83.9
1964	663.0	21.4	13.9	31.5	177.9	105.9	72.0	58.3	46.4	63.5	93.0	69.1	–2.1	90.1
1965	719.1	24.2	14.0	34.6	196.3	118.8	77.5	62.4	50.0	68.0	100.0	74.7	–1.4	96.3
1966	787.8	25.4	14.7	37.7	215.3	131.1	84.3	67.3	54.4	72.7	108.1	82.7	2.7	106.9
1967	833.6	24.9	15.2	39.5	220.8	134.1	86.7	70.5	57.8	78.2	117.4	90.8	.6	117.9
1968	910.6	25.7	16.3	43.3	241.1	146.3	94.8	76.4	63.4	86.6	127.0	99.4	.2	131.2
1969	982.2	28.5	17.1	48.4	254.4	154.4	100.0	82.7	68.5	94.2	136.6	110.8	–2.2	143.3
1970	1,035.6	29.8	18.7	51.1	249.6	146.2	103.4	88.3	72.2	100.2	146.6	120.5	1.0	157.6
1971	1,125.4	32.1	18.9	56.1	263.0	154.2	108.9	97.4	78.0	109.2	163.4	130.4	5.1	171.7
1972	1,237.3	37.0	19.7	62.5	290.4	172.6	117.8	108.6	87.4	118.8	176.9	144.9	3.2	187.8
1973	1,382.6	54.4	23.8	69.7	323.4	195.7	127.7	119.4	98.2	130.9	193.5	163.1	2.4	203.8
1974	1,496.9	53.2	37.1	73.6	337.3	202.2	135.1	130.1	111.1	136.7	209.3	179.3	4.5	224.8
1975	1,630.6	54.5	42.8	75.1	354.7	207.0	147.7	142.6	121.5	152.8	227.1	199.1	11.2	249.3
1976	1,819.0	53.6	47.6	84.9	405.3	239.9	165.4	161.6	129.2	172.2	250.4	223.9	18.9	271.2
1977	2,026.9	54.3	54.1	93.8	462.4	277.6	184.7	179.5	142.3	190.2	283.7	255.5	17.5	293.5
1978	2,291.4	63.2	61.5	110.6	516.9	316.9	200.0	202.5	161.0	215.6	328.1	294.6	17.6	319.8
1979	2,557.5	74.5	71.2	124.7	571.3	343.5	227.8	219.2	182.4	234.2	370.6	333.2	27.8	348.2
1980	2,784.2	66.7	112.7	128.6	584.4	348.7	235.7	242.3	195.3	245.9	418.2	377.3	27.4	385.5
1981	3,115.9	81.1	151.7	129.6	652.0	388.1	263.9	276.3	216.4	270.4	470.9	426.2	14.6	426.5
1982	3,242.1	77.1	149.5	129.8	649.8	377.4	272.3	293.2	219.6	288.1	504.2	471.8	–2.9	461.9
1983	3,514.5	62.6	127.5	138.9	690.1	397.3	292.7	328.3	229.2	321.9	565.6	521.5	36.5	492.4
1984	3,902.4	83.6	134.2	165.0	780.5	469.5	311.0	358.0	264.4	362.2	626.1	590.4	4.2	533.8
1985	4,180.7	84.5	132.8	185.5	802.9	477.1	325.9	376.8	280.8	395.0	691.3	651.1	1.3	578.6
1986	4,422.2	82.1	86.3	207.3	833.1	487.0	346.1	394.0	293.6	415.2	761.3	712.2	22.1	615.0
1987	4,692.3	88.6	88.3	217.0	889.0	514.4	374.6	420.7	300.3	436.5	830.3	785.1	–16.6	653.2
Based on 1987 SIC:														
1987	4,692.3	88.6	88.3	217.0	889.0	513.3	375.7	420.7	301.0	435.8	830.7	784.6	–16.6	653.2
1988	5,049.6	88.9	99.9	233.4	971.3	556.6	414.7	443.6	336.5	459.3	892.4	877.8	–48.6	694.9
1989	5,438.7	101.9	96.3	242.2	1,013.4	574.9	438.5	461.1	356.4	490.2	960.6	965.5	11.6	739.2
1990	5,743.8	108.7	112.3	245.2	1,031.4	572.8	458.5	482.3	367.3	503.5	1,025.2	1,059.4	16.1	792.5
1991	5,916.7	102.9	101.1	228.8	1,028.1	558.3	469.8	511.8	388.2	517.4	1,082.7	1,107.6	8.8	839.5
1992	6,244.4	112.4	92.2	229.7	1,063.6	573.4	490.2	528.8	406.5	544.3	1,148.8	1,200.8	43.7	873.6
1993	6,550.2	105.3	89.0	243.6	1,116.5	612.3	504.3	566.2	423.1	571.1	1,214.0	1,266.1	55.1	900.2
1994	6,931.4	117.8	90.1	269.2	1,197.1	673.1	524.0	606.4	461.9	609.9	1,273.7	1,342.7	31.3	931.3

[1] Equals gross domestic product (GDP) measured as the sum of expenditures less gross domestic income.

Note.—Data in this table incorporate the results of the comprehensive revision to the national income and product accounts (NIPA) released in January 1996. See *Survey of Current Business,* August 1996 for details. Data do *not* reflect the limited annual NIPA revisions released in August 1996.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–11.—*Real gross domestic product by industry, 1977–94*

[Billions of chained (1992) dollars]

Year	Gross domestic product	Private industries: Agriculture, forestry, and fishing	Mining	Construction	Manufacturing: Total	Manufacturing: Durable goods	Manufacturing: Nondurable goods	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Statistical discrepancy[1]	Government	Not allocated by industry[2]
Based on 1972 SIC:															
1977	4,279.3	60.6	82.4	213.8	796.5	435.2	361.8	350.3	201.1	364.5	743.3	712.5	36.9	717.4	–88.0
1978	4,493.7	52.0	84.6	221.2	836.7	461.8	374.1	366.4	215.6	389.9	786.6	759.5	34.4	731.5	–62.2
1979	4,624.0	57.3	73.6	227.8	865.1	470.6	395.7	382.4	228.3	389.1	831.4	787.3	50.3	739.4	–74.3
1980	4,611.9	57.7	82.0	214.7	822.8	451.3	371.5	388.9	226.0	374.5	863.5	810.8	45.3	748.8	–85.0
1981	4,724.9	75.6	81.4	195.4	858.6	468.8	390.6	394.9	241.1	386.2	878.8	829.9	22.2	749.4	–45.2
1982	4,623.6	78.6	78.8	172.8	810.2	428.0	386.3	383.4	246.6	387.9	876.5	838.1	–4.1	748.3	–55.2
1983	4,810.0	59.4	73.7	181.0	856.8	448.4	413.8	409.2	251.6	422.6	900.8	862.8	50.0	753.0	–59.4
1984	5,138.2	72.9	82.0	210.1	948.3	521.9	426.1	426.3	286.9	465.0	945.8	920.8	5.5	760.1	–24.3
1985	5,329.5	90.5	87.1	232.9	976.5	534.7	442.1	428.0	298.2	496.8	968.9	963.9	1.7	777.9	–26.5
1986	5,489.9	87.2	83.6	239.0	967.6	527.5	440.8	425.9	333.2	526.6	969.8	996.8	27.4	795.6	5.3
1987	5,648.4	87.6	86.4	239.6	1,041.6	566.4	476.4	458.4	322.1	510.1	1,016.0	1,041.9	–20.0	810.0	30.1
Based on 1987 SIC:															
1987	5,648.4	87.6	86.4	239.6	1,041.6	565.1	477.8	458.4	322.9	509.2	1,016.5	1,041.4	–20.0	810.0	31.1
1988	5,862.9	80.7	104.4	248.8	1,110.9	616.1	494.5	472.7	343.9	537.6	1,070.2	1,099.1	–56.4	829.0	6.3
1989	6,060.4	88.2	92.8	251.9	1,106.0	613.1	492.6	479.9	366.4	553.4	1,102.7	1,149.5	13.0	847.7	2.0
1990	6,138.7	101.5	96.9	247.5	1,090.1	600.7	489.3	494.7	360.6	546.4	1,109.9	1,181.7	17.2	867.0	20.6
1991	6,079.0	100.9	97.5	229.0	1,050.4	568.1	482.2	514.7	381.3	534.1	1,106.6	1,174.2	9.0	873.7	6.1
1992	6,244.4	112.4	92.2	229.7	1,063.6	573.4	490.2	528.8	406.5	544.3	1,148.8	1,200.8	43.7	873.6	.0
1993	6,383.8	103.3	90.7	236.1	1,095.3	601.2	494.1	555.8	418.6	563.2	1,159.8	1,222.1	53.7	875.1	7.0
1994	6,604.2	115.7	96.7	253.1	1,168.0	657.9	510.2	585.3	450.0	595.4	1,192.8	1,249.6	29.8	875.8	–14.5

[1] Equals the current-dollar statistical discrepancy deflated by the implicit price deflator for gross domestic product.
[2] Equals GDP less the statistical discrepancy and the sum of gross product originating of the detailed industries.

Note.—Data in this table incorporate the results of the comprehensive revision to the national income and product accounts (NIPA) released in January 1996. See *Survey of Current Business,* August 1996 for details. Data do *not* reflect the limited annual NIPA revisions released in August 1996.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–12.—*Gross domestic product of nonfinancial corporate business, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business	Consumption of fixed capital	Net domestic product: Total	Net domestic product: Indirect business taxes [1]	Domestic income: Total	Domestic income: Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments: Total	Profits: Profits before tax	Profits: Profits tax liability	Profits after tax: Total	Profits after tax: Dividends	Profits after tax: Undistributed profits	Inventory valuation adjustment	Capital consumption adjustment	Net interest
1959	267.5	26.3	241.2	26.0	215.2	171.5	40.6	43.6	20.7	22.9	10.0	12.9	−0.3	−2.8	3.1
1960	278.1	27.2	250.9	28.3	222.6	181.2	38.0	40.3	19.2	21.1	10.6	10.6	−.2	−2.2	3.5
1961	285.5	27.8	257.8	29.5	228.2	185.3	38.9	40.1	19.5	20.7	10.6	10.1	.3	−1.5	4.0
1962	311.7	28.8	282.9	32.0	250.9	200.1	46.3	45.0	20.6	24.3	11.4	13.0	.0	1.3	4.5
1963	331.8	29.8	302.0	34.0	267.9	211.1	52.0	49.8	22.8	27.0	12.6	14.4	.1	2.2	4.8
1964	358.1	31.3	326.8	36.6	290.2	226.7	58.2	56.0	24.0	32.1	13.7	18.4	−.5	2.7	5.3
1965	393.5	33.5	360.0	39.2	320.8	246.5	68.2	66.2	27.2	39.0	15.6	23.4	−1.2	3.3	6.1
1966	431.0	36.7	394.3	40.5	353.8	274.0	72.5	71.4	29.5	41.9	16.8	25.1	−2.1	3.2	7.4
1967	453.4	40.1	413.4	43.1	370.3	292.3	69.2	67.5	27.8	39.7	17.5	22.2	−1.6	3.3	8.8
1968	500.5	43.8	456.7	49.7	407.0	323.2	73.6	74.0	33.6	40.4	19.1	21.3	−3.7	3.3	10.1
1969	543.3	47.5	495.8	54.7	441.1	358.8	69.1	70.8	33.3	37.5	19.1	18.4	−5.9	4.1	13.2
1970	561.4	51.6	509.8	58.8	451.0	378.7	55.2	58.1	27.2	31.0	18.5	12.5	−6.6	3.6	17.1
1971	606.4	56.3	550.1	64.5	485.6	402.0	65.5	67.1	29.9	37.1	18.5	18.7	−4.6	3.0	18.1
1972	673.3	62.1	611.2	69.2	542.1	447.1	75.8	78.6	33.8	44.8	20.1	24.7	−6.6	3.9	19.2
1973	754.5	67.6	686.8	76.3	610.5	505.9	82.1	98.6	40.2	58.4	21.1	37.3	−20.0	3.6	22.5
1974	814.6	78.7	736.0	81.4	654.6	556.8	69.5	109.2	42.2	67.0	21.7	45.2	−39.5	−.2	28.3
1975	881.2	94.4	786.8	87.4	699.5	580.3	90.4	109.9	41.5	68.4	24.8	43.6	−11.0	−8.5	28.7
1976	995.3	104.5	890.8	95.1	795.6	657.4	110.7	137.3	53.0	84.4	28.0	56.3	−14.9	−11.7	27.5
1977	1,125.4	125.8	999.7	104.1	895.6	742.6	122.4	158.6	59.9	98.7	31.5	67.2	−16.6	−19.5	30.6
1978	1,284.1	142.1	1,142.0	116.4	1,025.5	852.9	136.3	183.5	67.1	116.4	36.4	80.0	−25.0	−22.1	36.3
1979	1,429.7	163.7	1,266.0	125.4	1,140.6	968.1	127.4	195.5	69.6	125.9	38.1	87.9	−41.6	−26.6	45.1
1980	1,553.8	187.8	1,365.9	141.6	1,224.3	1,058.5	107.6	181.6	67.0	114.6	45.3	69.2	−43.0	−30.9	58.2
1981	1,767.3	218.3	1,549.1	170.4	1,378.7	1,171.5	135.3	181.4	63.9	117.5	53.3	64.2	−25.7	−20.4	71.9
1982	1,823.4	235.4	1,588.0	172.1	1,415.9	1,217.0	116.4	133.7	46.3	87.4	53.3	34.2	−9.9	−7.4	82.5
1983	1,950.3	248.9	1,701.4	189.0	1,512.4	1,280.5	155.3	157.4	59.4	97.9	64.2	33.8	−9.1	7.0	76.6
1984	2,187.5	255.1	1,932.4	210.2	1,722.2	1,421.7	212.7	191.0	73.7	117.3	67.8	49.5	−5.6	27.3	87.8
1985	2,319.3	266.5	2,052.8	224.4	1,828.4	1,521.9	215.9	167.6	69.9	97.6	72.3	25.4	.5	47.8	90.6
1986	2,416.3	283.7	2,132.6	235.8	1,896.8	1,603.2	195.5	151.5	75.6	75.9	73.9	2.1	11.4	32.6	98.1
1987	2,589.6	296.9	2,292.7	246.7	2,046.0	1,715.5	225.2	214.9	93.5	121.4	75.9	45.5	−20.7	31.0	105.3
1988	2,805.2	316.5	2,488.7	263.5	2,225.3	1,846.7	257.5	260.6	101.7	158.8	79.4	79.4	−29.3	26.3	121.0
1989	2,950.9	335.5	2,615.4	280.8	2,334.6	1,950.0	238.7	237.0	98.8	138.3	103.5	34.8	−17.5	19.1	145.9
1990	3,084.0	352.7	2,731.3	296.8	2,434.5	2,056.0	231.0	237.3	95.7	141.6	118.4	23.3	−13.5	7.2	147.5
1991	3,132.1	366.7	2,765.3	318.0	2,447.3	2,090.6	223.1	218.1	85.4	132.8	124.6	8.2	4.0	1.0	133.7
1992	3,262.6	376.1	2,886.5	337.0	2,549.5	2,195.3	250.0	257.8	91.1	166.7	133.6	33.1	−7.5	−.3	104.2
1993	3,437.5	390.1	3,047.4	356.2	2,691.2	2,294.3	297.3	303.7	103.5	200.3	152.6	47.6	−6.6	.1	99.6
1994	3,689.4	412.8	3,276.6	379.6	2,896.9	2,434.8	364.6	372.5	129.9	242.7	161.8	80.9	−13.3	5.3	97.5
1995	3,885.8	424.0	3,461.8	400.9	3,060.9	2,574.9	384.6	403.0	140.7	262.4	175.9	86.5	−28.1	9.7	101.3
1990: I	3,042.8	346.4	2,696.4	290.5	2,405.9	2,022.0	237.5	227.9	90.5	137.3	119.5	17.8	−1.3	10.9	146.5
II	3,103.0	351.6	2,751.5	292.6	2,458.9	2,055.8	254.2	239.0	96.4	142.7	116.5	26.2	7.7	7.4	148.9
III	3,092.7	356.0	2,736.7	299.7	2,437.0	2,074.7	214.7	250.1	101.1	148.9	118.1	30.8	−40.0	4.7	147.6
IV	3,097.4	356.9	2,740.5	304.3	2,436.2	2,071.4	217.7	232.3	94.7	137.7	119.5	18.2	−20.3	5.6	147.1
1991: I	3,107.7	363.2	2,744.5	309.2	2,435.3	2,060.0	232.6	213.3	83.1	130.3	120.7	9.5	17.6	1.7	142.7
II	3,119.1	365.7	2,753.4	314.2	2,439.2	2,078.8	222.8	215.0	84.0	131.0	125.4	5.6	6.8	1.1	137.6
III	3,142.0	369.0	2,773.0	321.2	2,451.8	2,101.2	219.4	220.6	86.8	133.8	124.9	8.9	−.8	−.3	131.1
IV	3,159.5	369.1	2,790.4	327.3	2,463.1	2,122.2	217.5	223.7	87.5	136.2	127.5	8.7	−7.6	1.5	123.3
1992: I	3,202.2	368.6	2,833.6	330.4	2,503.1	2,152.8	240.2	236.3	82.4	153.9	124.0	29.9	.3	3.6	110.2
II	3,236.1	371.8	2,864.3	331.8	2,532.5	2,183.2	243.3	262.6	93.6	169.0	129.7	39.3	−21.9	2.6	106.0
III	3,270.5	387.9	2,882.7	337.8	2,544.9	2,209.3	234.8	254.4	89.9	164.5	134.3	30.2	−8.6	−11.0	100.8
IV	3,341.7	376.3	2,965.4	348.0	2,617.4	2,236.1	281.6	277.9	98.4	179.5	146.3	33.2	.2	3.5	99.7
1993: I	3,344.2	382.8	2,961.3	346.9	2,614.4	2,251.4	260.5	275.9	93.8	182.1	153.4	28.7	−14.6	−.7	102.5
II	3,407.3	387.5	3,019.8	352.9	2,666.9	2,279.8	286.9	303.2	103.9	199.3	150.1	49.2	−15.6	−.7	100.2
III	3,459.7	395.8	3,063.9	355.9	2,708.0	2,308.4	301.1	296.4	100.1	196.3	150.8	45.5	7.9	−3.3	98.5
IV	3,538.7	394.2	3,144.4	368.9	2,775.5	2,337.6	340.6	339.5	116.0	223.4	156.3	67.2	−4.0	5.1	97.4
1994: I	3,601.7	427.9	3,173.9	372.6	2,801.3	2,381.8	323.6	346.0	121.0	225.0	154.9	70.1	−3.9	−18.4	95.9
II	3,663.0	404.3	3,258.7	376.5	2,882.2	2,418.4	366.3	364.4	126.9	237.5	160.9	76.7	−9.8	11.7	97.5
III	3,709.5	408.7	3,300.8	382.1	2,918.6	2,445.8	374.2	378.0	130.9	247.1	161.0	86.1	−16.5	12.7	98.7
IV	3,783.2	410.4	3,372.9	387.2	2,985.7	2,493.3	394.3	401.8	140.6	261.1	170.2	91.0	−22.8	15.3	98.0
1995: I	3,803.3	415.0	3,388.3	394.1	2,994.2	2,528.5	364.6	405.1	142.2	262.9	172.1	90.8	−51.9	11.4	101.2
II	3,841.9	421.3	3,420.6	401.1	3,019.4	2,553.1	364.5	397.9	138.5	259.4	176.1	83.3	−42.3	8.9	101.8
III	3,924.8	426.6	3,498.2	401.6	3,096.6	2,590.6	405.0	406.0	141.3	264.7	174.9	89.7	−9.3	8.4	100.9
IV	3,973.2	433.0	3,540.2	406.9	3,133.3	2,627.6	404.3	403.2	140.6	262.6	180.3	82.4	−8.8	9.9	101.4
1996: I	4,011.6	434.8	3,576.8	405.3	3,171.5	2,651.3	420.3	424.1	147.7	276.4	185.6	90.8	−17.4	13.6	100.0
II	4,081.6	439.9	3,641.7	403.0	3,238.8	2,703.4	433.8	429.5	149.2	280.3	187.9	92.4	−11.0	15.4	101.5
III	4,143.1	445.5	3,697.6	406.6	3,290.9	2,744.3	442.8	424.1	146.9	277.1	186.2	90.9	2.0	16.8	103.9

[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, 1959–96*

[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 real output (dollars)[1]							
							Corporate profits with inventory valuation and capital consumption adjustments			
	Current dollars	Chained (1992) dollars	Total cost and profit[2]	Consumption of fixed capital	Indirect business taxes[3]	Compensation of employees	Total	Profits tax liability	Profits after tax[4]	Net interest
1959	267.5	921.6	0.290	0.028	0.028	0.186	0.044	0.023	0.022	0.003
1960	278.1	947.5	.294	.029	.030	.191	.040	.020	.020	.004
1961	285.5	967.6	.295	.029	.031	.192	.040	.020	.020	.004
1962	311.7	1,046.8	.298	.027	.031	.191	.044	.020	.025	.004
1963	331.8	1,110.7	.299	.027	.031	.190	.047	.021	.026	.004
1964	358.1	1,189.4	.301	.026	.031	.191	.049	.020	.029	.004
1965	393.5	1,283.6	.307	.026	.031	.192	.053	.021	.032	.005
1966	431.0	1,363.1	.316	.027	.030	.201	.053	.022	.032	.005
1967	453.4	1,396.5	.325	.029	.031	.209	.050	.020	.030	.006
1968	500.5	1,488.1	.336	.029	.033	.217	.049	.023	.027	.007
1969	543.3	1,545.6	.351	.031	.035	.232	.045	.022	.023	.009
1970	561.4	1,525.5	.368	.034	.039	.248	.036	.018	.018	.011
1971	606.4	1,592.0	.381	.035	.041	.253	.041	.019	.022	.011
1972	673.3	1,717.2	.392	.036	.040	.260	.044	.020	.025	.011
1973	754.5	1,811.4	.416	.037	.042	.279	.045	.022	.023	.012
1974	814.6	1,780.6	.457	.044	.046	.313	.039	.024	.015	.016
1975	881.2	1,744.6	.505	.054	.050	.333	.052	.024	.028	.016
1976	995.3	1,892.2	.526	.055	.050	.347	.059	.028	.031	.015
1977	1,125.4	2,041.1	.551	.062	.051	.364	.060	.029	.031	.015
1978	1,284.1	2,165.7	.593	.066	.054	.394	.063	.031	.032	.017
1979	1,429.7	2,214.2	.646	.074	.057	.437	.058	.031	.026	.020
1980	1,553.8	2,222.2	.699	.085	.064	.476	.048	.030	.018	.026
1981	1,767.3	2,328.8	.759	.094	.073	.503	.058	.027	.031	.031
1982	1,823.4	2,298.8	.793	.102	.075	.529	.051	.020	.030	.036
1983	1,950.3	2,407.8	.810	.103	.078	.532	.064	.025	.040	.032
1984	2,187.5	2,634.6	.830	.097	.080	.540	.081	.028	.053	.033
1985	2,319.3	2,748.0	.844	.097	.082	.554	.079	.025	.053	.033
1986	2,416.3	2,832.4	.853	.100	.083	.566	.069	.027	.042	.035
1987	2,589.6	2,967.0	.873	.100	.083	.578	.076	.031	.044	.035
1988	2,805.2	3,122.1	.898	.101	.084	.591	.082	.033	.050	.039
1989	2,950.9	3,175.4	.929	.106	.088	.614	.075	.031	.044	.046
1990	3,084.0	3,212.5	.960	.110	.092	.640	.072	.030	.042	.046
1991	3,132.1	3,168.8	.988	.116	.100	.660	.070	.027	.043	.042
1992	3,262.6	3,262.6	1.000	.115	.103	.673	.077	.028	.049	.032
1993	3,437.5	3,380.0	1.017	.115	.105	.679	.088	.031	.057	.029
1994	3,689.4	3,567.7	1.034	.116	.106	.682	.102	.036	.066	.027
1995	3,885.8	3,692.3	1.052	.115	.109	.697	.104	.038	.066	.027
1990: I	3,042.8	3,208.3	.948	.108	.091	.630	.074	.028	.046	.046
II	3,103.0	3,243.0	.957	.108	.090	.634	.078	.030	.049	.046
III	3,092.7	3,208.5	.964	.111	.093	.647	.067	.032	.035	.046
IV	3,097.4	3,190.2	.971	.112	.095	.649	.068	.030	.039	.046
1991: I	3,107.7	3,164.3	.982	.115	.098	.651	.074	.026	.047	.045
II	3,119.1	3,158.4	.988	.116	.099	.658	.071	.027	.044	.044
III	3,142.0	3,170.1	.991	.116	.101	.663	.069	.027	.042	.041
IV	3,159.5	3,182.5	.993	.116	.103	.667	.068	.027	.041	.039
1992: I	3,202.2	3,216.6	.996	.115	.103	.669	.075	.026	.049	.034
II	3,236.1	3,238.1	.999	.115	.102	.674	.075	.029	.046	.033
III	3,270.5	3,267.4	1.001	.119	.103	.676	.072	.028	.044	.031
IV	3,341.7	3,328.5	1.004	.113	.105	.672	.085	.030	.055	.030
1993: I	3,344.2	3,302.9	1.012	.116	.105	.682	.079	.028	.050	.031
II	3,407.3	3,356.7	1.015	.115	.105	.679	.085	.031	.055	.030
III	3,459.7	3,399.2	1.018	.116	.105	.679	.089	.029	.059	.029
IV	3,538.7	3,461.1	1.022	.114	.107	.675	.098	.034	.065	.028
1994: I	3,601.7	3,503.9	1.028	.122	.106	.680	.092	.035	.058	.027
II	3,663.0	3,553.0	1.031	.114	.106	.681	.103	.036	.067	.027
III	3,709.5	3,577.7	1.037	.114	.107	.684	.105	.037	.068	.028
IV	3,783.2	3,636.3	1.040	.113	.106	.686	.108	.039	.070	.027
1995: I	3,803.3	3,634.1	1.047	.114	.108	.696	.100	.039	.061	.028
II	3,841.9	3,656.1	1.051	.115	.110	.698	.100	.038	.062	.028
III	3,924.8	3,719.9	1.055	.115	.108	.696	.109	.038	.071	.027
IV	3,973.2	3,759.1	1.057	.115	.108	.699	.108	.037	.070	.027
1996: I	4,011.6	3,779.2	1.062	.115	.107	.702	.111	.039	.072	.026
II	4,081.6	3,831.0	1.065	.115	.105	.706	.113	.039	.074	.027
III	4,143.1	3,888.8	1.065	.115	.105	.706	.114	.038	.076	.027

[1] Output is measured by gross domestic product of nonfinancial corporate business in chained (1992) 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.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–14.—*Personal consumption expenditures, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods			Nondurable goods					Services					
		Total [1]	Motor vehicles and parts	Furniture and household equipment	Total [1]	Food	Clothing and shoes	Gasoline and oil	Fuel oil and coal	Total [1]	Housing [2]	Household operation: Total [1]	Household operation: Electricity and gas	Transportation	Medical care
1959	318.1	42.7	18.9	18.1	148.5	80.7	26.4	11.3	4.0	127.0	45.0	18.7	7.6	10.5	16.4
1960	332.2	43.3	19.7	18.0	152.9	82.3	27.0	12.0	3.8	136.0	48.2	20.3	8.3	11.2	17.6
1961	342.6	41.8	17.8	18.3	156.6	84.0	27.6	12.0	3.8	144.3	51.2	21.2	8.8	11.7	18.7
1962	363.4	46.9	21.5	19.3	162.8	86.1	29.0	12.6	3.8	153.7	54.7	22.4	9.4	12.2	20.8
1963	383.0	51.6	24.4	20.7	168.2	88.3	29.8	13.0	4.0	163.2	58.0	23.6	9.9	12.7	22.6
1964	411.4	56.7	26.0	23.2	178.7	93.6	32.4	13.6	4.1	176.1	61.4	25.0	10.4	13.4	25.8
1965	444.3	63.3	29.9	25.1	191.6	100.7	34.1	14.8	4.4	189.4	65.4	26.5	10.9	14.5	28.0
1966	481.9	68.3	30.3	28.2	208.8	109.3	37.4	16.0	4.7	204.8	69.5	28.2	11.5	15.9	30.7
1967	509.5	70.4	30.0	30.0	217.1	112.5	39.2	17.1	4.8	222.0	74.1	30.2	12.2	17.3	33.9
1968	559.8	80.8	36.1	32.9	235.7	122.2	43.2	18.6	4.7	243.4	79.7	32.3	13.0	18.9	39.2
1969	604.7	85.9	38.4	34.7	253.2	131.5	46.5	20.5	4.6	265.5	86.8	35.1	14.0	20.9	44.7
1970	648.1	85.0	35.5	35.7	272.0	143.8	47.8	21.9	4.4	291.1	94.0	37.8	15.2	23.7	50.4
1971	702.5	96.9	44.5	37.8	285.5	149.7	51.7	23.2	4.6	320.1	102.7	41.0	16.6	27.1	56.9
1972	770.7	110.4	51.1	42.4	308.0	161.4	56.4	24.4	5.1	352.3	112.1	45.3	18.4	29.8	63.8
1973	851.6	123.5	56.1	47.9	343.1	179.6	62.5	28.1	6.3	384.9	122.7	49.8	20.0	31.2	71.6
1974	931.2	122.3	49.5	51.5	384.5	201.8	66.0	36.1	7.8	424.4	134.1	55.5	23.5	33.3	80.6
1975	1,029.1	133.5	54.8	54.5	420.6	223.1	70.8	39.7	8.4	475.0	147.0	63.7	28.5	35.7	93.5
1976	1,148.8	158.9	71.3	60.2	458.2	242.4	76.6	43.0	10.1	531.8	161.5	72.4	32.5	41.3	106.7
1977	1,277.1	181.1	83.5	67.1	496.9	262.4	84.1	46.9	11.1	599.0	179.5	81.9	37.6	49.2	123.0
1978	1,428.8	201.4	93.1	74.0	549.9	289.2	94.3	50.1	11.5	677.4	201.7	91.2	42.1	53.5	140.0
1979	1,593.5	213.9	93.5	82.3	624.0	324.2	101.2	66.2	14.4	755.6	226.6	100.0	46.8	59.1	158.0
1980	1,760.4	213.5	87.0	86.0	695.5	355.4	107.3	86.7	15.4	851.4	255.2	113.0	56.3	64.7	181.2
1981	1,941.3	230.5	95.8	91.3	758.2	382.8	117.2	97.9	15.8	952.6	287.9	126.0	63.4	68.7	213.0
1982	2,076.8	239.3	102.9	92.5	786.8	402.6	120.5	94.1	14.5	1,050.7	313.2	141.4	72.6	70.9	239.4
1983	2,283.4	279.8	126.9	105.3	830.3	422.9	130.9	93.1	13.6	1,173.3	339.0	155.9	80.7	79.4	267.8
1984	2,492.3	325.1	152.5	117.2	883.6	446.3	142.5	94.6	13.9	1,283.6	370.6	168.0	84.7	90.0	294.1
1985	2,704.8	361.1	175.7	126.3	927.6	466.5	152.1	97.2	13.6	1,416.1	407.1	180.3	88.8	100.0	321.8
1986	2,892.7	398.7	192.4	140.3	957.2	490.8	163.1	80.1	11.3	1,536.8	442.2	186.9	87.2	107.3	346.1
1987	3,094.5	416.7	193.1	150.4	1,014.0	513.9	174.4	85.4	11.2	1,663.8	476.6	194.9	88.9	118.2	381.1
1988	3,349.7	451.0	207.5	162.8	1,081.1	551.2	185.9	87.1	11.4	1,817.6	512.9	206.6	94.1	130.5	428.7
1989	3,594.8	472.8	214.4	173.3	1,163.8	588.4	199.9	96.6	11.4	1,958.1	547.4	219.8	98.8	137.8	477.1
1990	3,839.3	476.5	210.3	176.0	1,245.3	630.5	205.9	109.2	12.0	2,117.5	586.3	226.3	98.7	143.7	537.7
1991	3,975.1	455.2	187.6	178.5	1,277.6	650.0	211.3	103.9	11.3	2,242.3	616.5	237.6	104.9	145.3	586.5
1992	4,219.8	488.5	206.9	189.4	1,321.8	660.0	225.5	106.6	10.9	2,409.4	646.8	248.2	106.6	158.1	646.6
1993	4,454.1	530.7	226.1	205.5	1,368.9	685.7	235.7	108.1	10.6	2,554.6	673.2	268.5	115.9	169.6	697.4
1994	4,700.9	580.9	245.3	226.8	1,429.7	715.7	247.8	109.9	10.1	2,690.3	706.6	278.9	115.6	181.3	739.1
1995	4,924.9	606.4	247.8	241.9	1,485.9	747.2	254.4	114.6	10.0	2,832.6	743.7	294.2	118.0	192.5	784.2
1990: I	3,759.2	493.3	223.4	178.9	1,220.7	617.6	205.8	102.8	11.5	2,045.3	571.1	219.1	93.5	141.5	514.2
II	3,811.8	477.6	211.5	176.4	1,230.2	627.5	205.6	100.4	11.3	2,104.1	581.5	227.0	99.5	143.2	530.6
III	3,879.2	473.2	208.5	175.0	1,256.2	637.1	206.8	109.6	12.7	2,149.8	593.5	229.6	101.0	144.2	547.2
IV	3,907.0	461.9	198.0	173.7	1,274.1	639.7	205.5	124.1	12.6	2,171.0	599.2	229.6	100.9	145.8	558.8
1991: I	3,910.7	449.0	183.6	175.2	1,268.3	644.0	207.2	108.4	11.9	2,193.5	605.8	230.7	101.6	143.0	568.2
II	3,961.0	452.7	183.3	179.7	1,279.7	652.9	212.7	103.6	10.8	2,228.6	612.9	239.9	108.1	143.9	578.6
III	4,001.6	462.0	192.5	180.6	1,283.4	653.2	214.1	102.1	11.3	2,256.3	619.7	240.5	106.1	145.9	591.3
IV	4,027.1	457.3	191.1	178.3	1,279.0	649.8	211.1	101.4	11.0	2,290.7	627.5	239.3	104.0	148.5	607.7
1992: I	4,127.6	474.1	199.1	184.8	1,303.1	657.3	219.6	102.3	10.4	2,350.4	636.6	241.5	102.1	154.9	624.2
II	4,183.0	481.3	204.0	186.5	1,308.4	652.3	222.3	105.8	11.8	2,393.3	643.4	248.8	106.2	156.9	640.6
III	4,238.9	492.5	208.3	190.6	1,326.3	657.9	228.1	109.4	10.6	2,420.1	649.9	243.6	106.6	156.0	655.0
IV	4,329.6	506.2	216.1	195.5	1,349.5	672.3	232.1	108.9	10.8	2,473.9	657.4	259.0	111.4	164.5	666.8
1993: I	4,367.6	508.3	214.2	198.3	1,354.1	676.5	230.6	110.6	10.9	2,505.2	663.7	260.8	113.2	166.7	681.9
II	4,424.8	525.2	225.4	202.1	1,364.1	683.0	234.0	108.0	10.6	2,535.4	670.1	264.2	113.3	168.4	691.9
III	4,481.0	536.7	228.3	207.7	1,371.3	687.9	236.7	106.6	10.6	2,572.9	675.9	273.6	118.6	170.0	702.9
IV	4,543.1	552.3	236.4	213.9	1,386.1	695.5	241.3	107.1	10.4	2,604.7	683.2	275.5	118.5	173.4	712.7
1994: I	4,600.9	562.6	243.3	216.0	1,399.7	701.4	242.8	105.9	11.3	2,638.6	693.2	270.4	117.3	176.5	722.4
II	4,666.2	573.1	242.4	223.4	1,416.6	710.7	245.4	106.4	9.8	2,676.5	701.6	282.5	119.2	180.6	732.9
III	4,738.3	585.3	245.0	230.2	1,443.4	721.1	249.4	113.4	9.9	2,709.6	711.3	281.6	114.4	183.2	743.6
IV	4,798.2	602.7	250.7	237.6	1,459.0	729.5	253.8	113.9	9.3	2,736.6	720.3	281.2	111.6	185.0	757.5
1995: I	4,840.6	593.0	240.6	237.1	1,471.5	738.4	252.8	116.2	9.5	2,776.1	729.8	286.3	113.6	187.1	771.0
II	4,910.5	604.0	248.3	239.2	1,486.7	744.6	254.3	118.3	10.4	2,819.8	739.0	293.7	118.2	191.6	779.5
III	4,957.9	615.8	253.9	244.3	1,491.2	750.9	255.5	113.1	9.8	2,850.9	748.0	298.7	121.7	194.2	787.8
IV	4,990.5	612.8	248.3	247.0	1,494.2	754.9	254.8	110.8	10.3	2,883.5	758.1	298.1	118.4	196.9	798.5
1996: I	5,060.5	625.2	254.2	248.7	1,522.1	765.8	261.2	115.9	11.3	2,913.2	767.0	302.1	120.8	198.5	800.4
II	5,139.4	637.6	256.2	255.9	1,544.7	767.9	266.3	127.0	11.0	2,957.1	775.2	310.4	124.7	202.4	811.2
III	5,165.4	630.5	249.8	255.9	1,546.5	773.3	265.1	119.8	10.6	2,988.5	783.3	309.2	122.3	206.4	818.9

[1] Includes other items not shown separately.
[2] Includes imputed rental value of owner-occupied housing.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–15.—*Real personal consumption expenditures, 1959–96*

[Billions of chained (1992) dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods			Nondurable goods					Services					
		Total [1]	Motor vehicles and parts	Furniture and household equipment	Total [1]	Food	Clothing and shoes	Gasoline and oil	Fuel oil and coal	Total [1]	Housing [2]	Household operation: Total [1]	Household operation: Electricity and gas	Transportation	Medical care
1959	1,394.6	103.1	53.5	31.7	606.3	355.9	68.6	46.9	26.7	687.4	195.4	79.7	36.9	55.1	132.7
1960	1,432.6	105.2	56.8	31.3	615.4	358.7	69.3	48.5	25.6	717.4	205.6	83.5	38.9	56.9	136.7
1961	1,461.5	101.2	51.2	31.9	626.7	362.7	70.6	49.0	24.4	746.5	215.3	86.5	40.9	57.5	141.7
1962	1,533.8	113.0	60.8	33.9	646.5	367.3	73.7	51.1	24.3	783.4	227.4	90.7	43.7	59.7	153.3
1963	1,596.6	124.0	68.4	36.4	660.0	371.4	75.1	52.7	25.5	818.7	237.9	94.6	45.8	62.1	162.7
1964	1,692.3	135.5	72.4	41.1	692.5	386.3	81.0	55.5	26.5	868.4	249.0	99.2	48.3	65.4	180.5
1965	1,799.1	152.6	84.0	44.9	729.3	407.9	84.3	58.2	27.7	914.6	262.6	104.2	50.6	68.4	188.9
1966	1,902.0	165.5	85.5	50.7	769.2	424.7	90.0	61.8	28.5	961.0	274.6	109.8	53.4	72.7	197.6
1967	1,958.6	168.1	83.6	53.1	781.4	430.2	90.5	63.8	28.6	1,007.6	286.8	115.3	56.4	77.2	204.8
1968	2,070.2	186.6	97.2	56.5	816.9	450.9	94.3	68.2	27.0	1,059.6	300.9	119.9	59.4	81.9	220.8
1969	2,147.5	193.3	101.2	58.0	838.6	462.5	96.0	72.8	25.6	1,110.8	316.8	125.9	62.7	86.5	237.2
1970	2,197.8	187.0	91.2	58.6	859.1	477.2	94.8	77.3	23.8	1,155.4	329.3	130.2	65.4	89.1	250.8
1971	2,279.5	205.7	108.7	60.9	874.5	481.6	99.4	81.1	23.0	1,197.9	343.5	132.2	67.2	92.3	268.3
1972	2,415.9	231.9	124.3	67.5	912.9	496.8	106.1	84.4	25.3	1,262.5	361.5	138.9	70.8	98.1	286.4
1973	2,532.6	255.8	135.7	74.8	942.9	498.4	113.5	88.8	27.5	1,319.4	379.4	146.0	72.8	100.6	307.6
1974	2,514.7	238.2	112.5	75.6	924.5	490.6	111.9	84.4	21.7	1,351.2	399.1	147.5	73.7	101.1	320.2
1975	2,570.0	238.1	113.2	73.9	938.3	502.6	115.7	86.9	21.3	1,398.3	410.6	154.6	77.8	103.0	337.3
1976	2,714.3	268.5	136.8	78.8	984.8	529.4	121.2	90.4	23.9	1,457.1	422.9	161.4	80.5	107.3	353.5
1977	2,829.8	293.4	151.5	85.5	1,010.4	541.2	127.8	93.2	23.1	1,518.2	433.3	170.3	84.4	114.8	371.2
1978	2,951.6	308.8	158.0	90.5	1,045.7	545.7	139.9	95.3	23.0	1,589.3	454.5	178.6	87.6	118.0	385.7
1979	3,020.2	307.3	147.4	95.4	1,069.7	555.1	145.8	94.0	21.3	1,639.8	472.7	183.3	88.3	121.7	401.1
1980	3,009.7	282.6	127.5	93.5	1,065.1	558.7	148.1	88.6	16.5	1,670.7	486.6	187.4	90.7	115.6	415.5
1981	3,046.4	285.8	130.5	93.5	1,074.3	557.9	156.0	89.9	13.8	1,696.1	497.8	185.9	89.4	111.7	436.4
1982	3,081.5	285.5	133.9	91.3	1,080.6	565.1	157.1	91.0	12.8	1,728.2	500.9	187.0	90.3	109.9	442.2
1983	3,240.6	327.4	160.5	103.5	1,112.4	579.7	167.3	93.0	12.9	1,809.0	511.8	193.0	93.0	117.0	459.7
1984	3,407.6	374.9	187.7	115.5	1,151.8	589.9	179.9	95.9	12.8	1,883.0	531.8	197.7	93.6	128.6	472.4
1985	3,566.5	411.4	211.2	125.3	1,178.3	602.2	186.5	97.8	13.0	1,977.3	551.1	205.6	96.1	140.6	490.7
1986	3,708.7	448.4	224.8	140.6	1,215.9	614.0	199.9	102.5	13.4	2,041.4	565.5	209.8	95.1	145.7	510.3
1987	3,822.3	454.9	216.2	149.9	1,239.3	620.8	205.4	105.3	13.0	2,126.9	583.4	219.4	98.4	151.0	537.3
1988	3,972.7	483.5	229.4	160.8	1,274.4	641.6	210.0	106.5	13.2	2,212.4	600.9	229.2	103.4	159.0	561.3
1989	4,064.6	496.2	230.3	170.9	1,303.5	650.1	220.7	108.1	12.6	2,262.3	614.6	237.6	105.6	160.8	575.8
1990	4,132.2	493.3	224.3	173.5	1,316.1	662.9	217.9	107.3	11.2	2,321.3	627.2	240.1	103.7	159.9	602.8
1991	4,105.8	462.0	193.2	177.0	1,302.9	659.6	215.9	103.4	10.8	2,341.0	635.2	243.4	107.0	152.3	621.6
1992	4,219.8	488.5	206.9	189.4	1,321.8	660.0	225.5	106.6	10.9	2,409.4	646.8	248.2	106.6	158.1	646.6
1993	4,339.5	524.1	218.6	208.4	1,348.8	674.3	233.3	109.1	10.7	2,466.7	655.0	261.2	112.4	162.6	658.8
1994	4,473.2	562.0	228.2	230.1	1,390.5	689.1	247.2	110.4	10.3	2,521.4	668.2	266.0	111.5	171.3	668.8
1995	4,577.8	579.8	221.1	251.1	1,421.9	702.1	257.2	113.3	10.3	2,577.0	681.7	276.8	113.6	177.0	684.1
1990: I	4,128.9	511.2	237.6	176.0	1,319.2	659.0	221.5	109.3	10.7	2,295.7	623.4	233.7	98.6	161.7	591.9
II	4,134.7	495.4	226.4	173.9	1,316.9	664.2	217.3	107.5	11.8	2,321.1	626.3	241.3	104.8	160.9	600.7
III	4,148.5	490.4	223.1	172.5	1,319.8	665.5	217.6	107.4	12.3	2,337.3	628.5	243.7	106.2	159.7	608.0
IV	4,116.4	476.3	210.0	171.5	1,308.4	662.9	215.1	104.9	9.9	2,331.2	630.6	241.9	105.3	157.3	610.6
1991: I	4,084.5	458.6	191.4	173.0	1,300.6	658.7	214.0	103.3	10.4	2,325.3	631.6	238.2	103.5	152.6	614.3
II	4,110.0	460.5	189.6	177.7	1,308.0	661.5	218.9	104.0	10.8	2,341.5	634.1	246.9	110.9	152.1	617.9
III	4,119.5	467.3	197.2	179.2	1,307.1	661.6	217.5	103.8	11.4	2,345.0	636.4	246.1	108.5	151.8	623.3
IV	4,109.1	461.5	194.6	178.0	1,295.7	656.5	213.1	102.5	10.6	2,352.0	638.6	242.5	105.1	152.6	630.8
1992: I	4,173.8	476.1	201.7	183.7	1,314.4	661.0	220.4	104.8	10.5	2,383.2	642.6	243.6	103.2	155.4	638.2
II	4,196.4	481.1	204.5	186.0	1,312.0	653.9	223.2	106.1	11.9	2,403.2	645.5	249.9	106.8	156.7	645.9
III	4,226.7	491.9	207.4	191.3	1,321.1	656.4	227.7	108.2	10.5	2,413.6	648.5	243.3	106.6	160.5	650.3
IV	4,282.3	505.0	213.9	196.4	1,339.8	668.6	230.9	107.3	10.7	2,437.6	650.6	256.1	109.7	159.6	652.2
1993: I	4,289.7	506.0	210.8	200.7	1,336.9	670.5	227.4	108.2	10.9	2,446.8	652.2	257.0	111.6	160.6	656.6
II	4,318.8	519.6	219.0	205.0	1,344.5	672.9	232.3	108.0	10.6	2,454.9	653.5	258.0	110.0	161.5	657.5
III	4,359.5	528.9	219.1	211.0	1,354.0	675.7	235.0	110.9	10.7	2,476.7	655.9	264.9	114.1	162.8	659.7
IV	4,390.0	541.9	225.3	216.8	1,359.9	677.9	238.6	109.3	10.6	2,488.5	658.5	265.0	113.7	165.7	661.4
1994: I	4,420.5	549.6	230.3	219.0	1,372.9	682.3	241.1	108.8	11.4	2,498.5	662.1	258.8	112.9	168.2	663.2
II	4,458.7	555.4	226.6	226.1	1,383.9	688.6	243.3	109.5	10.0	2,519.9	666.1	269.8	115.2	170.3	667.6
III	4,489.4	563.1	226.5	232.6	1,397.0	690.5	249.0	111.6	10.2	2,530.0	670.7	268.1	110.4	172.1	670.4
IV	4,524.0	579.8	229.4	242.6	1,408.1	694.9	255.5	111.6	9.6	2,537.3	674.1	267.2	107.6	174.5	674.2
1995: I	4,534.8	566.5	216.3	243.1	1,416.6	700.5	254.6	113.4	9.9	2,552.5	677.4	270.1	109.4	175.6	677.8
II	4,569.9	576.2	220.9	247.1	1,422.9	701.3	257.9	113.6	10.6	2,571.6	680.0	277.2	114.3	175.9	681.3
III	4,597.3	589.1	226.4	254.1	1,424.7	703.6	258.8	112.5	10.0	2,584.6	683.2	280.8	117.2	176.4	686.0
IV	4,609.4	587.5	220.6	259.9	1,423.2	703.0	257.3	113.7	10.7	2,599.3	686.3	278.9	113.4	180.0	691.2
1996: I	4,649.1	599.2	224.2	264.1	1,436.1	709.2	262.5	112.6	10.7	2,614.7	689.0	280.8	115.4	182.5	691.1
II	4,687.6	615.6	225.9	276.0	1,440.9	704.9	268.9	114.3	10.1	2,632.3	691.6	285.6	117.9	183.3	696.1
III	4,693.5	611.6	220.0	279.0	1,442.2	701.6	271.0	113.4	10.1	2,640.6	693.9	282.2	114.4	185.2	699.7

[1] Includes other items not shown separately.
[2] Includes imputed rental value of owner-occupied housing.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–16.—*Private gross fixed investment by type, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Private fixed investment	Nonresidential											Residential
		Total nonresidential	Structures				Producers' durable equipment						
			Total [1]	Nonresidential buildings including farm	Utilities	Mining exploration, shafts, and wells	Total [1]	Information processing and related equipment			Industrial equipment	Transportation and related equipment	
								Total	Computers and peripheral equipment [2]	Other			
1959	74.6	46.5	18.1	10.6	4.9	2.5	28.3	4.0	0.0	4.0	8.4	8.3	28.1
1960	75.5	49.2	19.6	12.0	5.0	2.3	29.7	4.7	.2	4.5	9.3	8.5	26.3
1961	75.0	48.6	19.7	12.7	4.6	2.3	28.9	5.1	.3	4.8	8.7	8.0	26.4
1962	81.8	52.8	20.8	13.7	4.6	2.5	32.1	5.4	.3	5.1	9.2	9.8	29.0
1963	87.7	55.6	21.2	13.9	5.0	2.3	34.4	6.1	.7	5.3	10.0	9.4	32.1
1964	96.7	62.4	23.7	15.8	5.4	2.4	38.7	6.8	.9	5.8	11.4	10.6	34.3
1965	108.3	74.1	28.3	19.5	6.1	2.4	45.8	7.8	1.2	6.6	13.6	13.2	34.2
1966	116.7	84.4	31.3	21.3	7.1	2.5	53.0	9.6	1.7	7.9	16.1	14.5	32.3
1967	117.6	85.2	31.5	20.6	7.8	2.4	53.7	10.0	1.9	8.1	16.8	14.3	32.4
1968	130.8	92.1	33.6	21.1	9.2	2.6	58.5	10.6	1.9	8.6	17.2	17.6	38.7
1969	145.5	102.9	37.7	24.4	9.6	2.8	65.2	12.9	2.4	10.4	18.9	18.9	42.6
1970	148.1	106.7	40.3	25.4	11.1	2.8	66.4	14.3	2.7	11.6	20.2	16.2	41.4
1971	167.5	111.7	42.7	27.1	11.9	2.7	69.1	14.9	2.8	12.1	19.4	18.4	55.8
1972	195.7	126.1	47.2	30.1	13.1	3.1	78.9	16.5	3.5	13.1	21.3	21.8	69.7
1973	225.4	150.0	55.0	35.5	15.0	3.5	95.1	19.8	3.5	16.3	25.9	26.6	75.3
1974	231.5	165.6	61.2	38.3	16.5	5.2	104.3	22.9	3.9	19.0	30.5	26.3	66.0
1975	231.7	169.0	61.4	35.6	17.1	7.4	107.6	23.5	3.6	19.9	31.1	25.2	62.7
1976	269.6	187.2	65.9	35.9	20.0	8.6	121.2	27.2	4.4	22.8	33.9	30.0	82.5
1977	333.5	223.2	74.6	39.9	21.5	11.5	148.7	33.1	5.7	27.5	39.2	39.3	110.3
1978	403.6	272.0	91.4	49.7	24.1	15.4	180.6	41.8	7.6	34.2	47.4	47.3	131.6
1979	464.0	323.0	114.9	65.7	27.5	19.0	208.1	49.9	10.2	39.8	55.8	53.6	141.0
1980	473.5	350.3	133.9	73.7	30.2	27.4	216.4	58.9	12.5	46.4	60.4	48.4	123.2
1981	528.1	405.4	164.6	86.3	33.0	42.5	240.9	69.5	17.1	52.3	65.2	50.6	122.6
1982	515.6	409.9	175.0	94.5	32.5	44.8	234.9	72.7	18.9	53.9	62.2	46.8	105.7
1983	552.0	399.4	152.7	90.5	28.7	30.0	246.7	82.0	23.9	58.1	58.2	53.7	152.5
1984	648.1	468.3	176.0	110.0	30.0	31.3	292.3	98.6	31.6	67.0	67.4	64.8	179.8
1985	688.9	502.0	193.3	128.0	30.6	27.9	308.7	104.2	33.7	70.5	71.7	69.7	186.9
1986	712.9	494.8	175.8	123.3	31.2	15.7	319.0	108.8	33.4	75.4	74.6	71.8	218.1
1987	722.9	495.4	172.1	126.0	26.5	13.1	323.3	109.8	35.8	74.0	75.9	70.4	227.6
1988	763.1	530.6	181.3	133.3	27.1	15.7	349.3	118.2	38.1	80.1	82.9	76.0	232.5
1989	797.5	566.2	192.3	142.7	29.4	14.4	373.9	127.1	43.3	83.8	91.5	71.2	231.3
1990	791.6	575.9	200.8	148.9	27.5	17.5	375.1	124.2	38.9	85.2	89.8	75.5	215.7
1991	738.5	547.3	181.7	126.1	31.6	17.1	365.6	122.6	38.1	84.5	86.4	79.5	191.2
1992	783.4	557.9	169.2	113.2	34.5	13.3	388.7	134.2	43.9	90.2	89.3	86.2	225.6
1993	850.5	598.8	171.8	116.6	32.0	15.6	427.0	141.8	48.7	93.0	97.6	99.2	251.7
1994	954.9	667.2	180.2	126.2	33.7	13.5	487.0	160.4	54.5	106.0	109.7	117.1	287.7
1995	1,028.2	738.5	199.7	142.0	38.5	12.0	538.8	183.2	63.6	119.6	124.5	124.9	289.8
1990: I	813.9	581.2	201.9	150.8	27.0	16.8	379.3	127.8	41.3	86.5	91.7	74.0	232.7
II ...	794.0	571.6	202.4	151.2	27.0	17.6	369.2	123.9	38.9	85.0	88.9	71.4	222.4
III ..	791.2	580.3	203.5	151.4	27.5	17.6	376.7	121.5	36.8	84.7	90.3	78.5	210.9
IV ..	767.5	570.6	195.4	142.1	28.4	18.1	375.1	123.4	38.6	84.7	88.1	78.3	196.9
1991: I	739.7	555.4	192.3	136.4	30.0	19.4	363.1	119.3	36.7	82.7	87.8	78.1	184.3
II ...	736.2	550.2	187.6	130.9	31.3	18.9	362.6	121.6	37.2	84.5	86.4	77.3	185.9
III ..	738.6	544.3	176.1	121.4	32.3	15.2	368.2	123.5	37.8	85.6	86.3	81.9	194.3
IV ..	739.5	539.2	170.8	115.7	33.0	15.0	368.4	125.9	40.7	85.2	85.2	80.6	200.3
1992: I	755.4	544.1	171.6	117.2	34.3	12.8	372.5	129.2	41.9	87.3	86.2	79.5	211.3
II ...	780.5	556.8	170.4	114.0	34.8	13.3	386.3	133.0	44.4	88.6	87.7	87.8	223.7
III ..	788.1	561.0	167.6	110.6	34.7	13.3	393.4	137.7	44.6	93.1	90.5	85.5	227.1
IV ..	809.7	569.6	167.1	111.0	34.2	13.8	402.5	136.8	44.9	91.9	92.8	91.9	240.1
1993: I	823.8	580.3	170.2	113.6	32.8	15.8	410.1	136.8	47.2	89.6	94.3	94.0	243.5
II ...	834.3	591.1	169.7	113.8	31.9	16.0	421.3	137.9	46.8	91.0	95.6	100.9	243.2
III ..	851.8	599.2	171.4	117.1	31.7	15.5	427.7	144.5	49.7	94.8	97.8	97.0	252.6
IV ..	892.3	624.6	175.8	121.8	31.7	15.1	448.8	148.0	51.2	96.8	102.8	105.1	267.7
1994: I	917.4	638.8	171.8	118.7	32.3	14.4	467.0	152.5	52.1	100.4	105.4	113.0	278.5
II ...	942.0	653.5	179.1	125.3	33.0	14.1	474.4	157.7	53.7	104.0	107.6	110.5	288.5
III ..	968.9	678.5	181.0	126.4	34.2	13.0	497.5	161.6	54.4	107.2	111.3	122.9	290.4
IV ..	991.4	697.9	188.8	134.4	35.2	12.4	509.1	169.9	57.7	112.2	114.6	122.1	293.5
1995: I	1,013.9	723.6	194.5	137.9	36.3	13.2	529.0	174.6	58.4	116.2	120.4	127.2	290.4
II ...	1,016.3	734.4	197.6	140.3	37.9	11.5	536.8	183.3	62.8	120.6	126.9	121.0	281.9
III ..	1,036.6	746.3	202.5	144.0	39.7	11.9	543.8	183.1	63.3	119.7	125.8	128.4	290.3
IV ..	1,046.2	749.7	204.0	145.8	40.2	11.4	545.7	191.8	69.7	122.0	124.9	123.0	296.5
1996: I	1,070.7	769.0	208.4	147.3	40.9	13.9	560.6	198.2	73.7	124.5	127.9	125.3	301.7
II ...	1,088.0	773.8	207.4	146.2	41.5	14.1	566.3	200.8	74.2	126.6	131.2	123.7	314.2
III ..	1,119.6	807.0	213.5	151.1	41.3	15.0	593.5	212.2	79.3	132.9	128.7	137.7	312.6

[1] Includes other items, not shown separately.
[2] Includes new computers and peripheral equipment only.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–17.—*Real private gross fixed investment by type, 1959–96*

[Billions of chained (1992) dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Private fixed investment	Nonresidential											Residential
		Total nonresidential	Structures				Producers' durable equipment						
			Total [1]	Nonresidential buildings including farm	Utilities	Mining exploration, shafts, and wells	Total [1]	Information processing and related equipment			Industrial equipment	Transportation and related equipment	
								Total	Computers and peripheral equipment [2]	Other			
1959	267.1	147.7	85.8	52.4	20.2	11.0	71.4	2.5	....	9.8	38.8	28.0	131.1
1960	269.2	155.9	92.6	59.9	20.4	10.3	74.3	3.0	....	11.1	41.9	28.8	121.8
1961	267.9	154.5	93.9	63.3	18.9	10.5	72.5	3.2	....	11.8	39.7	27.0	122.2
1962	292.0	168.0	98.1	67.4	19.0	11.0	81.0	3.6	....	12.5	41.8	33.4	133.9
1963	313.7	176.4	99.2	67.5	20.4	10.4	87.1	4.1	....	13.0	45.1	32.1	149.6
1964	343.7	197.1	109.5	75.0	22.2	11.1	98.1	4.6	....	14.1	51.0	36.3	158.3
1965	378.5	231.3	126.9	89.4	24.4	11.0	115.9	5.5	....	16.0	60.2	45.5	153.7
1966	399.1	259.4	135.6	94.2	27.8	10.4	133.8	7.1	....	18.9	69.2	50.1	140.0
1967	391.0	255.3	132.2	88.7	29.8	9.9	132.5	7.5	....	18.9	69.5	48.4	135.6
1968	418.1	266.4	134.1	86.2	33.3	10.0	140.5	8.0	....	19.5	68.1	58.2	154.0
1969	442.9	285.6	141.3	92.7	33.4	10.4	152.2	9.7	0.1	22.8	72.6	60.5	158.6
1970	432.1	282.8	141.7	91.1	35.7	9.8	149.5	10.7	.1	24.5	73.7	49.7	149.1
1971	464.9	282.4	139.4	89.4	36.1	9.1	150.7	11.4	.1	24.7	67.7	53.6	190.0
1972	520.3	307.7	143.7	91.8	37.6	9.7	169.8	12.9	.2	26.0	73.0	62.3	223.7
1973	567.5	352.5	155.4	100.3	40.0	10.4	201.2	15.4	.2	31.7	86.2	75.0	222.3
1974	530.2	354.4	152.2	97.6	37.6	12.3	205.4	17.5	.2	34.8	92.8	67.9	176.4
1975	471.0	317.3	136.2	82.5	34.4	14.4	183.9	16.9	.2	33.3	78.6	58.4	153.5
1976	517.6	332.6	139.6	80.6	38.0	15.6	195.2	19.4	.3	36.6	79.0	65.0	189.7
1977	593.7	371.8	146.4	83.6	38.2	18.0	225.6	24.1	.5	43.8	83.6	79.1	229.8
1978	660.8	422.6	162.3	95.3	40.0	20.0	259.6	31.7	1.0	52.4	93.0	87.3	245.0
1979	695.6	463.3	182.7	113.5	41.3	21.3	280.7	38.6	1.5	59.5	99.8	91.0	236.0
1980	648.4	461.1	195.0	114.4	41.2	30.0	268.2	45.4	2.4	64.9	95.5	74.2	186.1
1981	660.6	485.7	210.4	122.8	42.0	34.9	278.2	52.5	3.8	68.5	94.1	72.0	171.2
1982	610.4	464.3	207.2	126.6	39.5	32.2	260.3	54.5	4.7	67.0	85.5	63.7	140.1
1983	654.2	456.4	185.7	117.6	34.2	26.7	272.4	63.4	7.1	70.4	78.5	71.7	197.6
1984	762.4	535.4	212.2	137.6	35.4	30.3	324.6	79.8	11.6	79.0	89.9	85.1	226.4
1985	799.3	568.4	227.8	155.2	35.6	27.0	342.4	88.0	14.5	81.9	94.1	88.4	229.5
1986	805.0	548.5	203.3	144.5	36.5	15.8	345.9	94.1	16.7	84.6	93.5	85.6	257.0
1987	799.4	542.4	195.9	142.4	30.7	15.5	346.9	97.5	21.0	80.2	91.1	82.1	257.6
1988	818.3	566.0	196.8	145.3	30.0	15.8	369.2	106.6	24.0	85.7	95.3	87.1	252.5
1989	832.0	588.8	201.2	150.2	30.9	13.9	387.6	116.2	29.4	88.1	101.5	78.9	243.2
1990	805.8	585.2	203.3	152.0	28.1	16.1	381.9	116.2	29.4	88.2	95.0	81.2	220.6
1991	741.3	547.7	181.6	126.9	32.0	15.7	366.2	117.8	32.4	85.9	88.3	81.7	193.4
1992	783.4	557.9	169.2	113.2	34.5	13.3	388.7	134.2	43.9	90.2	89.3	86.2	225.6
1993	836.4	593.6	166.3	112.8	31.1	14.8	427.6	147.1	56.2	91.5	96.3	97.5	242.7
1994	921.1	652.1	168.8	117.7	31.7	12.6	484.1	170.4	69.3	102.6	105.9	111.7	268.9
1995	975.9	714.3	181.1	127.9	35.1	11.2	534.5	201.1	91.5	114.2	116.2	118.1	262.8
1990: I	834.7	595.3	206.5	155.4	27.7	15.8	388.8	119.2	30.6	89.8	98.6	80.3	239.4
II ...	811.2	583.4	205.5	154.7	27.6	16.3	377.8	116.1	29.3	88.2	94.8	77.4	227.8
III ..	803.1	588.1	205.2	153.8	28.1	16.1	383.0	113.8	27.9	87.6	95.1	84.3	214.9
IV ..	774.4	573.9	196.0	143.8	28.9	16.3	377.9	115.7	29.9	87.1	91.4	82.8	200.3
1991: I	742.6	555.1	192.2	137.6	30.4	17.3	362.9	112.5	29.2	84.3	89.7	81.2	187.4
II ...	739.4	550.9	187.2	131.7	31.7	17.0	363.8	116.2	30.8	86.2	88.7	79.9	188.3
III ..	741.0	545.3	175.5	121.7	32.6	14.0	369.8	119.7	33.2	87.1	88.4	83.9	195.6
IV ..	742.0	539.5	171.4	116.4	33.3	14.4	368.1	122.5	36.6	86.2	86.4	81.6	202.4
1992: I	758.3	544.4	172.7	118.1	34.6	12.7	371.7	126.7	39.2	87.7	86.8	79.9	213.9
II ...	782.4	557.5	171.0	114.4	34.8	13.3	386.4	132.4	43.4	88.9	88.1	87.9	224.9
III ..	787.3	560.6	167.4	110.4	34.6	13.4	393.1	138.6	45.7	92.8	89.8	85.4	226.7
IV ..	805.8	569.1	165.6	109.8	33.9	13.7	403.5	138.9	47.5	91.5	92.6	91.5	236.7
1993: I	815.4	577.5	167.0	111.4	32.4	15.2	410.5	139.5	51.1	88.6	93.7	93.0	237.9
II ...	821.1	586.4	164.8	110.6	31.0	15.2	421.7	142.2	52.9	89.6	94.4	99.5	234.8
III ..	835.4	593.1	165.1	112.7	30.7	14.6	428.2	150.7	58.3	93.1	96.3	95.0	242.2
IV ..	873.5	617.6	168.2	116.3	30.5	14.2	449.8	156.0	62.5	94.6	100.7	102.7	255.8
1994: I	892.4	628.5	163.0	112.4	30.7	13.4	466.4	161.2	64.5	97.8	102.8	109.0	263.6
II ...	911.4	639.5	169.0	117.8	31.2	13.3	471.1	166.6	67.1	100.8	104.3	105.3	271.6
III ..	930.8	660.5	169.1	117.4	32.1	12.2	492.5	171.6	69.3	103.6	107.0	115.8	270.3
IV ..	949.7	679.7	174.3	123.3	32.7	11.5	506.5	182.4	76.3	108.3	109.4	116.6	270.3
1995: I	969.5	704.4	178.5	125.4	33.7	12.5	527.2	189.1	80.2	111.5	114.2	121.9	265.9
II ...	965.7	710.5	180.0	126.8	34.8	10.7	531.7	199.7	88.2	115.1	118.4	114.9	256.5
III ..	980.0	719.0	182.8	129.2	35.8	11.0	537.4	201.4	91.9	114.0	116.6	120.3	262.2
IV ..	988.5	723.3	183.2	130.3	36.0	10.5	541.4	214.4	105.6	116.2	115.4	115.4	266.3
1996: I	1,013.3	743.5	186.6	131.4	36.4	12.8	558.3	225.5	117.2	118.1	117.8	117.5	271.1
II ...	1,031.1	750.5	184.9	129.7	36.8	12.9	567.5	234.1	126.3	119.7	120.6	114.9	281.5
III ..	1,057.5	781.4	188.6	133.0	36.4	13.5	595.0	250.5	138.9	125.5	118.0	126.5	277.8

[1] Includes other items, not shown separately.
[2] Includes new computers and peripheral equipment only.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–18.—*Government consumption expenditures and gross investment by type, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Government consumption expenditures and gross investment													
	Total	Federal									State and local			
		Total	National defense				Nondefense				Total	Consumption expenditures	Gross investment	
			Total	Consumption expenditures	Gross investment		Total	Consumption expenditures	Gross investment				Structures	Equipment
					Structures	Equipment			Structures	Equipment				
1959	112.0	67.2	55.7	42.0	2.5	11.2	11.5	9.9	1.5	0.2	44.8	30.9	12.8	1.1
1960	113.2	65.6	54.9	42.5	2.2	10.1	10.8	8.8	1.7	0.3	47.6	33.7	12.7	1.2
1961	120.9	69.1	57.7	43.9	2.4	11.5	11.4	9.0	1.9	0.5	51.8	36.7	13.8	1.2
1962	131.4	76.5	62.3	47.8	2.0	12.5	14.2	11.3	2.1	0.8	55.0	39.1	14.5	1.3
1963	137.7	78.1	62.2	49.6	1.6	11.0	15.9	12.4	2.3	1.1	59.6	42.2	16.0	1.5
1964	144.4	79.4	61.3	49.9	1.3	10.2	18.1	14.0	2.5	1.6	65.0	46.0	17.2	1.7
1965	153.0	81.8	62.0	52.0	1.1	8.9	19.7	15.1	2.8	1.8	71.2	50.5	19.0	1.8
1966	173.6	94.1	73.4	61.2	1.3	11.0	20.7	15.9	2.8	2.0	79.5	56.5	21.0	2.0
1967	194.6	106.6	85.5	71.3	1.2	13.0	21.0	17.0	2.2	1.8	88.1	62.9	23.0	2.2
1968	212.1	113.8	92.0	78.9	1.2	11.8	21.8	18.2	2.1	1.6	98.3	70.8	25.2	2.3
1969	223.8	115.8	92.4	80.0	1.5	10.9	23.4	20.0	1.9	1.5	108.0	79.8	25.6	2.6
1970	236.1	115.9	90.6	78.6	1.3	10.7	25.3	21.9	2.1	1.3	120.2	91.6	25.8	2.8
1971	249.9	117.1	88.7	79.2	1.8	7.7	28.3	24.6	2.5	1.3	132.8	102.9	27.0	2.9
1972	268.9	125.1	93.2	82.3	1.8	9.1	31.9	27.8	2.7	1.3	143.8	113.4	27.1	3.3
1973	287.6	128.2	94.7	83.7	2.1	8.9	33.5	29.2	3.1	1.2	159.4	126.4	29.1	3.8
1974	323.2	139.9	101.9	90.1	2.2	9.7	38.0	33.2	3.4	1.4	183.3	144.0	34.7	4.6
1975	362.6	154.5	110.9	97.0	2.3	11.6	43.6	38.0	4.1	1.4	208.1	164.9	38.1	5.1
1976	385.9	162.7	116.1	101.3	2.1	12.6	46.6	40.4	4.6	1.6	223.1	179.7	38.1	5.3
1977	416.9	178.4	125.8	109.6	2.4	13.8	52.6	45.7	5.0	1.9	238.5	196.1	36.9	5.4
1978	457.9	194.4	135.6	118.4	2.5	14.6	58.9	50.4	6.1	2.3	263.4	214.5	42.8	6.1
1979	507.1	215.0	151.2	130.7	2.5	18.0	63.8	55.2	6.3	2.4	292.0	235.9	49.0	7.1
1980	572.8	248.4	174.2	150.9	3.2	20.1	74.2	64.3	7.1	2.9	324.4	261.3	55.1	8.1
1981	633.4	284.1	202.0	174.3	3.2	24.5	82.2	71.7	7.7	2.8	349.2	285.3	55.4	8.5
1982	684.8	313.2	230.9	197.6	4.0	29.4	82.3	72.3	6.8	3.2	371.6	307.9	54.2	9.4
1983	735.7	344.5	255.0	214.9	4.8	35.4	89.4	78.2	6.7	4.5	391.2	326.2	54.2	10.8
1984	796.6	372.6	282.7	236.3	4.9	41.5	89.9	77.9	7.0	5.0	424.0	350.8	60.5	12.7
1985	875.0	410.1	312.4	257.6	6.2	48.5	97.7	84.9	7.3	5.4	464.9	382.6	67.6	14.8
1986	938.5	435.2	332.4	272.7	6.8	52.9	102.9	89.7	8.0	5.2	503.3	412.7	74.2	16.4
1987	992.8	455.7	350.4	287.6	7.7	55.1	105.3	90.7	9.0	5.6	537.2	441.1	78.8	17.2
1988	1,032.0	457.3	354.0	297.9	7.4	48.7	103.3	89.9	6.8	6.6	574.7	471.3	84.8	18.6
1989	1,095.1	477.2	360.6	303.3	6.4	51.0	116.7	101.9	6.9	7.9	617.9	507.2	88.7	21.9
1990	1,176.1	503.6	373.1	312.7	6.1	54.3	130.4	113.9	8.0	8.6	672.6	550.1	98.5	23.9
1991	1,225.9	522.6	383.5	325.4	4.6	53.5	139.1	120.6	9.2	9.3	703.4	579.4	100.5	23.4
1992	1,263.8	528.0	375.8	319.7	5.2	50.9	152.2	131.4	10.3	10.5	735.8	603.6	108.1	24.0
1993	1,290.4	522.6	362.7	313.5	4.8	44.4	159.9	138.4	11.2	10.3	767.8	627.9	113.9	25.9
1994	1,314.7	516.4	352.0	305.8	4.9	41.4	164.3	144.9	10.5	8.9	798.4	651.7	119.0	27.7
1995	1,358.3	516.6	345.5	302.3	5.3	37.9	171.0	151.5	10.1	9.4	841.7	682.6	130.0	29.1
1990: I	1,153.0	496.4	369.7	311.7	6.3	51.7	126.7	110.0	8.2	8.5	656.6	535.3	97.7	23.6
II	1,164.3	500.1	370.6	310.8	6.3	53.5	129.5	112.9	8.1	8.4	664.2	543.9	96.5	23.9
III	1,176.9	501.2	368.9	307.3	6.4	55.2	132.3	115.9	8.1	8.3	675.7	554.0	97.6	24.1
IV	1,210.4	516.7	383.3	321.0	5.3	57.0	133.3	116.7	7.6	9.1	693.7	567.3	102.4	24.1
1991: I	1,220.6	525.6	389.7	331.3	4.8	53.6	136.0	119.3	7.7	9.0	695.0	572.1	99.3	23.7
II	1,227.4	528.2	389.3	328.6	4.8	55.9	138.9	120.5	9.1	9.3	699.2	576.9	99.0	23.3
III	1,226.5	520.9	382.1	323.1	4.5	54.5	138.8	120.6	9.1	9.1	705.5	581.5	100.8	23.2
IV	1,229.2	515.5	373.0	318.5	4.5	50.0	142.6	122.0	10.8	9.8	713.6	587.3	102.9	23.4
1992: I	1,247.9	521.8	372.8	317.2	5.2	50.4	149.0	128.5	10.3	10.1	726.1	592.6	109.9	23.6
II	1,256.4	523.2	374.1	317.3	5.5	51.4	149.1	129.1	10.2	9.9	733.2	600.8	108.6	23.8
III	1,270.7	532.0	380.9	323.5	4.8	52.7	151.1	130.9	9.6	10.5	738.7	607.4	107.1	24.2
IV	1,280.0	535.0	375.3	320.7	5.5	49.1	159.7	137.0	11.0	11.6	745.1	613.6	106.9	24.6
1993: I	1,279.3	525.5	365.7	314.4	4.7	46.6	159.8	136.9	11.7	11.2	753.8	620.8	107.7	25.3
II	1,285.1	520.1	362.7	312.6	4.7	45.5	157.4	135.9	10.8	10.7	765.0	626.0	113.3	25.7
III	1,294.1	521.3	361.2	315.1	4.9	41.1	160.1	138.4	11.3	10.5	772.7	630.8	115.7	26.2
IV	1,303.2	523.5	361.3	312.0	4.7	44.6	162.2	142.3	11.0	8.9	779.7	634.1	119.1	26.5
1994: I	1,296.4	511.3	346.7	301.3	4.8	40.7	164.6	145.4	10.6	8.5	785.0	642.4	115.5	27.1
II	1,300.8	509.4	349.3	303.4	4.7	41.3	160.0	141.7	9.9	8.4	791.4	647.3	116.7	27.5
III	1,328.2	523.8	362.3	313.5	5.1	43.8	161.5	142.2	10.0	9.4	804.4	655.4	121.1	27.9
IV	1,333.5	520.9	349.7	305.0	4.9	39.8	171.2	150.4	11.5	9.4	812.6	661.9	122.7	28.1
1995: I	1,345.8	519.7	347.6	302.8	5.7	39.1	172.1	151.8	11.0	9.3	826.1	672.1	125.5	28.5
II	1,359.4	522.0	351.7	304.8	4.9	42.1	170.3	150.8	10.2	9.3	837.3	680.1	128.3	28.9
III	1,364.6	516.8	345.7	301.4	5.5	38.8	171.1	152.2	9.3	9.6	847.7	686.2	132.3	29.3
IV	1,363.4	507.7	337.1	300.1	5.3	31.7	170.6	151.3	9.9	9.4	855.7	691.9	134.0	29.7
1996: I	1,383.7	518.6	343.9	298.7	5.0	40.1	174.7	154.9	9.7	10.1	865.1	701.3	133.8	30.0
II	1,408.8	529.6	353.7	307.4	5.1	41.2	175.8	156.1	10.0	9.7	879.2	710.2	138.7	30.3
III	1,414.8	525.5	348.8	304.7	5.1	39.0	176.7	156.6	9.6	10.5	889.3	719.3	139.4	30.6

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–19.—*Real government consumption expenditures and gross investment by type, 1959–96*

[Billions of chained (1992) dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Government consumption expenditures and gross investment													
	Total	Federal									State and local			
		Total	National defense				Nondefense				Total	Consumption expenditures	Gross investment	
			Total	Consumption expenditures	Gross investment		Total	Consumption expenditures	Gross investment				Structures	Equipment
					Structures	Equipment			Structures	Equipment				
1959	618.5	360.5	307.6	259.3	15.5	28.4	58.8	53.9	7.2	0.4	256.8	191.6	59.9	3.1
1960	617.2	349.4	301.3	260.8	13.7	25.6	54.1	47.1	8.1	.6	267.2	201.8	60.0	3.4
1961	647.2	363.0	313.8	265.8	14.6	29.0	55.5	46.5	9.0	1.0	283.8	213.0	65.0	3.5
1962	686.0	393.2	332.4	284.2	12.1	30.9	66.8	56.4	10.1	1.4	292.1	218.7	67.1	3.8
1963	701.9	391.8	324.0	287.9	9.9	26.4	72.9	60.4	10.9	1.9	309.7	229.5	72.7	4.3
1964	715.9	385.2	309.9	279.3	7.5	24.4	79.2	64.5	11.7	2.5	330.9	244.9	77.5	4.8
1965	737.6	385.2	303.8	281.1	6.7	21.0	84.6	67.7	12.4	3.2	353.2	261.1	83.0	5.1
1966	804.6	429.1	348.2	318.9	7.0	25.8	85.7	68.4	12.3	3.4	375.9	277.7	88.2	5.6
1967	865.6	471.7	393.5	360.2	6.4	29.9	84.7	71.5	9.3	3.0	394.2	289.8	93.9	5.8
1968	892.4	476.3	400.9	376.7	6.3	26.1	82.5	71.4	8.3	2.5	416.5	307.5	98.1	6.1
1969	887.5	459.9	381.6	361.6	6.8	23.1	84.3	75.1	7.1	2.2	428.0	324.4	92.9	6.5
1970	866.8	427.2	349.0	330.1	5.5	21.7	83.0	74.6	7.1	1.9	440.0	344.1	86.0	6.7
1971	851.0	397.0	313.7	304.6	7.0	14.6	86.3	77.5	7.9	1.8	454.4	362.1	83.1	6.8
1972	854.1	390.2	300.3	285.3	6.3	17.5	91.9	83.0	8.1	1.8	464.5	376.0	78.9	7.6
1973	848.4	371.1	281.2	265.5	6.4	17.1	91.5	82.3	8.7	1.6	478.5	389.9	78.3	8.5
1974	862.9	368.8	273.5	256.5	5.9	17.9	96.4	87.3	8.5	1.8	495.6	406.8	78.1	9.3
1975	876.3	367.9	269.7	248.9	5.7	20.4	99.1	89.9	8.9	1.7	510.0	423.1	77.4	9.0
1976	876.8	364.3	264.7	242.5	5.0	21.5	100.4	90.2	9.5	1.9	514.3	429.5	76.1	8.8
1977	884.7	370.1	266.4	243.7	5.1	22.0	104.3	93.5	9.8	2.1	516.4	437.6	71.3	8.6
1978	910.6	377.7	266.7	244.7	5.1	21.5	111.4	98.1	11.3	2.7	534.7	448.1	78.1	9.0
1979	924.9	383.3	271.0	245.9	4.3	24.5	112.7	100.4	10.6	2.6	543.5	452.3	81.4	9.7
1980	941.4	399.3	280.7	254.0	5.0	25.5	119.0	106.0	10.7	3.1	543.6	451.7	81.3	10.3
1981	947.7	415.9	296.0	266.4	4.8	28.3	120.4	107.9	10.5	2.9	532.8	450.3	73.3	10.1
1982	960.1	429.4	316.5	282.0	5.6	32.0	113.3	102.3	8.6	3.2	531.4	455.6	67.0	10.7
1983	987.3	452.7	334.6	293.3	6.6	37.0	118.5	105.9	8.4	4.7	534.9	458.2	66.3	12.1
1984	1,018.4	463.7	348.1	301.3	6.4	41.7	115.9	102.3	8.7	5.2	555.0	467.9	73.8	14.2
1985	1,080.1	495.6	374.1	318.2	7.9	48.6	121.8	107.4	8.9	5.7	584.7	487.8	80.9	16.4
1986	1,135.0	518.4	393.4	331.1	8.6	53.7	125.2	110.6	9.4	5.4	616.9	513.3	85.9	18.0
1987	1,165.9	534.4	409.2	341.1	9.2	58.4	125.3	109.2	10.3	5.9	631.8	525.5	87.8	18.8
1988	1,180.9	524.6	405.5	345.3	8.5	51.9	119.1	104.8	7.6	6.8	656.6	545.3	91.6	20.0
1989	1,213.9	531.5	401.6	340.9	6.9	53.8	130.1	114.8	7.4	7.9	682.6	566.3	93.5	23.0
1990	1,250.4	541.9	401.5	338.9	6.4	56.1	140.5	123.8	8.3	8.5	708.6	583.2	100.7	24.7
1991	1,258.0	539.4	397.5	338.7	4.7	54.1	142.0	123.6	9.3	9.2	718.7	593.8	101.3	23.6
1992	1,263.8	528.0	375.8	319.7	5.2	50.9	152.2	131.4	10.3	10.5	735.8	603.6	108.1	24.0
1993	1,261.0	509.2	355.4	307.4	4.4	43.6	153.8	132.4	11.0	10.4	751.8	614.6	111.5	25.7
1994	1,260.0	489.8	337.0	293.6	4.3	39.1	152.6	133.5	10.0	9.0	770.5	629.0	114.4	27.1
1995	1,260.2	472.3	319.6	280.1	4.6	35.0	152.3	133.5	9.3	9.5	788.6	639.1	121.1	28.4
1990: I	1,246.5	542.9	404.1	343.6	6.7	53.9	138.9	122.0	8.5	8.5	703.8	578.1	101.0	24.6
II	1,248.2	543.0	402.8	340.0	6.7	56.0	140.4	123.7	8.4	8.3	705.4	581.6	99.0	24.8
III	1,246.8	538.2	396.1	332.4	6.7	56.9	142.2	125.7	8.4	8.2	708.7	585.0	99.0	24.8
IV	1,259.9	543.5	403.1	339.7	5.6	57.7	140.5	124.0	7.7	8.9	716.5	588.2	103.7	24.6
1991: I	1,262.6	547.3	408.4	348.9	4.9	54.6	139.0	122.4	7.9	8.8	715.5	590.9	100.6	23.9
II	1,263.8	547.1	405.0	343.8	4.9	56.3	142.2	123.8	9.2	9.2	716.8	593.5	99.7	23.7
III	1,255.1	536.3	395.0	335.2	4.5	55.3	141.4	123.2	9.1	9.0	718.8	594.2	101.2	23.5
IV	1,250.7	526.9	381.7	326.7	4.6	50.4	145.3	124.7	10.9	9.7	723.8	596.7	103.7	23.4
1992: I	1,258.5	525.1	374.2	318.3	5.2	50.7	150.8	130.4	10.4	10.1	733.5	599.0	110.8	23.6
II	1,257.5	523.3	373.3	316.5	5.5	51.3	150.0	129.9	10.2	9.8	734.2	601.7	108.8	23.8
III	1,266.5	529.6	378.7	321.2	4.8	52.7	150.9	130.7	9.6	10.5	736.9	605.9	106.8	24.2
IV	1,272.5	534.0	376.8	322.6	5.4	48.9	157.1	134.5	10.9	11.7	738.5	607.9	106.1	24.6
1993: I	1,257.7	516.1	361.6	310.9	4.5	46.2	154.4	131.7	11.5	11.3	741.6	610.3	106.2	25.1
II	1,258.4	509.7	356.9	307.5	4.4	44.9	152.7	131.4	10.6	10.8	748.8	612.4	110.9	25.5
III	1,261.6	505.9	351.6	307.0	4.4	40.2	154.2	132.6	11.0	10.6	755.7	616.6	113.2	26.0
IV	1,266.2	505.0	351.2	303.9	4.2	43.2	153.7	134.0	10.6	9.0	761.3	619.1	115.9	26.3
1994: I	1,252.4	489.9	334.8	291.7	4.2	39.0	154.9	135.8	10.3	8.6	762.7	624.0	112.0	26.7
II	1,249.8	483.3	335.5	292.7	4.1	38.6	147.8	129.6	9.5	8.5	766.8	626.9	113.0	26.9
III	1,271.2	496.7	346.2	300.4	4.4	41.4	150.4	131.4	9.5	9.4	774.7	631.2	116.2	27.2
IV	1,266.6	489.2	331.3	289.7	4.2	37.5	157.5	137.1	10.8	9.5	777.7	633.7	116.5	27.6
1995: I	1,262.7	481.0	325.0	283.7	4.9	36.4	155.6	135.8	10.3	9.4	782.2	636.1	118.2	27.9
II	1,265.1	479.4	325.5	282.8	4.2	38.6	153.5	134.7	9.4	9.4	786.3	637.9	120.2	28.2
III	1,263.4	472.5	319.1	278.9	4.7	35.6	153.1	134.8	8.5	9.7	791.5	640.5	122.5	28.5
IV	1,249.6	456.2	308.8	275.1	4.5	29.2	147.0	128.6	8.9	9.5	794.4	642.1	123.4	28.9
1996: I	1,254.7	462.9	311.9	271.6	4.3	36.0	150.6	131.6	8.8	10.2	792.6	640.9	122.5	29.2
II	1,278.2	473.4	319.4	279.6	4.3	35.6	153.7	134.7	9.0	9.9	805.5	649.7	126.3	29.5
III	1,276.1	469.3	314.9	276.5	4.2	34.3	153.9	134.4	8.5	11.0	807.7	652.4	125.5	29.9

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–20.—*Inventories and final sales of domestic business, 1959–96*

[Billions of dollars, except as noted; seasonally adjusted]

Quarter	Inventories[1]							Final sales of domestic business[3]	Ratio of inventories to final sales of domestic business	
	Total[2]	Farm	Nonfarm						Total	Nonfarm
			Total[2]	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1959	131.0	32.1	98.9	51.6	18.3	20.0	9.0	36.5	3.59	2.71
1960	134.7	32.9	101.8	52.8	18.6	21.4	8.9	37.7	3.57	2.70
1961	138.0	34.6	103.4	54.3	19.1	20.9	9.2	39.5	3.49	2.62
1962	145.8	36.8	109.0	57.6	19.9	22.3	9.2	41.8	3.48	2.61
1963	148.3	33.9	114.4	59.6	21.3	23.6	9.8	44.5	3.33	2.57
1964	154.0	32.5	121.4	63.2	22.7	24.9	10.6	47.4	3.25	2.56
1965	168.8	37.0	131.9	68.2	24.3	27.7	11.7	52.5	3.22	2.51
1966	186.2	37.5	148.6	78.3	27.7	30.1	12.5	55.6	3.35	2.67
1967	198.4	37.0	161.4	85.2	29.9	31.1	15.3	59.2	3.35	2.73
1968	214.1	40.3	173.8	91.4	31.7	34.4	16.3	65.1	3.29	2.67
1969	233.7	43.8	189.9	99.0	35.2	37.7	18.1	69.1	3.38	2.75
1970	242.0	42.3	199.7	102.8	39.0	38.7	19.3	72.9	3.32	2.74
1971	261.2	49.7	211.5	103.5	42.1	44.9	20.9	79.4	3.29	2.66
1972	289.7	60.9	228.8	109.4	46.0	50.0	23.4	88.5	3.28	2.59
1973	345.8	78.1	267.8	125.1	54.8	58.7	29.2	97.5	3.55	2.75
1974	398.6	68.4	330.3	158.2	69.8	64.2	38.0	105.4	3.78	3.13
1975	410.6	72.3	338.4	164.5	69.3	64.7	39.8	118.0	3.48	2.87
1976	443.4	68.3	375.1	181.1	77.2	73.3	43.5	129.7	3.42	2.89
1977	494.2	73.3	421.0	202.8	86.6	81.2	50.4	145.0	3.41	2.90
1978	581.9	97.9	484.0	228.4	101.9	94.5	59.1	167.6	3.47	2.89
1979	676.8	114.9	561.9	268.7	120.5	105.3	67.5	186.4	3.63	3.01
1980	737.5	114.7	622.8	296.5	138.5	113.7	74.0	204.8	3.60	3.04
1981	783.1	104.9	678.2	318.1	151.4	123.9	84.9	221.8	3.53	3.06
1982	768.4	110.4	658.0	299.5	150.3	123.5	84.6	232.8	3.30	2.83
1983	787.8	106.7	681.1	302.6	154.1	138.0	86.4	255.4	3.08	2.67
1984	860.7	109.2	751.5	333.4	169.0	157.3	91.8	276.7	3.11	2.72
1985	875.3	106.3	769.1	325.3	173.4	171.9	98.4	297.7	2.94	2.58
1986	862.7	94.5	768.2	314.6	177.2	176.8	99.5	315.7	2.73	2.43
1987	927.5	98.0	829.5	332.9	190.6	199.5	106.4	333.1	2.78	2.49
1988	992.8	102.0	890.8	358.8	208.5	213.8	109.6	362.8	2.74	2.46
1989	1,044.6	103.6	941.0	382.1	218.4	232.7	107.8	384.9	2.71	2.44
1990: I	1,051.9	106.2	945.7	385.9	221.6	229.8	108.4	394.2	2.67	2.40
II	1,062.7	107.2	955.5	387.5	226.3	234.1	107.6	397.6	2.67	2.40
III	1,087.1	109.1	977.9	401.0	230.9	237.3	108.7	401.0	2.71	2.44
IV	1,082.4	108.3	974.1	399.7	232.4	237.1	104.8	403.4	2.68	2.41
1991: I	1,072.3	111.2	961.1	393.7	233.7	232.7	101.0	403.9	2.65	2.38
II	1,056.5	105.5	951.0	385.5	230.3	233.6	101.7	409.0	2.58	2.33
III	1,053.0	99.0	954.1	383.5	231.3	237.5	101.7	411.0	2.56	2.32
IV	1,058.1	97.2	961.0	383.4	235.5	240.1	102.0	413.1	2.56	2.33
1992: I	1,065.6	105.0	960.6	379.2	236.9	240.1	104.4	423.4	2.52	2.27
II	1,070.8	104.1	966.8	378.1	240.5	244.1	104.1	427.7	2.50	2.26
III	1,076.3	104.8	971.5	380.1	242.0	246.4	103.0	432.8	2.49	2.24
IV	1,077.9	104.9	973.1	375.5	245.3	249.4	103.0	441.9	2.44	2.20
1993: I	1,097.4	109.9	987.5	378.0	248.0	259.0	102.5	444.3	2.47	2.22
II	1,101.3	105.5	995.8	380.5	249.6	261.7	104.0	449.2	2.45	2.22
III	1,103.5	101.7	1,001.7	380.1	252.8	263.3	105.5	453.7	2.43	2.21
IV	1,112.8	101.6	1,011.2	380.9	255.2	267.0	108.1	463.2	2.40	2.18
1994: I	1,130.2	107.2	1,023.0	385.5	257.3	270.2	110.1	467.4	2.42	2.19
II	1,147.1	103.3	1,043.8	390.3	263.3	278.2	111.9	473.4	2.42	2.20
III	1,167.4	102.5	1,065.0	397.7	270.7	283.4	113.1	482.3	2.42	2.21
IV	1,196.5	104.9	1,091.6	406.7	279.8	289.8	115.3	489.8	2.44	2.23
1995: I	1,235.3	105.8	1,129.5	421.0	291.9	296.0	120.6	494.2	2.50	2.29
II	1,245.9	101.2	1,144.7	426.5	297.8	297.9	122.5	499.9	2.49	2.29
III	1,251.9	99.2	1,152.8	429.5	301.3	299.1	122.9	507.6	2.47	2.27
IV	1,260.9	100.7	1,160.2	430.4	304.0	299.1	126.7	512.0	2.46	2.27
1996: I	1,263.5	98.2	1,165.3	432.7	307.3	294.5	130.8	519.0	2.43	2.25
II	1,271.5	102.5	1,169.0	430.9	309.8	296.0	132.3	527.2	2.41	2.22
III	1,279.7	103.6	1,176.0	433.7	306.2	302.7	133.4	529.8	2.42	2.22

[1] Inventories at end of quarter. Quarter-to-quarter change calculated from this table is not the current-dollar change in business inventories (CBI) component of GDP. The former is the difference between two inventory stocks, each valued at their respective end-of-quarter prices. The latter is the change in the physical volume of inventories valued at average prices of the quarter. In addition, changes calculated from this table are at quarterly rates, whereas CBI is stated at annual rates.

[2] Inventories of construction establishments are included in "other" nonfarm inventories.

[3] Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross product of households and institutions and of general government and includes a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis. Estimates for nonfarm industries other than manufacturing and trade for 1986 and earlier periods are based on the 1972 Standard Industrial Classification (SIC). Manufacturing estimates for 1981 and earlier periods and trade estimates for 1966 and earlier periods are based on the 1972 SIC; later estimates for these industries are based on the 1987 SIC. The resulting discontinuities are small.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–21.—*Real inventories and final sales of domestic business, 1959–96*

[Billions of chained (1992) dollars, except as noted; seasonally adjusted]

Quarter	Inventories[1]							Final sales of domestic business[3]	Ratio of inventories to final sales of domestic business	
	Total[2]	Farm	Nonfarm						Total	Nonfarm
			Total[2]	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1959	401.4	88.6	303.6	148.2	56.5	59.4	37.6	144.3	2.78	2.10
1960	412.0	90.1	312.4	150.6	57.9	63.6	38.3	147.0	2.80	2.13
1961	420.9	92.3	318.6	155.1	59.3	62.3	40.1	153.5	2.74	2.08
1962	440.9	94.7	336.7	165.2	61.9	66.7	40.1	160.8	2.74	2.09
1963	459.0	96.6	353.1	171.5	66.3	70.3	42.2	169.5	2.71	2.08
1964	474.7	94.4	372.6	180.4	70.3	74.2	45.0	178.4	2.66	2.09
1965	504.8	96.0	400.3	192.6	74.7	81.7	48.4	194.2	2.60	2.06
1966	547.2	94.9	445.0	217.6	84.6	88.5	49.8	199.4	2.74	2.23
1967	579.2	97.4	474.5	234.4	91.0	88.4	56.9	206.4	2.81	2.30
1968	606.1	101.1	497.5	245.0	94.1	95.8	58.1	217.8	2.78	2.28
1969	633.3	101.4	524.8	256.0	100.6	102.3	61.4	221.7	2.86	2.37
1970	639.0	99.3	533.0	256.0	108.0	102.4	62.6	224.0	2.85	2.38
1971	661.7	103.6	551.1	253.1	113.8	116.1	64.9	234.4	2.82	2.35
1972	686.9	104.2	576.5	259.8	119.0	124.9	69.9	252.7	2.72	2.28
1973	725.9	106.5	615.0	277.7	122.4	134.8	77.4	261.1	2.78	2.36
1974	749.8	102.2	646.8	296.8	133.0	132.9	80.8	254.6	2.94	2.54
1975	738.8	107.6	628.3	289.7	127.5	126.3	81.5	265.6	2.78	2.37
1976	767.8	105.6	660.4	303.4	135.9	136.0	81.7	277.5	2.77	2.38
1977	805.8	111.7	692.1	311.8	146.5	143.7	87.1	291.7	2.76	2.37
1978	848.1	113.3	733.6	325.8	158.8	153.1	93.2	311.9	2.72	2.35
1979	871.2	117.0	752.8	338.5	166.3	153.1	91.5	319.3	2.73	2.36
1980	861.2	110.1	751.3	338.9	171.3	148.9	88.7	319.9	2.69	2.35
1981	894.3	119.6	774.1	343.5	176.0	157.2	94.4	318.9	2.80	2.43
1982	878.7	126.9	751.3	329.5	174.1	153.3	91.7	319.2	2.75	2.35
1983	872.8	109.8	763.4	329.5	173.5	166.2	92.4	338.2	2.58	2.26
1984	947.6	115.8	832.4	358.4	189.6	186.4	96.7	355.7	2.66	2.34
1985	977.4	122.2	855.8	353.9	194.8	201.3	105.1	370.8	2.64	2.31
1986	988.3	120.5	868.2	349.7	201.9	204.4	111.6	384.3	2.57	2.26
1987	1,014.5	111.5	902.5	354.8	208.5	223.9	115.1	393.8	2.58	2.29
1988	1,026.2	98.8	927.2	364.3	217.8	231.3	113.7	411.7	2.49	2.25
1989	1,059.5	98.9	960.7	383.5	223.3	245.0	108.9	420.7	2.52	2.28
1990: I	1,062.2	98.9	963.4	386.9	225.9	240.5	109.9	426.2	2.49	2.26
II	1,073.2	100.0	973.2	389.2	230.5	244.1	109.3	424.2	2.53	2.29
III	1,076.9	102.0	974.9	391.1	231.1	245.0	107.6	423.6	2.54	2.30
IV	1,069.9	101.4	968.4	390.1	231.3	243.5	103.4	421.8	2.54	2.30
1991: I	1,065.5	100.8	964.7	390.4	234.1	238.4	101.6	417.7	2.55	2.31
II	1,060.3	101.5	958.8	386.1	232.0	238.0	102.6	420.2	2.52	2.28
III	1,061.5	99.3	962.2	384.5	233.1	241.7	102.9	419.4	2.53	2.29
IV	1,066.9	99.7	967.2	384.0	236.9	243.3	103.0	419.2	2.55	2.31
1992: I	1,066.9	101.6	965.3	380.6	237.2	242.0	105.4	426.6	2.50	2.26
II	1,069.7	104.1	965.6	377.5	239.8	244.3	104.1	428.9	2.49	2.25
III	1,072.7	105.4	967.3	378.5	241.6	245.1	102.1	432.3	2.48	2.24
IV	1,074.2	105.1	969.1	374.7	244.7	247.2	102.6	438.1	2.45	2.21
1993: I	1,078.8	103.3	975.6	375.0	245.2	255.1	100.2	436.7	2.47	2.23
II	1,084.0	101.9	982.3	377.7	247.0	256.1	101.5	438.7	2.47	2.24
III	1,088.9	99.0	990.0	379.6	250.1	257.5	102.7	441.5	2.47	2.24
IV	1,093.2	97.9	995.5	380.2	250.6	259.6	105.1	448.0	2.44	2.22
1994: I	1,103.4	100.6	1,003.0	382.8	251.3	262.2	106.6	449.3	2.46	2.23
II	1,122.0	105.9	1,016.5	383.9	256.4	267.9	108.2	453.0	2.48	2.24
III	1,138.1	109.4	1,029.1	386.9	261.6	271.8	108.7	458.5	2.48	2.24
IV	1,152.1	110.1	1,042.4	388.5	267.2	276.1	110.4	463.2	2.49	2.25
1995: I	1,165.8	109.2	1,056.7	390.7	273.2	279.2	113.4	464.0	2.51	2.28
II	1,173.4	108.2	1,065.2	393.5	277.1	280.6	113.8	466.8	2.51	2.28
III	1,181.6	106.6	1,074.8	397.6	280.4	281.4	115.3	471.6	2.51	2.28
IV	1,185.3	105.4	1,079.5	400.4	281.5	279.6	117.9	474.1	2.50	2.28
1996: I	1,184.5	103.8	1,080.3	403.4	283.1	274.2	119.4	478.5	2.48	2.26
II	1,186.3	102.5	1,083.2	402.4	284.9	275.5	120.2	483.3	2.45	2.24
III	1,194.9	102.4	1,091.8	405.4	284.0	281.2	121.1	483.8	2.47	2.26

[1] Inventories at end of quarter. Quarter-to-quarter changes calculated from this table are at quarterly rates, whereas the change in business inventories component of GDP is stated at annual rates.

[2] Inventories of construction establishments are included in ''other'' nonfarm inventories.

[3] Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross product of households and institutions and of general government and includes a small amount of final sales by farms.

NOTE.—The industry classification of inventories is on an establishment basis. Estimates for nonfarm industries other than manufacturing and trade for 1986 and earlier periods are based on the 1972 Standard Industrial Classification (SIC). Manufacturing estimates for 1981 and earlier periods and trade estimates for 1966 and earlier periods are based on the 1972 SIC; later estimates for these industries are based on the 1987 SIC. The resulting discontinuities are small.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–22.—*Foreign transactions in the national income and product accounts, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts from rest of the world					Payments to rest of the world									
	Total [1]	Exports of goods and services			Receipts of factor income	Total	Imports of goods and services			Payments of factor income	Transfer payments (net)				Net foreign investment
		Total	Goods [2]	Services [2]			Total	Goods [2]	Services [2]		Total	From persons (net)	From government (net)	From business	
1959	25.0	20.6	16.5	4.2	4.3	25.0	22.3	15.3	7.0	1.5	2.4	0.4	1.8	0.1	–1.2
1960	30.2	25.3	20.5	4.8	5.0	30.2	22.8	15.2	7.6	1.8	2.4	.5	1.9	.1	3.2
1961	31.4	26.0	20.9	5.1	5.4	31.4	22.7	15.1	7.6	1.8	2.7	.5	2.1	.1	4.3
1962	33.5	27.4	21.7	5.7	6.1	33.5	25.0	16.9	8.1	1.8	2.8	.5	2.1	.1	3.9
1963	36.1	29.4	23.3	6.1	6.6	36.1	26.1	17.7	8.4	2.1	2.8	.6	2.1	.1	5.0
1964	41.0	33.6	26.7	6.9	7.4	41.0	28.1	19.4	8.7	2.4	3.0	.7	2.1	.2	7.5
1965	43.5	35.4	27.8	7.6	8.1	43.5	31.5	22.2	9.3	2.7	3.0	.8	2.1	.2	6.2
1966	47.2	38.9	30.7	8.2	8.3	47.2	37.1	26.3	10.7	3.1	3.2	.8	2.2	.2	3.9
1967	50.2	41.4	32.2	9.2	8.9	50.2	39.9	27.8	12.2	3.4	3.4	1.0	2.1	.2	3.5
1968	55.6	45.3	35.3	10.0	10.3	55.6	46.6	33.9	12.6	4.1	3.2	1.0	1.9	.3	1.7
1969	61.2	49.3	38.3	11.0	11.9	61.2	50.5	36.8	13.7	5.8	3.2	1.1	1.8	.3	1.8
1970	70.8	57.0	44.5	12.4	13.0	70.8	55.8	40.9	14.9	6.6	3.6	1.2	2.0	.4	4.9
1971	74.2	59.3	45.6	13.8	14.1	74.2	62.3	46.6	15.8	6.4	4.1	1.3	2.4	.4	1.3
1972	83.4	66.2	51.8	14.4	16.4	83.4	74.2	56.9	17.3	7.7	4.3	1.3	2.5	.5	–2.9
1973	115.6	91.8	73.9	17.8	23.8	115.6	91.2	71.8	19.3	11.1	4.6	1.4	2.5	.7	8.7
1974	152.6	124.3	101.0	23.3	30.3	152.6	127.5	104.5	22.9	14.6	5.4	1.2	3.2	1.0	5.1
1975	164.4	136.3	109.6	26.7	28.2	164.4	122.7	99.0	23.7	14.9	5.4	1.2	3.5	.7	21.4
1976	181.7	148.9	117.8	31.1	32.9	181.7	151.1	124.6	26.5	15.7	6.0	1.2	3.7	1.1	8.9
1977	196.6	158.8	123.7	35.1	37.9	196.6	182.4	152.6	29.8	17.2	6.0	1.2	3.4	1.4	–9.0
1978	233.5	186.1	145.4	40.7	47.4	233.5	212.3	177.4	34.8	25.3	6.4	1.3	3.8	1.4	–10.4
1979	300.3	228.7	184.0	44.7	70.4	300.3	252.7	212.8	39.9	37.5	7.5	1.4	4.1	2.0	2.6
1980	361.9	278.9	225.8	53.2	81.8	361.9	293.8	248.6	45.3	46.5	9.0	1.6	5.0	2.4	12.5
1981	399.5	302.8	239.1	63.7	95.6	399.5	317.8	267.8	49.9	60.9	13.4	5.2	5.0	3.2	7.4
1982	379.5	282.6	215.0	67.6	96.9	379.5	303.2	250.5	52.6	65.8	16.7	6.2	7.0	3.4	–6.1
1983	374.6	277.0	207.3	69.7	97.6	374.6	328.6	272.7	56.0	65.6	17.7	6.5	7.8	3.4	–37.3
1984	421.8	303.1	225.6	77.5	118.7	421.8	405.1	336.3	68.8	87.6	20.6	7.4	9.7	3.5	–91.5
1985	411.1	303.0	222.2	80.8	108.1	411.1	417.2	343.3	73.9	87.7	23.1	7.8	12.2	3.1	–116.9
1986	427.1	320.7	226.0	94.7	106.5	427.1	452.2	370.0	82.2	93.6	24.3	8.1	12.9	3.3	–142.9
1987	481.8	365.7	257.5	108.2	116.0	481.8	507.9	414.8	93.1	107.1	23.3	8.7	11.2	3.3	–156.4
1988	591.9	447.2	325.8	121.4	144.7	591.9	553.2	452.1	101.1	131.7	25.1	9.1	11.4	4.6	–118.1
1989	678.3	509.3	371.7	137.6	169.0	678.3	589.7	484.5	105.3	154.8	26.1	9.6	11.4	5.1	–92.4
1990	734.8	557.3	398.5	158.8	177.5	734.8	628.6	508.0	120.6	156.4	28.4	9.9	13.3	5.2	–78.6
1991	757.9	601.8	426.4	175.4	156.2	757.9	622.3	500.7	121.6	140.5	–12.1	10.4	–27.9	5.4	7.3
1992	777.3	639.4	448.7	190.7	137.9	777.3	669.0	544.9	124.1	126.8	32.0	9.6	16.6	5.8	–50.5
1993	798.5	657.8	459.6	198.3	140.7	798.5	720.5	592.8	127.8	130.1	36.1	12.8	17.3	6.0	–88.2
1994	882.5	719.1	509.1	210.1	163.4	882.5	813.5	677.0	136.4	167.2	38.2	14.2	16.5	7.5	–136.4
1995	1,015.6	807.4	581.4	225.9	208.3	1,015.6	902.0	757.0	145.1	215.3	34.6	14.9	11.5	8.2	–136.3
1990: I	715.2	541.6	391.6	150.0	173.6	715.2	615.9	500.4	115.5	152.5	26.1	9.9	11.5	4.7	–79.4
II	728.1	554.8	399.8	155.1	173.3	728.1	615.1	497.4	117.8	156.4	30.3	9.5	15.5	5.3	–73.8
III	728.6	555.5	394.6	160.9	173.1	728.6	634.1	511.3	122.7	158.7	29.1	10.2	13.2	5.7	–93.3
IV	767.3	577.3	408.2	169.1	190.0	767.3	649.2	522.9	126.4	157.9	28.2	10.1	12.9	5.3	–68.1
1991: I	751.4	577.4	414.8	162.7	174.0	751.4	610.3	488.3	122.1	147.1	–61.3	10.4	–76.9	5.2	55.3
II	758.7	602.7	428.8	173.9	156.0	758.7	615.0	493.5	121.6	143.8	–16.1	10.3	–32.0	5.6	16.0
III	750.6	602.6	423.9	178.7	148.1	750.6	624.5	504.6	119.9	138.7	10.0	10.2	–5.4	5.2	–22.6
IV	771.0	624.4	438.1	186.3	146.6	771.0	639.3	516.5	122.7	132.2	18.9	10.6	2.6	5.7	–19.4
1992: I	773.1	632.4	442.1	190.3	140.7	773.1	641.3	516.8	124.5	124.2	27.5	9.4	12.4	5.7	–19.9
II	779.2	635.9	445.9	190.0	143.3	779.2	664.9	541.1	123.8	132.3	30.7	9.7	15.0	6.0	–48.7
III	774.0	640.2	447.7	192.5	133.8	774.0	677.8	557.2	120.6	124.3	27.8	9.2	12.9	5.8	–56.0
IV	783.0	649.1	459.0	190.1	133.9	783.0	691.8	564.4	127.4	126.4	42.0	9.9	26.1	5.9	–77.2
1993: I	783.0	646.9	451.2	195.7	136.1	783.0	694.8	570.7	124.0	120.2	30.6	12.6	12.6	5.5	–62.6
II	801.8	660.4	462.0	198.5	141.4	801.8	720.0	593.2	126.8	131.1	33.7	12.7	14.8	6.2	–83.0
III	787.1	645.3	447.7	197.7	141.7	787.1	719.8	592.7	127.1	129.0	34.5	12.8	15.5	6.2	–96.2
IV	822.2	678.7	477.4	201.3	143.5	822.2	747.5	614.4	133.1	140.2	45.5	13.1	26.3	6.1	–111.0
1994: I	826.8	678.9	476.0	202.8	147.9	826.8	757.6	623.6	134.0	142.9	32.7	14.1	11.2	7.3	–106.5
II	862.4	707.4	498.4	209.0	155.0	862.4	800.4	664.6	135.8	157.1	34.5	14.1	12.9	7.4	–129.7
III	899.6	729.2	516.6	212.6	170.4	899.6	836.1	698.3	137.9	176.6	37.4	14.1	15.7	7.6	–150.6
IV	941.3	761.0	545.1	215.9	180.3	941.3	859.6	721.6	138.0	192.1	48.4	14.5	26.2	7.7	–158.9
1995: I	976.9	776.1	559.1	217.0	200.8	976.9	884.8	741.9	142.8	203.8	34.5	14.4	12.1	8.1	–146.2
II	1,009.2	797.3	575.2	222.2	211.9	1,009.2	912.6	767.3	145.3	214.3	33.1	14.1	11.0	8.0	–150.8
III	1,026.1	819.0	587.0	232.1	207.0	1,026.1	906.6	759.7	146.9	223.4	34.2	14.7	11.3	8.2	–138.1
IV	1,050.3	837.0	604.5	232.5	213.4	1,050.3	904.2	759.0	145.2	219.7	36.6	16.5	11.6	8.5	–110.2
1996: I	1,059.9	839.5	603.6	235.9	220.4	1,059.9	925.8	776.7	149.2	220.6	43.3	15.7	19.0	8.6	–129.9
II	1,073.9	850.0	610.4	239.7	223.9	1,073.9	949.2	798.2	151.0	231.4	37.4	16.2	11.8	9.4	–144.2
III	1,070.7	844.3	605.4	239.0	226.4	1,070.7	964.5	812.1	152.5	243.8	36.9	16.2	11.7	9.1	–174.6

[1] Includes capital grants received by the United States (net), not shown separately. See Table B–30 for data.

[2] Certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment were reclassified from goods to services.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–23.—*Real exports and imports of goods and services and receipts and payments of factor income, 1959–96*

[Billions of chained (1992) dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Exports of goods and services					Receipts of factor income	Imports of goods and services					Payments of factor income
	Total	Goods [1]			Services [1]		Total	Goods [1]			Services [1]	
		Total	Durable goods	Nondurable goods				Total	Durable goods	Nondurable goods		
1959	71.9	51.7	23.7	30.4	18.6	20.8	106.6	71.1	23.7	49.5	34.9	7.5
1960	86.8	63.8	29.3	36.5	20.6	23.4	108.1	70.0	22.6	50.1	37.7	8.7
1961	88.3	64.2	29.5	36.8	22.0	25.2	107.3	69.9	21.8	51.8	37.0	8.8
1962	93.0	67.0	31.0	38.6	24.0	27.6	119.5	80.2	25.6	58.4	38.8	8.9
1963	100.0	72.3	32.7	42.2	25.5	29.8	122.7	83.5	27.0	60.1	38.7	9.9
1964	113.3	82.2	37.7	47.2	28.6	32.6	129.2	89.0	30.0	62.5	39.7	11.0
1965	115.6	82.6	39.3	45.9	30.8	34.6	143.0	101.6	37.1	67.2	40.9	12.0
1966	123.4	88.4	42.2	48.8	32.6	34.3	164.2	117.6	46.2	72.5	46.0	13.4
1967	126.1	88.8	48.8	40.4	35.5	35.7	176.2	123.8	49.5	74.7	51.7	14.3
1968	135.3	95.8	53.4	42.8	37.3	39.5	202.5	149.4	63.0	84.6	52.6	16.6
1969	142.7	100.8	57.7	43.2	39.6	43.7	214.0	157.5	67.3	87.8	55.9	21.9
1970	158.1	112.3	63.1	49.5	43.1	45.0	223.1	163.7	69.2	92.6	58.8	23.6
1971	159.2	111.9	62.7	49.6	45.0	46.4	235.0	177.4	76.1	98.3	57.2	22.0
1972	172.0	123.9	69.2	55.1	44.7	51.7	261.0	201.6	87.6	109.8	59.1	25.3
1973	209.6	152.4	86.3	66.5	52.6	70.4	272.6	215.8	93.2	118.4	56.7	34.1
1974	229.8	164.5	99.6	65.9	61.6	82.5	265.3	209.8	93.6	111.0	55.4	41.0
1975	228.2	160.7	97.5	64.2	65.6	70.2	235.4	183.4	76.5	103.0	52.5	38.7
1976	241.6	168.3	98.9	70.3	72.5	77.2	281.5	224.8	93.7	126.4	56.2	38.7
1977	247.4	170.5	98.7	72.8	77.2	83.4	311.6	252.2	106.0	140.7	58.4	39.5
1978	273.1	189.5	110.0	80.6	83.0	96.8	338.6	274.8	122.5	145.3	62.5	53.5
1979	299.0	211.9	125.2	87.9	83.9	132.4	344.3	279.5	125.4	147.0	63.4	73.0
1980	331.4	237.2	139.6	98.9	89.2	141.1	321.3	258.7	126.3	126.6	61.8	83.1
1981	335.3	234.7	134.7	101.4	98.5	150.1	329.7	264.0	136.8	122.8	65.4	99.4
1982	311.4	213.5	117.0	98.4	98.5	143.5	325.5	257.4	138.4	115.6	68.9	100.7
1983	303.3	207.3	114.6	94.4	96.8	138.2	366.6	292.4	166.8	123.1	74.4	95.9
1984	328.4	223.7	127.0	98.1	105.9	160.3	455.7	363.1	221.9	140.2	92.9	121.9
1985	337.3	231.7	137.3	95.3	106.1	140.5	485.2	385.9	244.1	142.0	99.7	116.8
1986	362.2	243.6	145.3	99.1	120.3	134.6	526.1	425.5	266.7	158.8	100.2	120.9
1987	402.0	270.5	165.7	105.0	133.4	141.9	558.2	445.2	278.5	166.8	113.1	133.0
1988	465.8	321.4	205.5	115.8	145.0	170.2	580.2	463.2	290.1	173.2	117.1	157.1
1989	520.2	361.7	236.7	124.9	158.7	189.9	603.0	482.7	302.6	180.1	120.2	176.7
1990	564.4	391.6	260.0	131.6	173.1	190.6	626.3	497.3	310.9	186.4	129.4	170.2
1991	599.9	419.2	279.6	139.6	180.8	161.1	622.2	497.1	312.7	184.4	125.3	145.7
1992	639.4	448.7	300.9	147.8	190.7	137.9	669.0	544.9	346.4	198.4	124.1	126.8
1993	658.2	464.5	318.3	146.2	193.7	137.4	730.2	602.6	390.0	212.5	127.7	126.7
1994	712.0	511.5	358.0	153.8	200.9	155.9	817.6	684.1	455.6	228.2	133.8	158.6
1995	775.4	565.9	403.2	163.7	210.4	194.2	883.0	744.7	507.1	237.2	138.8	199.7
1990: I	555.2	386.8	256.1	130.6	168.6	189.5	622.3	494.2	303.1	191.1	128.5	169.5
II	566.8	394.8	264.2	130.6	172.2	187.1	633.5	504.0	313.3	190.7	129.8	171.0
III	561.8	388.0	258.6	129.4	174.3	185.1	633.0	503.2	315.4	187.7	130.2	171.7
IV	573.9	397.0	261.2	135.8	177.3	200.9	616.4	487.9	312.0	175.9	129.0	168.7
1991: I	572.3	403.3	263.1	140.1	168.9	181.4	596.6	472.2	298.9	173.3	124.8	154.7
II	600.3	419.8	282.8	137.1	180.6	161.5	617.4	490.8	304.8	186.0	126.8	149.9
III	603.6	420.0	281.9	138.1	183.8	152.0	633.4	509.4	320.2	189.2	124.1	143.0
IV	623.5	433.7	290.5	143.3	189.8	149.4	641.4	515.9	326.8	189.1	125.6	135.2
1992: I	633.0	440.3	294.5	145.8	192.8	141.9	647.8	521.2	331.2	190.0	126.7	125.6
II	635.8	445.1	298.4	146.6	190.7	143.5	668.3	543.6	344.6	199.0	124.7	132.6
III	639.7	448.3	299.5	148.8	191.3	133.4	670.5	552.8	351.0	201.8	117.7	123.9
IV	649.1	461.0	311.1	149.9	188.2	132.7	689.1	561.8	359.0	202.8	127.4	125.2
1993: I	647.1	454.3	308.1	146.2	192.7	133.9	703.1	578.4	372.7	205.6	124.7	117.9
II	660.0	466.0	319.1	146.9	194.0	138.3	724.4	598.0	383.6	214.4	126.5	127.9
III	645.5	452.7	310.6	142.1	192.7	138.2	731.7	604.1	390.5	213.6	127.6	125.3
IV	680.3	485.0	335.5	149.6	195.5	139.1	761.8	629.8	413.1	216.6	132.0	135.6
1994: I	677.6	481.9	336.8	145.3	195.9	142.5	777.0	644.5	424.1	220.2	132.6	137.0
II	703.1	502.9	353.7	149.6	200.5	148.5	810.4	675.6	448.2	227.1	135.0	149.8
III	719.6	517.8	361.8	156.2	202.2	162.2	831.3	697.1	462.6	234.1	134.5	166.9
IV	747.6	543.4	379.7	163.9	204.9	170.6	851.9	719.3	487.7	231.2	133.1	180.8
1995: I	752.3	548.8	386.5	162.8	204.3	188.8	874.9	735.4	500.1	235.0	139.8	190.5
II	763.2	557.7	398.3	160.5	206.4	197.9	884.6	747.7	508.5	238.9	137.4	199.2
III	783.0	568.2	405.9	163.5	215.4	192.6	884.5	745.6	506.0	239.3	139.4	206.8
IV	803.1	588.8	422.3	167.9	215.3	197.6	888.0	750.0	514.0	235.8	138.5	202.4
1996: I	806.7	590.9	424.0	168.4	216.7	203.2	910.7	768.4	529.7	238.5	142.8	202.3
II	817.9	600.6	437.9	165.3	218.3	205.4	932.6	789.9	542.1	247.7	143.2	211.1
III	816.1	601.1	439.0	164.8	216.1	207.0	953.5	810.0	556.9	253.0	144.1	221.4

[1] Certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment were reclassified from goods to services.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–24.—*Relation of gross domestic product, gross national product, net national product, and national income, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product	Plus: Receipts of factor income from rest of the world	Less: Payments of factor income to rest of the world	Equals: Gross national product	Less: Consumption of fixed capital			Equals: Net national product	Less:			Plus: Subsidies less current surplus of government enterprises	Equals: National income
					Total	Private	Government		Indirect business tax and nontax liability	Business transfer payments	Statistical discrepancy		
1959	507.2	4.3	1.5	510.1	58.6	44.5	14.1	451.5	41.9	1.4	–2.1	0.1	410.4
1960	526.6	5.0	1.8	529.8	60.7	46.1	14.5	469.1	45.5	1.4	–3.7	.3	426.2
1961	544.8	5.4	1.8	548.4	62.2	47.2	15.0	486.2	48.1	1.5	–3.3	1.3	441.2
1962	585.2	6.1	1.8	589.4	64.7	48.9	15.8	524.8	51.7	1.6	–2.4	1.5	475.3
1963	617.4	6.6	2.1	621.9	67.2	50.5	16.7	554.7	54.7	1.8	–3.5	.9	502.6
1964	663.0	7.4	2.4	668.0	70.4	53.1	17.4	597.6	58.8	2.0	–2.1	1.4	540.2
1965	719.1	8.1	2.7	724.5	74.9	56.7	18.2	649.6	62.7	2.2	–1.4	1.7	587.8
1966	787.8	8.3	3.1	793.0	81.1	61.8	19.3	711.9	65.4	2.3	2.7	3.0	644.4
1967	833.6	8.9	3.4	839.1	87.8	67.0	20.8	751.3	70.4	2.5	.6	2.9	680.7
1968	910.6	10.3	4.1	916.7	95.4	73.0	22.4	821.3	79.0	2.8	.2	3.1	742.4
1969	982.2	11.9	5.8	988.4	103.6	79.5	24.1	884.8	86.6	3.1	–2.2	3.6	800.9
1970	1,035.6	13.0	6.6	1,042.0	111.9	86.1	25.8	930.1	94.3	3.2	1.0	4.9	836.6
1971	1,125.4	14.1	6.4	1,133.1	122.0	94.4	27.6	1,011.0	103.6	3.4	5.1	5.1	904.0
1972	1,237.3	16.4	7.7	1,246.0	134.8	104.9	29.9	1,111.2	111.4	3.9	3.2	6.4	999.2
1973	1,382.6	23.8	11.1	1,395.4	148.0	115.1	32.9	1,247.3	121.0	4.5	2.4	5.9	1,125.3
1974	1,496.9	30.3	14.6	1,512.6	171.7	133.7	38.0	1,340.9	129.3	5.0	4.5	4.5	1,206.7
1975	1,630.6	28.2	14.9	1,643.9	200.1	157.7	42.4	1,443.8	140.0	5.2	11.2	8.1	1,295.5
1976	1,819.0	32.9	15.7	1,836.1	218.9	174.1	44.7	1,617.2	151.6	6.5	18.9	7.4	1,447.5
1977	2,026.9	37.9	17.2	2,047.5	251.1	203.5	47.6	1,796.4	165.5	7.3	17.5	10.1	1,616.3
1978	2,291.4	47.4	25.3	2,313.5	281.8	230.4	51.5	2,031.6	177.8	8.2	17.6	11.1	1,839.2
1979	2,557.5	70.4	37.5	2,590.4	322.3	265.5	56.8	2,268.1	188.7	9.9	27.8	11.7	2,053.3
1980	2,784.2	81.8	46.5	2,819.5	368.0	304.6	63.4	2,451.5	212.0	11.2	27.4	15.2	2,216.1
1981	3,115.9	95.6	60.9	3,150.6	419.9	349.5	70.4	2,730.7	249.3	13.4	14.6	16.9	2,470.2
1982	3,242.1	96.9	65.8	3,273.2	456.3	378.3	78.1	2,816.9	256.4	15.2	–2.9	21.1	2,569.2
1983	3,514.5	97.6	65.6	3,546.5	477.9	397.8	80.1	3,068.6	280.1	16.2	36.5	25.6	2,761.4
1984	3,902.4	118.7	87.6	3,933.5	494.0	410.9	83.1	3,439.5	309.5	18.6	4.2	25.5	3,132.7
1985	4,180.7	108.1	87.7	4,201.0	519.5	432.4	87.1	3,681.5	329.6	20.9	1.3	21.9	3,351.5
1986	4,422.2	106.5	93.6	4,435.1	552.8	459.4	93.5	3,882.2	344.7	23.9	22.1	25.1	3,516.5
1987	4,692.3	116.0	107.1	4,701.3	581.9	483.2	98.7	4,119.4	364.8	24.2	–16.6	31.0	3,778.1
1988	5,049.6	144.7	131.7	5,062.6	620.2	516.0	104.2	4,442.5	385.5	25.4	–48.6	28.5	4,108.6
1989	5,438.7	169.0	154.8	5,452.8	662.2	551.9	110.3	4,790.6	414.7	26.3	11.6	24.2	4,362.1
1990	5,743.8	177.5	156.4	5,764.9	693.1	575.8	117.3	5,071.9	442.6	26.5	16.1	25.3	4,611.9
1991	5,916.7	156.2	140.5	5,932.4	723.1	599.6	123.5	5,209.3	478.1	26.3	8.8	23.6	4,719.7
1992	6,244.4	137.9	126.8	6,255.5	754.2	626.1	128.2	5,501.3	505.6	28.4	43.7	27.1	4,950.8
1993	6,553.0	140.7	130.1	6,563.5	773.8	640.0	133.8	5,789.7	540.0	28.1	58.0	31.7	5,195.3
1994	6,935.7	163.4	167.2	6,931.9	818.8	678.7	140.1	6,113.2	572.5	30.1	34.1	25.1	5,501.6
1995	7,253.8	208.3	215.3	7,246.7	825.9	679.2	146.7	6,420.8	595.5	30.8	–.9	18.2	5,813.5
1990: I	5,660.4	173.6	152.5	5,681.4	680.1	565.6	114.5	5,001.3	432.1	26.1	43.0	23.8	4,523.9
II	5,751.0	173.3	156.4	5,767.8	689.0	573.2	115.8	5,078.9	436.1	26.8	17.4	24.5	4,623.1
III	5,782.4	173.1	158.7	5,796.8	698.6	580.6	118.0	5,098.2	447.3	26.9	16.3	25.7	4,633.4
IV	5,781.5	190.0	157.9	5,813.6	704.6	583.9	120.7	5,109.0	455.0	26.4	–12.3	27.3	4,667.2
1991: I	5,822.1	174.0	147.1	5,849.0	713.6	592.5	121.1	5,135.3	464.7	26.0	–6.5	24.4	4,675.6
II	5,892.3	156.0	143.8	5,904.5	719.6	596.4	123.2	5,184.9	472.9	26.3	5.6	22.7	4,702.8
III	5,950.0	148.1	138.7	5,959.4	725.7	601.4	124.3	5,233.7	483.7	26.0	17.2	23.5	4,730.4
IV	6,002.3	146.6	132.2	6,016.6	733.5	608.1	125.4	5,283.2	491.2	26.8	18.8	23.6	4,770.0
1992: I	6,121.8	140.7	124.2	6,138.3	727.6	601.3	126.3	5,410.7	495.7	27.6	23.3	24.6	4,888.7
II	6,201.2	143.3	132.3	6,212.2	734.1	606.4	127.7	5,478.1	497.9	28.5	36.2	25.4	4,941.0
III	6,271.7	133.8	124.3	6,281.1	809.2	680.5	128.6	5,471.9	507.1	28.6	51.6	26.9	4,911.6
IV	6,383.0	133.9	126.4	6,390.5	746.1	616.2	130.0	5,644.3	521.7	28.8	63.6	31.5	5,061.7
1993: I	6,442.6	136.1	120.2	6,458.6	765.6	633.8	131.7	5,693.0	524.7	27.7	79.5	35.2	5,096.3
II	6,506.2	141.4	131.1	6,516.5	767.6	634.6	133.0	5,748.9	535.1	28.3	59.8	33.7	5,159.4
III	6,574.4	141.7	129.0	6,587.1	783.1	648.4	134.6	5,804.0	541.7	28.2	49.8	29.9	5,214.1
IV	6,688.6	143.5	140.2	6,691.9	779.1	643.3	135.8	5,912.8	558.5	28.2	42.8	28.0	5,311.3
1994: I	6,776.0	147.9	142.9	6,781.0	887.4	748.7	138.7	5,893.6	562.1	29.8	24.1	27.2	5,304.8
II	6,890.5	155.0	157.1	6,888.3	791.2	652.7	138.5	6,097.2	568.0	30.0	30.0	24.0	5,493.2
III	6,993.1	170.4	176.6	6,987.0	796.7	656.7	140.0	6,190.2	576.4	30.2	45.3	23.4	5,561.7
IV	7,083.2	180.3	192.1	7,071.4	799.7	656.6	143.1	6,271.7	583.5	30.4	36.9	25.9	5,646.9
1995: I	7,149.8	200.8	203.8	7,146.8	809.5	664.6	144.9	6,337.3	586.0	30.6	30.0	19.2	5,709.9
II	7,204.9	211.9	214.3	7,202.4	820.1	673.6	146.5	6,382.3	594.8	30.6	20.3	18.7	5,755.4
III	7,309.8	207.0	223.4	7,293.4	828.8	681.6	147.2	6,464.6	597.3	30.9	–7.1	17.9	5,861.4
IV	7,350.6	213.4	219.7	7,344.3	845.1	697.0	148.2	6,499.1	604.1	31.2	–46.7	16.8	5,927.4
1996: I	7,426.8	220.4	220.6	7,426.6	843.0	694.7	148.4	6,583.6	604.1	31.5	–50.0	17.3	6,015.3
II	7,545.1	223.9	231.4	7,537.5	852.8	704.2	148.6	6,684.7	608.7	32.4	–57.5	17.6	6,118.7
III	7,616.3	226.4	243.8	7,598.9	864.0	714.6	149.4	6,734.9	614.6	32.2	–98.1	16.8	6,203.0

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–25.—*Relation of national income and personal income, 1959–96*

[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 [1]	Net interest	Contributions for social insurance	Wage accruals less disbursements	Personal interest income	Personal dividend income	Government transfer payments to persons	Business transfer payments to persons	Personal income
1959	410.4	50.2	10.2	18.8	0.0	22.7	12.7	25.7	1.3	393.5
1960	426.2	48.8	11.2	21.9	.0	25.0	13.4	27.5	1.3	411.7
1961	441.2	49.8	13.1	22.9	.0	26.9	14.0	31.5	1.4	429.1
1962	475.3	57.7	14.6	25.4	.0	29.3	15.0	32.6	1.5	456.1
1963	502.6	63.5	16.1	28.5	.0	32.4	16.1	34.5	1.7	479.1
1964	540.2	70.4	18.2	30.1	.0	36.1	18.0	36.0	1.8	513.5
1965	587.8	80.9	21.1	31.6	.0	40.3	20.2	39.1	2.0	555.8
1966	644.4	86.3	24.3	40.6	.0	44.9	20.9	43.6	2.1	604.7
1967	680.7	83.6	28.1	45.5	.0	49.5	22.1	52.3	2.3	649.7
1968	742.4	90.3	30.4	50.4	.0	54.6	24.5	60.6	2.5	713.5
1969	800.9	87.5	33.6	57.8	.0	60.8	25.1	67.5	2.8	778.2
1970	836.6	75.7	40.0	62.0	.0	69.2	23.5	81.8	2.8	836.1
1971	904.0	88.8	45.4	69.6	.6	75.7	23.5	97.0	3.0	898.9
1972	999.2	102.2	49.3	79.5	.0	81.8	25.5	108.4	3.4	987.3
1973	1,125.3	115.1	56.5	97.9	–.1	94.1	27.7	124.1	3.8	1,105.6
1974	1,206.7	103.7	71.8	111.7	–.5	112.4	29.6	147.4	4.0	1,213.3
1975	1,295.5	121.1	80.0	121.1	.1	123.0	29.2	185.7	4.5	1,315.6
1976	1,447.5	147.0	85.1	137.7	.1	134.6	35.0	202.8	5.5	1,455.4
1977	1,616.3	167.3	100.7	155.4	.1	155.7	39.5	217.5	5.9	1,611.4
1978	1,839.2	191.6	120.5	177.0	.3	184.5	44.3	234.8	6.8	1,820.2
1979	2,053.3	194.0	150.3	204.2	–.2	223.6	50.5	262.8	7.9	2,049.7
1980	2,216.1	167.1	191.9	225.0	.0	274.7	57.5	312.6	8.8	2,285.7
1981	2,470.2	183.9	234.5	261.6	.1	337.2	67.2	355.7	10.2	2,560.4
1982	2,569.2	159.2	264.9	280.6	.0	379.2	66.9	396.3	11.8	2,718.7
1983	2,761.4	212.3	275.9	301.9	–.4	403.2	77.4	426.6	12.8	2,891.7
1984	3,132.7	268.2	318.5	345.5	.2	472.3	79.4	438.5	15.1	3,205.5
1985	3,351.5	282.2	337.2	375.9	–.2	508.4	88.3	468.7	17.8	3,439.6
1986	3,516.5	271.0	363.1	402.0	.0	543.3	105.1	498.0	20.7	3,647.5
1987	3,778.1	309.7	372.2	423.3	.0	560.0	101.1	522.5	20.8	3,877.3
1988	4,108.6	357.2	398.9	462.8	.0	595.5	109.9	556.8	20.8	4,172.8
1989	4,362.1	356.4	456.6	491.2	.0	674.5	130.9	604.9	21.1	4,489.3
1990	4,611.9	369.5	467.3	518.5	.1	704.4	142.9	666.5	21.3	4,791.6
1991	4,719.7	382.5	448.0	543.5	–.1	699.2	153.6	749.1	20.8	4,968.5
1992	4,950.8	401.4	414.3	571.4	–15.8	667.2	159.4	835.7	22.5	5,264.2
1993	5,195.3	464.4	398.9	592.9	4.6	648.1	186.8	888.6	22.1	5,480.1
1994	5,501.6	529.5	394.9	628.3	15.5	663.7	199.6	933.8	22.6	5,753.1
1995	5,813.5	586.6	403.6	660.0	2.7	717.1	214.8	1,000.0	22.6	6,115.1
1990: I	4,523.9	369.3	458.9	511.1	.0	690.6	142.0	649.2	21.3	4,687.8
II	4,623.1	392.8	465.0	516.2	.0	701.1	143.4	656.5	21.5	4,771.5
III	4,633.4	350.4	467.7	522.4	.0	711.6	143.3	669.3	21.3	4,838.4
IV	4,667.2	365.5	477.5	524.3	.2	714.2	142.7	691.0	21.1	4,868.6
1991: I	4,675.6	393.7	460.4	536.8	.2	705.4	149.3	725.6	20.8	4,885.6
II	4,702.8	380.0	450.6	540.9	–.4	702.2	153.1	742.5	20.7	4,950.2
III	4,730.4	376.8	446.6	546.0	.0	697.0	156.4	754.1	20.8	4,989.3
IV	4,770.0	379.6	434.3	550.3	.0	692.3	155.7	774.0	21.1	5,048.9
1992: I	4,888.7	417.3	419.2	565.1	.0	674.1	152.3	816.4	21.9	5,151.9
II	4,941.0	409.3	417.5	570.1	.0	673.0	154.5	831.0	22.5	5,225.1
III	4,911.6	351.3	408.1	574.8	.0	661.2	160.8	842.5	22.8	5,264.6
IV	5,061.7	427.7	412.4	575.7	–63.0	660.4	170.1	853.0	22.9	5,415.3
1993: I	5,096.3	427.4	412.8	578.3	64.0	659.3	180.0	873.6	22.3	5,349.1
II	5,159.4	447.8	403.2	592.8	1.0	652.2	185.4	884.8	22.1	5,459.2
III	5,214.1	469.6	391.4	597.5	1.0	640.9	189.7	894.3	22.0	5,501.6
IV	5,311.3	512.8	388.0	603.1	–47.4	639.9	192.1	901.6	22.1	5,610.5
1994: I	5,304.8	459.7	390.2	614.2	52.1	641.0	193.2	917.1	22.4	5,562.4
II	5,493.2	534.3	395.5	627.5	3.7	659.6	197.5	927.3	22.5	5,739.1
III	5,561.7	553.1	400.1	632.2	3.7	673.3	201.0	938.7	22.6	5,808.2
IV	5,646.9	570.9	393.8	639.3	2.5	680.9	206.7	952.0	22.7	5,902.7
1995: I	5,709.9	560.0	406.9	651.0	4.0	704.6	209.5	979.8	22.6	6,004.5
II	5,755.4	562.3	405.2	656.2	2.9	716.6	212.2	994.2	22.6	6,074.4
III	5,861.4	612.5	400.7	664.0	2.9	719.9	215.8	1,007.3	22.6	6,146.9
IV	5,927.4	611.8	401.9	668.6	.9	727.2	221.7	1,018.7	22.7	6,234.5
1996: I	6,015.3	645.1	399.5	676.0	1.9	726.1	226.6	1,040.1	22.9	6,308.5
II	6,118.7	655.8	402.3	686.2	.0	733.1	229.3	1,052.6	23.0	6,412.4
III	6,203.0	661.2	405.6	694.4	.0	742.9	231.5	1,062.1	23.1	6,501.4

[1] Includes rest of world.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–26.—*National income by type of income, 1959–96*

[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			Total	Farm		Nonfarm	
			Total	Government	Other	Total	Employer contributions for social insurance	Other labor income		Total	Proprietors' income[2]	Total	Proprietors' income[3]
1959	410.4	281.2	259.8	46.0	213.8	21.4	10.9	10.6	50.5	10.9	11.8	39.6	40.2
1960	426.2	296.7	272.8	49.2	223.7	23.8	12.6	11.2	50.5	11.5	12.3	39.1	39.8
1961	441.2	305.6	280.5	52.4	228.0	25.1	13.3	11.8	53.0	12.1	12.9	40.9	41.8
1962	475.3	327.4	299.3	56.3	243.0	28.1	15.1	13.0	55.0	12.1	12.9	42.9	43.9
1963	502.6	345.5	314.8	60.0	254.8	30.7	16.7	14.0	56.3	12.0	12.7	44.3	45.2
1964	540.2	371.0	337.7	64.9	272.9	33.2	17.5	15.7	59.0	10.8	11.5	48.3	49.2
1965	587.8	399.8	363.7	69.9	293.8	36.1	18.3	17.8	63.5	13,0	13.8	50.4	51.9
1966	644.4	443.0	400.3	78.3	321.9	42.7	22.8	19.9	67.6	14.1	14.9	53.5	55.4
1967	680.7	475.5	428.9	86.4	342.5	46.6	24.9	21.7	69.1	12.7	13.7	56.4	58.3
1968	742.4	524.7	471.9	96.6	375.3	52.8	27.6	25.2	73.3	12.8	13.8	60.5	63.0
1969	800.9	578.3	518.3	105.5	412.7	60.0	31.5	28.5	77.1	14.6	15.8	62.5	65.0
1970	836.6	618.1	551.5	117.1	434.3	66.6	34.1	32.5	78.0	14.8	16.1	63.2	66.0
1971	904.0	660.1	584.5	126.7	457.8	75.6	38.9	36.7	83.9	15.5	16.9	68.3	72.0
1972	999.2	726.8	638.7	137.8	500.9	88.1	45.1	43.0	95.2	19.5	21.2	75.8	79.3
1973	1,125.3	813.1	708.6	148.7	560.0	104.4	55.3	49.2	113.3	32.6	34.6	80.7	85.9
1974	1,206.7	892.4	772.2	160.4	611.8	120.3	63.7	56.5	111.3	25.9	28.5	85.4	93.4
1975	1,295.5	951.3	814.7	176.1	638.6	136.6	70.6	65.9	116.5	24.2	27.7	92.3	99.2
1976	1,447.5	1,061.5	899.6	188.7	710.8	162.0	82.2	79.7	127.5	18.7	22.8	108.8	116.3
1977	1,616.3	1,182.9	994.0	202.4	791.6	188.9	94.1	94.7	140.8	17.9	22.3	122.9	131.0
1978	1,839.2	1,338.5	1,121.1	219.8	901.2	217.4	107.3	110.1	162.2	22.9	27.7	139.2	148.7
1979	2,053.3	1,503.3	1,255.7	236.9	1,018.8	247.5	123.2	124.3	177.3	26.6	32.2	150.8	160.9
1980	2,216.1	1,653.9	1,377.6	261.2	1,116.4	276.3	136.4	139.8	167.9	13.8	20.7	154.1	165.2
1981	2,470.2	1,827.8	1,517.6	285.6	1,232.0	310.2	157.1	153.0	178.3	23.7	31.6	154.6	160.7
1982	2,569.2	1,927.6	1,593.9	307.3	1,286.7	333.7	168.3	165.4	169.9	16.4	24.8	153.5	158.2
1983	2,761.4	2,044.2	1,684.8	324.5	1,360.3	359.4	182.2	177.2	181.7	6.0	14.1	175.8	172.2
1984	3,132.7	2,257.0	1,855.3	347.8	1,507.5	401.7	212.8	188.9	237.9	24.8	32.7	213.1	199.7
1985	3,351.5	2,425.7	1,995.7	373.5	1,622.1	430.0	226.9	203.1	257.4	24.9	32.4	232.5	210.5
1986	3,516.5	2,572.4	2,116.5	396.6	1,720.0	455.9	239.9	216.0	267.8	25.2	32.6	242.6	215.9
1987	3,778.1	2,757.7	2,272.7	423.1	1,849.5	485.0	249.7	235.4	292.9	32.3	39.6	260.6	238.2
1988	4,108.6	2,973.9	2,453.6	450.4	2,003.2	520.3	268.6	251.7	322.9	28.2	35.4	294.7	272.0
1989	4,362.1	3,151.6	2,598.1	479.4	2,118.7	553.5	280.4	273.1	345.0	36.8	44.3	308.2	284.8
1990	4,611.9	3,352.8	2,757.5	517.2	2,240.3	595.2	294.6	300.6	361.0	36.3	43.8	324.6	312.7
1991	4,719.7	3,457.9	2,827.6	546.0	2,281.5	630.4	307.7	322.7	362.9	30.2	37.7	332.7	325.0
1992	4,950.8	3,644.9	2,970.6	567.8	2,402.9	674.3	323.0	351.3	409.5	38.0	45.7	371.5	363.1
1993	5,195.3	3,809.5	3,095.3	584.2	2,511.1	714.2	333.3	380.9	420.0	32.0	39.5	388.1	381.0
1994	5,501.6	4,009.8	3,257.3	602.5	2,654.8	752.4	350.2	402.2	450.9	35.0	42.5	415.9	411.5
1995	5,813.5	4,222.7	3,433.2	621.7	2,811.5	789.5	365.5	424.0	478.3	29.0	36.5	449.3	434.6
1990: I	4,523.9	3,285.5	2,704.0	504.3	2,199.6	581.5	290.1	291.4	354.7	36.1	43.5	318.6	302.2
II	4,623.1	3,344.7	2,753.0	514.3	2,238.6	591.7	294.0	297.8	362.7	39.4	46.7	323.3	309.4
III	4,633.4	3,384.9	2,784.5	520.8	2,263.6	600.5	296.4	304.0	365.6	36.0	43.5	329.6	319.7
IV	4,667.2	3,395.9	2,788.8	529.4	2,259.3	607.1	297.9	309.2	360.9	33.9	41.3	327.1	319.6
1991: I	4,675.6	3,405.7	2,789.5	541.5	2,248.0	616.2	303.8	312.4	349.2	27.6	35.1	321.6	313.0
II	4,702.8	3,440.7	2,814.7	544.9	2,269.8	626.0	306.3	319.7	365.1	34.2	41.6	331.0	323.3
III	4,730.4	3,474.2	2,838.8	546.9	2,292.0	635.4	309.1	326.3	365.2	28.0	35.5	337.1	329.9
IV	4,770.0	3,511.0	2,867.1	550.8	2,316.3	643.8	311.4	332.4	372.1	31.0	38.5	341.1	333.7
1992: I	4,888.7	3,577.1	2,916.5	561.4	2,355.1	660.7	319.9	340.8	396.5	36.7	44.2	359.8	350.8
II	4,941.0	3,626.5	2,956.2	567.2	2,389.0	670.3	322.7	347.6	406.9	37.9	45.4	368.9	360.7
III	4,911.6	3,669.2	2,988.2	569.8	2,418.3	681.0	325.1	355.9	412.1	39.9	48.3	372.3	364.4
IV	5,061.7	3,707.0	3,021.7	572.5	2,449.2	685.3	324.2	361.1	422.4	37.3	44.8	385.1	376.3
1993: I	5,096.3	3,744.2	3,046.0	580.9	2,465.1	698.2	325.9	372.2	413.5	31.5	39.0	382.0	375.5
II	5,159.4	3,787.9	3,075.2	581.4	2,493.9	712.6	333.5	379.1	417.6	35.8	43.3	381.8	375.7
III	5,214.1	3,834.9	3,115.0	586.3	2,528.7	719.9	335.6	384.3	414.2	26.1	33.8	388.1	380.0
IV	5,311.3	3,871.1	3,145.0	588.3	2,556.6	726.2	338.1	388.0	434.9	34.4	41.9	400.5	392.7
1994: I	5,304.8	3,932.6	3,194.1	596.5	2,597.6	738.5	342.9	395.6	421.1	40.8	48.2	380.3	399.3
II	5,493.2	3,988.0	3,237.5	601.7	2,635.8	750.5	350.0	400.5	454.4	35.1	42.5	419,3	409.1
III	5,561.7	4,027.5	3,270.3	603.7	2,666.6	757.2	352.3	404.9	458.7	31.9	39.4	426.8	415.1
IV	5,646.9	4,091.0	3,327.4	608.3	2,719.1	763.6	355.8	407.8	469.4	32.3	39.8	437.1	422.5
1995: I	5,709.9	4,150.5	3,371.9	616.3	2,755.6	778.6	360.8	417.7	472.0	28.5	36.1	443.5	429.6
II	5,755.4	4,191.6	3,406.0	619.6	2,786.4	785.6	363.6	422.0	474.7	27.6	35.1	447.1	433.1
III	5,861.4	4,247.7	3,454.0	624.1	2,829.9	793.7	367.8	425.9	479.6	28.1	35.7	451.5	436.3
IV	5,927.4	4,301.1	3,501.1	626.9	2,874.2	800.1	369.8	430.2	486.7	31.8	39.3	454.9	439.6
1996: I	6,015.3	4,344.3	3,540.2	634.0	2,906.1	804.1	375.0	429.1	499.5	38.4	45.8	461.1	446.4
II	6,118.7	4,420.9	3,606.5	638.9	2,967.5	814.4	380.4	434.0	515.2	45.8	53.2	469.4	455.2
III	6,203.0	4,482.9	3,659.6	644.6	3,015.1	823.3	384.6	438.6	526.3	51.8	59.4	474.6	459.4

[1] National income is the total net income earned in production. It differs from gross domestic 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–24.

See next page for continuation of table.

TABLE B–26.—*National income by type of income, 1959–96*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment: Total	Rental income of persons with capital consumption adjustment: Rental income of persons	Rental income of persons with capital consumption adjustment: Capital consumption adjustment	Corporate profits with inventory valuation and capital consumption adjustments: Total	Profits with inventory valuation adjustment and without capital consumption adjustment: Total	Profits: Profits before tax	Profits: Profits tax liability	Profits after tax: Total	Profits after tax: Dividends	Profits after tax: Undistributed profits	Inventory valuation adjustment	Capital consumption adjustment	Net interest
1959	18.2	19.7	−1.5	50.2	53.1	53.4	23.6	29.7	12.7	17.0	−0.3	−2.9	10.2
1960	19.1	20.6	−1.5	48.8	51.0	51.1	22.7	28.4	13.4	15.0	−.2	−2.2	11.2
1961	19.8	21.2	−1.4	49.8	51.3	51.0	22.8	28.2	14.0	14.3	.3	−1.5	13.1
1962	20.6	22.0	−1.4	57.7	56.4	56.4	24.0	32.4	15.0	17.4	.0	1.3	14.6
1963	21.3	22.6	−1.3	63.5	61.2	61.2	26.2	34.9	16.1	18.8	.1	2.3	16.1
1964	21.7	23.0	−1.3	70.4	67.5	68.0	28.0	40.0	18.0	22.0	−.5	2.8	18.2
1965	22.5	24.0	−1.5	80.9	77.6	78.8	30.9	47.9	20.2	27.8	−1.2	3.4	21.1
1966	23.2	24.9	−1.7	86.3	83.0	85.1	33.7	51.4	20.9	30.5	−2.1	3.3	24.3
1967	24.4	26.3	−1.9	83.6	80.3	81.8	32.7	49.2	22.1	27.1	−1.6	3.3	28.1
1968	23.7	26.0	−2.3	90.3	86.9	90.6	39.4	51.2	24.6	26.6	−3.7	3.4	30.4
1969	24.4	27.3	−2.8	87.5	83.2	89.0	39.7	49.4	25.2	24.1	−5.9	4.4	33.6
1970	24.7	27.8	−3.1	75.7	71.8	78.4	34.4	44.0	23.7	20.3	−6.6	3.9	40.0
1971	25.8	29.5	−3.7	88.8	85.5	90.1	37.7	52.4	23.7	28.6	−4.6	3.3	45.4
1972	25.7	30.3	−4.6	102.2	97.9	104.5	41.9	62.6	25.8	36.9	−6.6	4.3	49.3
1973	27.4	32.8	−5.4	115.1	110.9	130.9	49.3	81.6	28.1	53.5	−20.0	4.1	56.5
1974	27.5	34.4	−6.9	103.7	103.4	142.8	51.8	91.0	30.4	60.6	−39.5	.3	71.8
1975	26.6	34.9	−8.4	121.1	129.4	140.4	50.9	89.5	30.1	59.4	−11.0	−8.3	80.0
1976	26.3	35.7	−9.5	147.0	158.9	173.8	64.2	109.6	35.9	73.7	−14.9	−11.8	85.1
1977	24.7	36.4	−11.7	167.3	186.8	203.5	73.0	130.4	40.8	89.6	−16.6	−19.6	100.7
1978	26.5	41.2	−14.7	191.6	213.1	238.1	83.5	154.6	46.0	108.6	−25.0	−21.5	120.5
1979	28.4	46.7	−18.3	194.0	220.2	261.8	88.0	173.8	52.5	121.3	−41.6	−26.2	150.3
1980	35.3	57.3	−22.0	167.1	198.3	241.4	84.8	156.6	59.3	97.3	−43.0	−31.2	191.9
1981	45.7	70.7	−25.1	183.9	204.1	229.8	81.1	148.6	69.5	79.1	−25.7	−20.1	234.5
1982	47.6	74.7	−27.1	159.2	166.8	176.7	63.1	113.6	69.8	43.8	−9.9	−7.6	264.9
1983	47.2	74.8	−27.6	212.3	203.7	212.8	77.2	135.5	80.8	54.8	−9.1	8.6	275.9
1984	51.0	79.2	−28.2	268.2	238.5	244.2	94.0	150.1	83.2	66.9	−5.6	29.7	318.5
1985	49.1	79.0	−29.9	282.2	230.5	229.9	96.5	133.4	92.8	40.6	.5	51.8	337.2
1986	42.3	72.6	−30.4	271.0	234.0	222.6	106.5	116.1	110.2	5.8	11.4	37.0	363.1
1987	45.5	77.6	−32.1	309.7	272.9	293.6	127.1	166.5	107.0	59.5	−20.7	36.8	372.2
1988	55.7	89.7	−33.9	357.2	325.0	354.3	137.0	217.3	116.8	100.5	−29.3	32.2	398.9
1989	52.4	91.0	−38.5	356.4	330.6	348.1	141.3	206.8	138.9	67.9	−17.5	25.8	456.6
1990	61.4	98.6	−37.2	369.5	358.2	371.7	140.5	231.2	151.9	79.4	−13.5	11.3	467.3
1991	68.4	107.0	−38.6	382.5	378.2	374.2	133.4	240.8	163.1	77.7	4.0	4.3	448.0
1992	80.6	126.9	−46.2	401.4	398.9	406.4	143.0	263.4	169.5	93.9	−7.5	2.5	414.3
1993	102.5	144.3	−41.8	464.4	457.7	464.3	163.8	300.5	197.3	103.2	−6.6	6.7	398.9
1994	116.6	159.4	−42.8	529.5	517.9	531.2	195.3	335.9	211.0	124.8	−13.3	11.6	394.9
1995	122.2	158.6	−36.4	586.6	570.8	598.9	218.7	380.2	227.4	152.8	−28.1	15.9	403.6
1990: I	55.5	92.3	−36.8	369.3	353.4	354.7	133.0	221.7	150.7	71.1	−1.3	15.9	458.9
II	57.9	94.9	−37.1	392.8	381.1	373.4	141.2	232.2	152.4	79.8	7.7	11.7	465.0
III	64.8	102.3	−37.5	350.4	341.9	381.9	148.0	233.9	152.4	81.6	−40.0	8.5	467.7
IV	67.3	104.9	−37.5	365.5	356.5	376.7	139.7	237.1	152.0	85.0	−20.3	9.0	477.5
1991: I	66.6	104.1	−37.5	393.7	388.3	370.7	130.1	240.7	158.6	82.0	17.6	5.4	460.4
II	66.3	103.9	−37.5	380.0	375.5	368.7	132.3	236.4	162.6	73.8	6.8	4.6	450.6
III	67.6	105.3	−37.7	376.8	373.8	374.6	136.0	238.6	165.9	72.7	−.8	3.0	446.6
IV	73.0	114.6	−41.6	379.6	375.2	382.8	135.2	247.6	165.3	82.2	−7.6	4.5	434.3
1992: I	78.6	114.8	−36.2	417.3	411.4	411.1	143.9	267.2	162.1	105.2	.3	5.9	419.2
II	80.9	117.5	−36.6	409.3	404.3	426.2	150.9	275.2	164.6	110.6	−21.9	5.0	417.5
III	70.8	144.8	−73.9	351.3	359.4	368.0	127.6	240.4	170.9	69.5	−8.6	−8.1	408.1
IV	92.3	130.4	−38.1	427.7	420.5	420.3	149.7	270.6	180.4	90.3	.2	7.2	412.4
1993: I	98.4	142.6	−44.2	427.4	422.4	437.0	151.5	285.6	190.2	95.3	−14.6	5.0	412.8
II	102.9	143.4	−40.5	447.8	442.0	457.6	162.6	295.0	195.8	99.2	−15.6	5.8	403.2
III	104.1	146.5	−42.5	469.6	465.9	458.0	159.3	298.6	200.2	98.4	7.9	3.8	391.4
IV	104.5	144.6	−40.1	512.8	500.5	504.5	181.7	322.8	202.9	119.9	−4.0	12.3	388.0
1994: I	101.1	162.2	−61.0	459.7	471.6	475.5	171.4	304.1	204.4	99.7	−3.9	−11.8	390.2
II	121.0	159.0	−37.9	534.3	516.2	526.0	192.8	333.3	208.8	124.5	−9.8	18.1	395.5
III	122.2	159.2	−37.0	553.1	534.3	550.8	203.4	347.4	212.5	134.9	−16.5	18.8	400.1
IV	121.9	157.2	−35.3	570.9	549.6	572.4	213.5	358.8	218.5	140.3	−22.8	21.3	393.8
1995: I	120.6	156.3	−35.7	560.0	542.6	594.5	217.3	377.2	221.7	155.5	−51.9	17.4	406.9
II	121.6	157.2	−35.6	562.3	547.3	589.6	214.2	375.3	224.6	150.8	−42.3	15.0	405.2
III	120.9	156.0	−35.1	612.5	597.9	607.2	224.5	382.8	228.5	154.3	−9.3	14.6	400.7
IV	125.8	165.0	−39.1	611.8	595.3	604.2	218.7	385.5	234.7	150.8	−8.8	16.5	401.9
1996: I	126.9	160.0	−33.1	645.1	624.8	642.2	233.4	408.8	239.9	168.9	−17.4	20.4	399.5
II	124.5	158.6	−34.2	655.8	633.5	644.6	236.4	408.1	243.1	165.1	−11.0	22.3	402.3
III	127.0	162.5	−35.5	661.2	637.6	635.6	233.4	402.2	245.2	156.9	2.0	23.6	405.6

[2] Without capital consumption adjustment.
[3] Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–27.—*Sources of personal income, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Wage and salary disbursements[1]: Total	Private industries: Total	Commodity-producing industries: Total	Commodity-producing industries: Manufacturing	Distributive industries	Service industries	Government	Other labor income[1]	Proprietors' income with inventory valuation and capital consumption adjustments: Farm	Proprietors' income: Nonfarm
1959	393.5	259.8	213.8	109.9	86.9	65.1	38.8	46.0	10.6	10.9	39.6
1960	411.7	272.8	223.7	113.4	89.8	68.6	41.7	49.2	11.2	11.5	39.1
1961	429.1	280.5	228.0	114.0	89.9	69.6	44.4	52.4	11.8	12.1	40.9
1962	456.1	299.3	243.0	122.2	96.8	73.3	47.6	56.3	13.0	12.1	42.9
1963	479.1	314.8	254.8	127.4	100.7	76.8	50.7	60.0	14.0	12.0	44.3
1964	513.5	337.7	272.9	136.0	107.3	82.0	54.9	64.9	15.7	10.8	48.3
1965	555.8	363.7	293.8	146.6	115.7	87.9	59.4	69.9	17.8	13.0	50.4
1966	604.7	400.3	321.9	161.6	128.2	95.1	65.3	78.3	19.9	14.1	53.5
1967	649.7	428.9	342.5	169.0	134.3	101.6	72.0	86.4	21.7	12.7	56.4
1968	713.5	471.9	375.3	184.1	146.0	110.8	80.4	96.6	25.2	12.8	60.5
1969	778.2	518.3	412.7	200.4	157.7	121.7	90.6	105.5	28.5	14.6	62.5
1970	836.1	551.5	434.3	203.7	158.4	131.2	99.4	117.1	32.5	14.8	63.2
1971	898.9	583.9	457.4	209.1	160.5	140.4	107.9	126.5	36.7	15.5	68.3
1972	987.3	638.7	501.2	228.2	175.6	153.3	119.7	137.4	43.0	19.5	75.8
1973	1,105.6	708.7	560.0	255.9	196.6	170.3	133.9	148.7	49.2	32.6	80.7
1974	1,213.3	772.6	611.8	276.5	211.8	186.8	148.6	160.9	56.5	25.9	85.4
1975	1,315.6	814.6	638.6	277.1	211.6	198.1	163.4	176.0	65.9	24.2	92.3
1976	1,455.4	899.5	710.8	309.7	238.0	219.5	181.6	188.6	79.7	18.7	108.8
1977	1,611.4	993.9	791.6	346.1	266.7	242.7	202.8	202.3	94.7	17.9	122.9
1978	1,820.2	1,120.8	901.2	392.6	300.1	274.9	233.7	219.6	110.1	22.9	139.2
1979	2,049.7	1,255.9	1,018.8	442.5	335.3	308.5	267.8	237.1	124.3	26.6	150.8
1980	2,285.7	1,377.7	1,116.4	472.5	356.4	336.7	307.2	261.3	139.8	13.8	154.1
1981	2,560.4	1,517.6	1,232.0	514.9	388.0	368.5	348.6	285.6	153.0	23.7	154.6
1982	2,718.7	1,593.9	1,286.7	515.1	386.2	385.9	385.7	307.3	165.4	16.4	153.5
1983	2,891.7	1,685.3	1,360.3	528.2	401.2	405.7	426.4	325.0	177.2	6.0	175.8
1984	3,205.5	1,855.1	1,507.5	586.6	445.9	445.2	475.6	347.6	188.9	24.8	213.1
1985	3,439.6	1,995.9	1,622.1	620.7	468.9	476.5	525.0	373.8	203.1	24.9	232.5
1986	3,647.5	2,116.5	1,720.0	637.3	481.2	501.6	581.0	396.6	216.0	25.2	242.6
1987	3,877.3	2,272.7	1,849.5	660.4	497.2	535.4	653.7	423.1	235.4	32.3	260.6
1988	4,172.8	2,453.6	2,003.2	707.0	530.1	575.3	720.9	450.4	251.7	28.2	294.7
1989	4,489.3	2,598.1	2,118.7	732.4	548.1	606.8	779.5	479.4	273.1	36.8	308.2
1990	4,791.6	2,757.5	2,240.3	754.2	561.2	634.1	852.1	517.2	300.6	36.3	324.6
1991	4,968.5	2,827.6	2,281.5	746.3	562.5	646.6	888.6	546.1	322.7	30.2	332.7
1992	5,264.2	2,986.4	2,418.6	765.7	583.5	680.3	972.6	567.8	351.3	38.0	371.5
1993	5,480.1	3,090.7	2,506.4	781.3	593.1	698.4	1,026.7	584.2	380.9	32.0	388.1
1994	5,753.1	3,241.8	2,639.3	824.9	621.1	739.2	1,075.2	602.5	402.2	35.0	415.9
1995	6,115.1	3,430.6	2,808.8	863.5	648.4	783.7	1,161.6	621.7	424.0	29.0	449.3
1990: I	4,687.8	2,704.0	2,199.6	748.7	554.8	624.4	826.5	504.3	291.4	36.1	318.6
II	4,771.5	2,753.0	2,238.6	757.7	563.9	633.9	847.1	514.3	297.8	39.4	323.3
III	4,838.4	2,784.4	2,263.6	758.5	564.9	638.9	866.2	520.8	304.0	36.0	329.6
IV	4,868.6	2,788.6	2,259.3	751.8	561.2	639.1	868.4	529.3	309.2	33.9	327.1
1991: I	4,885.6	2,789.3	2,248.0	742.5	555.5	636.7	868.8	541.3	312.4	27.6	321.6
II	4,950.2	2,815.1	2,269.8	742.8	558.4	644.6	882.5	545.3	319.7	34.2	331.0
III	4,989.3	2,838.8	2,292.0	749.4	566.3	649.7	892.8	546.9	326.3	28.0	337.1
IV	5,048.9	2,867.1	2,316.3	750.6	569.7	655.3	910.5	550.8	332.4	31.0	341.1
1992: I	5,151.9	2,916.5	2,355.1	752.7	571.5	666.2	936.2	561.4	340.8	36.7	359.8
II	5,225.1	2,956.2	2,389.0	761.9	579.6	673.6	953.4	567.2	347.6	37.9	368.9
III	5,264.6	2,988.2	2,418.3	764.6	583.0	681.5	972.2	569.8	355.9	39.9	372.3
IV	5,415.3	3,084.7	2,512.2	783.6	599.7	699.9	1,028.6	572.5	361.1	37.3	385.1
1993: I	5,349.1	2,982.0	2,401.1	757.1	573.8	674.7	969.3	580.9	372.2	31.5	382.0
II	5,459.4	3,074.3	2,492.9	778.5	591.5	696.2	1,018.2	581.4	379.1	35.8	381.8
III	5,501.6	3,114.0	2,527.7	785.5	596.0	704.0	1,038.2	586.3	384.3	26.1	388.1
IV	5,610.5	3,192.4	2,604.0	804.2	611.0	718.7	1,081.2	588.3	388.0	34.4	400.5
1994: I	5,562.4	3,142.0	2,545.6	800.9	603.4	716.2	1,028.5	596.5	395.6	40.8	380.3
II	5,739.1	3,233.8	2,632.1	820.4	618.1	735.7	1,075.9	601.7	400.5	35.1	419.3
III	5,808.2	3,266.6	2,662.9	832.5	626.5	744.7	1,085.7	603.7	404.9	31.9	426.8
IV	5,902.7	3,324.9	2,716.6	845.9	636.4	760.0	1,110.7	608.3	407.8	32.3	437.1
1995: I	6,004.5	3,367.9	2,751.5	854.8	643.6	767.6	1,129.2	616.3	417.7	28.5	443.5
II	6,074.4	3,403.1	2,783.5	858.7	645.3	777.3	1,147.5	619.6	422.0	27.6	447.1
III	6,146.9	3,451.2	2,827.1	866.7	650.1	789.3	1,171.1	624.1	425.9	28.1	451.5
IV	6,234.5	3,500.2	2,873.3	873.9	654.7	800.7	1,198.6	626.9	430.2	31.8	454.9
1996: I	6,308.5	3,538.2	2,904.2	878.7	654.8	810.5	1,215.1	634.0	429.1	38.4	461.1
II	6,412.4	3,606.5	2,967.5	900.3	671.8	822.3	1,244.9	638.9	434.0	45.8	469.4
III	6,501.4	3,659.6	3,015.1	911.0	678.5	832.4	1,271.6	644.6	438.6	51.8	474.6

[1] The total of wage and salary disbursements and other labor income differs from compensation of employees in Table B–26 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–27.—*Sources of personal income, 1959–96*—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 to persons							Less: Personal contributions for social insurance
				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	
1959	18.2	12.7	22.7	27.0	10.2	2.8	4.6	2.8	0.9	5.7	7.9
1960	19.1	13.4	25.0	28.8	11.1	3.0	4.6	3.1	1.0	6.1	9.3
1961	19.8	14.0	26.9	32.8	12.6	4.3	5.0	3.4	1.1	6.5	9.7
1962	20.6	15.0	29.3	34.1	14.3	3.1	4.7	3.7	1.3	7.0	10.3
1963	21.3	16.1	32.4	36.2	15.2	3.0	4.8	4.2	1.4	7.6	11.8
1964	21.7	18.0	36.1	37.9	16.0	2.7	4.7	4.7	1.5	8.2	12.6
1965	22.5	20.2	40.3	41.1	18.1	2.3	4.9	5.2	1.7	9.0	13.3
1966	23.2	20.9	44.9	45.7	20.8	1.9	4.9	6.1	1.9	10.3	17.8
1967	24.4	22.1	49.5	54.6	25.5	2.2	5.6	6.9	2.3	12.2	20.6
1968	23.7	24.5	54.6	63.2	30.2	2.1	5.9	7.6	2.8	14.5	22.9
1969	24.4	25.1	60.8	70.3	32.9	2.2	6.7	8.7	3.5	16.2	26.2
1970	24.7	23.5	69.2	84.6	38.5	4.0	7.7	10.2	4.8	19.4	27.9
1971	25.8	23.5	75.7	100.1	44.5	5.8	8.8	11.8	6.2	23.0	30.7
1972	25.7	25.5	81.8	111.8	49.6	5.7	9.7	13.8	6.9	26.1	34.5
1973	27.4	27.7	94.1	127.9	60.4	4.4	10.4	16.0	7.2	29.5	42.6
1974	27.5	29.6	112.4	151.3	70.1	6.8	11.8	19.0	7.9	35.7	47.9
1975	26.6	29.2	123.0	190.2	81.4	17.6	14.5	22.7	9.2	44.7	50.4
1976	26.3	35.0	134.6	208.3	92.9	15.8	14.4	26.1	10.1	49.1	55.5
1977	24.7	39.5	155.7	223.3	104.9	12.7	13.8	29.0	10.6	52.4	61.2
1978	26.5	44.3	184.5	241.6	116.2	9.7	13.9	32.7	10.7	58.4	69.8
1979	28.4	50.5	223.6	270.7	131.8	9.8	14.4	36.9	11.0	66.8	81.0
1980	35.3	57.5	274.7	321.5	154.2	16.1	15.0	43.0	12.4	80.8	88.6
1981	45.7	67.2	337.2	365.9	182.0	15.9	16.1	49.4	13.0	89.7	104.5
1982	47.6	66.9	379.2	408.1	204.5	25.2	16.4	54.6	13.3	94.1	112.3
1983	47.2	77.4	403.2	439.4	221.7	26.3	16.6	58.0	14.2	102.6	119.7
1984	51.0	79.4	472.3	453.6	235.7	15.9	16.4	60.9	14.8	109.9	132.7
1985	49.1	88.3	508.4	486.5	253.4	15.7	16.7	66.6	15.4	118.7	149.0
1986	42.3	105.1	543.3	518.6	269.2	16.3	16.7	70.7	16.4	129.3	162.1
1987	45.5	101.1	560.0	543.3	282.9	14.5	16.6	76.0	16.7	136.6	173.7
1988	55.7	109.9	595.5	577.6	300.4	13.3	16.9	82.2	17.3	147.6	194.2
1989	52.4	130.9	674.5	626.0	325.1	14.4	17.3	87.6	18.0	163.6	210.8
1990	61.4	142.9	704.4	687.8	352.0	18.1	17.8	94.5	19.8	185.6	223.9
1991	68.4	153.6	699.2	769.9	382.3	26.8	18.3	102.2	22.0	218.2	235.8
1992	80.6	159.4	667.2	858.2	414.0	38.9	19.3	109.0	23.3	253.8	248.4
1993	102.5	186.8	648.1	910.7	444.4	34.0	20.1	116.4	23.9	271.8	259.6
1994	116.6	199.6	663.7	956.3	472.9	23.7	20.2	125.8	24.2	289.5	278.1
1995	122.2	214.8	717.1	1,022.6	507.4	21.6	20.9	135.5	23.3	313.9	294.5
1990: I	55.5	142.0	690.6	670.5	348.1	16.4	18.0	93.0	19.1	175.9	221.0
II	57.9	143.4	701.1	678.1	348.6	17.1	17.8	93.7	19.5	181.4	222.3
III	64.8	143.3	711.6	690.6	352.6	18.2	17.7	94.9	20.0	187.2	225.9
IV	67.3	142.7	714.2	712.0	358.7	20.9	17.8	96.4	20.5	197.6	226.4
1991: I	66.6	149.3	705.4	746.4	374.6	24.5	18.1	102.2	21.1	205.9	233.0
II	66.3	153.1	702.2	763.2	380.0	27.7	18.7	101.6	21.8	213.5	234.6
III	67.6	156.4	697.0	774.9	384.7	26.0	18.3	102.3	22.2	221.4	236.9
IV	73.0	155.7	692.3	795.1	389.9	29.2	18.2	102.9	22.7	232.2	238.9
1992: I	78.6	152.3	674.1	838.3	405.4	39.2	20.4	107.8	23.0	242.5	245.2
II	80.9	154.5	673.0	853.5	412.2	40.4	18.9	108.6	23.1	250.2	247.4
III	70.8	160.8	661.2	865.3	416.9	38.7	18.8	109.0	23.4	258.5	249.7
IV	92.3	170.1	660.4	875.8	421.5	37.1	19.1	110.5	23.5	264.2	251.4
1993: I	98.4	180.0	659.3	895.9	436.8	34.4	20.1	114.2	23.7	266.7	252.3
II	102.9	185.4	652.2	906.9	441.9	34.3	20.3	115.8	24.0	270.6	259.3
III	104.1	189.7	640.9	916.4	446.7	34.7	20.2	117.2	24.0	273.6	261.9
IV	104.5	192.1	639.9	923.6	452.1	32.6	20.0	118.5	24.1	276.3	265.0
1994: I	101.1	193.2	641.0	939.5	463.6	27.9	20.0	120.2	24.2	283.6	271.4
II	121.0	197.5	659.6	949.8	470.4	23.9	20.0	124.6	24.2	286.7	277.6
III	122.2	201.0	673.3	961.4	475.6	21.8	20.4	128.1	24.2	291.3	279.9
IV	121.9	206.7	680.9	974.7	482.1	21.2	20.3	130.4	24.1	296.5	283.5
1995: I	120.6	209.5	704.6	1,002.4	497.6	21.2	20.8	132.9	23.8	306.1	290.2
II	121.6	212.2	716.6	1,016.8	505.1	21.0	20.7	135.5	23.5	311.1	292.7
III	120.9	215.8	719.9	1,029.9	510.7	22.0	21.1	136.4	23.1	316.6	296.2
IV	125.8	221.7	727.2	1,041.4	516.1	22.2	21.0	137.3	22.8	322.0	298.8
1996: I	126.9	226.6	726.1	1,063.0	529.9	22.2	21.7	138.4	22.5	328.3	301.0
II	124.5	229.3	733.1	1,075.6	536.3	22.0	22.0	142.1	22.0	331.2	305.8
III	127.0	231.5	742.9	1,085.1	541.7	22.0	21.9	143.5	21.6	334.4	309.7

Note.—The industry classification of wage and salary disbursements and proprietors' income is on an establishment basis and is based on the 1987 Standard Industrial Classification (SIC) beginning 1987 and on the 1972 SIC for earlier years shown.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–28.—*Disposition of personal income, 1959–96*

[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 [1]		
				Total	Personal consumption expenditures	Interest paid by persons	Personal transfer payments to rest of the world (net)		Personal outlays		Personal saving
									Total	Personal consumption expenditures	
1959	393.5	44.5	349.0	324.7	318.1	6.1	0.4	24.3	93.0	91.1	7.0
1960	411.7	48.7	362.9	339.6	332.2	7.0	.5	23.3	93.6	91.5	6.4
1961	429.1	50.3	378.8	350.5	342.6	7.3	.5	28.3	92.5	90.5	7.5
1962	456.1	54.8	401.3	371.8	363.4	7.8	.5	29.5	92.6	90.6	7.4
1963	479.1	58.0	421.1	392.5	383.0	8.9	.6	28.6	93.2	90.9	6.8
1964	513.5	56.0	457.6	422.1	411.4	10.0	.7	35.5	92.3	89.9	7.7
1965	555.8	61.9	493.9	456.2	444.3	11.1	.8	37.8	92.4	90.0	7.6
1966	604.7	71.0	533.7	494.7	481.9	12.0	.8	39.1	92.7	90.3	7.3
1967	649.7	77.9	571.9	523.0	509.5	12.5	1.0	48.9	91.5	89.1	8.5
1968	713.5	92.1	621.4	574.6	559.8	13.8	1.0	46.8	92.5	90.1	7.5
1969	778.2	109.9	668.4	621.4	604.7	15.7	1.1	46.9	93.0	90.5	7.0
1970	836.1	109.0	727.1	666.1	648.1	16.8	1.2	61.0	91.5	89.1	8.4
1971	898.9	108.7	790.2	721.6	702.5	17.8	1.3	68.6	91.3	88.9	8.7
1972	987.3	132.0	855.3	791.6	770.7	19.6	1.3	63.6	92.6	90.1	7.4
1973	1,105.6	140.6	965.0	875.4	851.6	22.4	1.4	89.6	90.7	88.2	9.3
1974	1,213.3	159.1	1,054.2	956.6	931.2	24.2	1.2	97.6	90.7	88.3	9.3
1975	1,315.6	156.4	1,159.2	1,054.8	1,029.1	24.5	1.2	104.4	91.0	88.8	9.0
1976	1,455.4	182.3	1,273.0	1,176.7	1,148.8	26.7	1.2	96.4	92.4	90.2	7.6
1977	1,611.4	210.0	1,401.4	1,308.9	1,277.1	30.7	1.2	92.5	93.4	91.1	6.6
1978	1,820.2	240.1	1,580.1	1,467.6	1,428.8	37.5	1.3	112.6	92.9	90.4	7.1
1979	2,049.7	280.2	1,769.5	1,639.5	1,593.5	44.5	1.4	130.1	92.6	90.1	7.4
1980	2,285.7	312.4	1,973.3	1,811.5	1,760.4	49.4	1.6	161.8	91.8	89.2	8.2
1981	2,560.4	360.2	2,200.2	2,001.1	1,941.3	54.6	5.2	199.1	90.9	88.2	9.1
1982	2,718.7	371.4	2,347.3	2,141.8	2,076.8	58.8	6.2	205.5	91.2	88.5	8.8
1983	2,891.7	369.3	2,522.4	2,355.5	2,283.4	65.5	6.5	167.0	93.4	90.5	6.6
1984	3,205.5	395.5	2,810.0	2,574.4	2,492.3	74.7	7.4	235.7	91.6	88.7	8.4
1985	3,439.6	437.7	3,002.0	2,795.8	2,704.8	83.2	7.8	206.2	93.1	90.1	6.9
1986	3,647.5	459.9	3,187.6	2,991.1	2,892.7	90.3	8.1	196.5	93.8	90.8	6.2
1987	3,877.3	514.2	3,363.1	3,194.7	3,094.5	91.5	8.7	168.4	95.0	92.0	5.0
1988	4,172.8	532.0	3,640.8	3,451.7	3,349.7	92.9	9.1	189.1	94.8	92.0	5.2
1989	4,489.3	594.9	3,894.5	3,706.7	3,594.8	102.4	9.6	187.8	95.2	92.3	4.8
1990	4,791.6	624.8	4,166.8	3,958.1	3,839.3	108.9	9.9	208.7	95.0	92.1	5.0
1991	4,968.5	624.8	4,343.7	4,097.4	3,975.1	111.9	10.4	246.4	94.3	91.5	5.7
1992	5,264.2	650.5	4,613.7	4,341.0	4,219.8	111.7	9.6	272.6	94.1	91.5	5.9
1993	5,480.1	689.9	4,790.2	4,575.8	4,454.1	108.9	12.8	214.4	95.5	93.0	4.5
1994	5,753.1	731.4	5,021.7	4,832.3	4,700.9	117.2	14.2	189.4	96.2	93.6	3.8
1995	6,115.1	794.3	5,320.8	5,071.5	4,924.9	131.7	14.9	249.3	95.3	92.6	4.7
1990: I	4,687.8	613.0	4,074.8	3,875.8	3,759.2	106.7	9.9	199.0	95.1	92.3	4.9
II	4,771.5	628.2	4,143.3	3,929.4	3,811.8	108.0	9.5	213.9	94.8	92.0	5.2
III	4,838.4	630.8	4,207.6	3,999.3	3,879.2	109.8	10.2	208.3	95.0	92.2	5.0
IV	4,868.6	627.1	4,241.5	4,027.9	3,907.0	110.9	10.1	213.5	95.0	92.1	5.0
1991: I	4,885.6	622.3	4,263.3	4,032.5	3,910.7	111.4	10.4	230.8	94.6	91.7	5.4
II	4,950.2	620.5	4,329.6	4,083.3	3,961.0	112.0	10.3	246.3	94.3	91.5	5.7
III	4,989.3	623.7	4,365.6	4,123.9	4,001.6	112.0	10.2	241.7	94.5	91.7	5.5
IV	5,048.9	632.5	4,416.4	4,149.8	4,027.1	112.1	10.6	266.6	94.0	91.2	6.0
1992: I	5,151.9	636.7	4,515.2	4,250.0	4,127.6	112.9	9.4	265.2	94.1	91.4	5.9
II	5,225.1	640.0	4,585.1	4,304.8	4,183.0	112.1	9.7	280.3	93.9	91.2	6.1
III	5,264.6	650.6	4,613.9	4,359.5	4,238.9	111.4	9.2	254.5	94.5	91.9	5.5
IV	5,415.3	674.8	4,740.5	4,450.0	4,329.6	110.4	9.9	290.5	93.9	91.3	6.1
1993: I	5,349.1	662.4	4,686.7	4,489.2	4,367.6	109.0	12.6	197.4	95.8	93.2	4.2
II	5,459.2	686.9	4,772.3	4,545.5	4,424.8	108.0	12.7	226.8	95.3	92.7	4.8
III	5,501.6	696.4	4,805.2	4,602.2	4,481.0	108.5	12.8	202.9	95.8	93.3	4.2
IV	5,610.5	713.8	4,896.7	4,666.3	4,543.1	110.0	13.1	230.5	95.3	92.8	4.7
1994: I	5,562.4	705.5	4,856.8	4,728.0	4,600.9	113.0	14.1	128.8	97.4	94.7	2.7
II	5,739.1	740.8	4,998.3	4,796.1	4,666.2	115.8	14.1	202.2	96.0	93.4	4.0
III	5,808.2	731.3	5,076.9	4,870.8	4,738.3	118.4	14.1	206.2	95.9	93.3	4.1
IV	5,902.7	748.1	5,154.6	4,934.2	4,798.2	121.5	14.5	220.4	95.7	93.1	4.3
1995: I	6,004.5	770.0	5,234.5	4,980.3	4,840.6	125.3	14.4	254.2	95.1	92.5	4.9
II	6,074.4	801.5	5,272.9	5,054.4	4,910.5	129.8	14.1	218.5	95.9	93.1	4.1
III	6,146.9	798.4	5,348.5	5,106.6	4,957.9	134.0	14.7	241.9	95.5	92.7	4.5
IV	6,234.5	807.2	5,427.3	5,144.7	4,990.5	137.8	16.5	282.6	94.8	92.0	5.2
1996: I	6,308.5	824.9	5,483.5	5,218.1	5,060.5	141.9	15.7	265.4	95.2	92.3	4.8
II	6,412.4	870.6	5,541.8	5,300.7	5,139.4	145.1	16.2	241.1	95.7	92.7	4.3
III	6,501.4	872.5	5,628.9	5,329.8	5,165.4	148.2	16.2	299.1	94.7	91.8	5.3

[1] Percents based on data in millions of dollars.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–29.—*Total and per capita disposable personal income and personal consumption expenditures in current and real dollars, 1959–96*

[Quarterly data at seasonally adjusted annual rates, except as noted]

Year or quarter	Disposable personal income				Personal consumption expenditures				Gross domestic product per capita (dollars)		Population (thousands)[1]
	Total (billions of dollars)		Per capita (dollars)		Total (billions of dollars)		Per capita (dollars)				
	Current dollars	Chained (1992) dollars	Current dollars	Chained (1992) dollars	Current dollars	Chained (1992) dollars	Current dollars	Chained (1992) dollars	Current dollars	Chained (1992) dollars	
1959	349.0	1,530.1	1,970	8,638	318.1	1,394.6	1,796	7,873	2,864	12,490	177,130
1960	362.9	1,565.4	2,008	8,660	332.2	1,432.6	1,838	7,926	2,913	12,512	180,760
1961	378.8	1,615.8	2,062	8,794	342.6	1,461.5	1,865	7,954	2,965	12,571	183,742
1962	401.3	1,693.7	2,151	9,077	363.4	1,533.8	1,948	8,220	3,136	13,125	186,590
1963	421.1	1,755.5	2,225	9,274	383.0	1,596.6	2,023	8,434	3,261	13,492	189,300
1964	457.6	1,881.9	2,384	9,805	411.4	1,692.3	2,144	8,817	3,455	14,083	191,927
1965	493.9	2,000.2	2,541	10,292	444.3	1,799.1	2,286	9,257	3,700	14,792	194,347
1966	533.7	2,106.6	2,715	10,715	481.9	1,902.0	2,451	9,674	4,007	15,565	196,599
1967	571.9	2,198.4	2,877	11,061	509.5	1,958.6	2,563	9,854	4,194	15,800	198,752
1968	621.4	2,298.2	3,096	11,448	559.8	2,070.2	2,789	10,313	4,536	16,382	200,745
1969	668.4	2,373.6	3,297	11,708	604.7	2,147.5	2,982	10,593	4,845	16,712	202,736
1970	727.1	2,465.6	3,545	12,022	648.1	2,197.8	3,160	10,717	5,050	16,520	205,089
1971	790.2	2,564.0	3,805	12,345	702.5	2,279.5	3,383	10,975	5,419	16,853	207,692
1972	855.3	2,680.8	4,074	12,770	770.7	2,415.9	3,671	11,508	5,894	17,579	209,924
1973	965.0	2,869.4	4,553	13,539	851.6	2,532.6	4,018	11,950	6,524	18,412	211,939
1974	1,054.2	2,847.0	4,928	13,310	931.2	2,514.7	4,353	11,756	6,998	18,178	213,898
1975	1,159.2	2,895.0	5,367	13,404	1,029.1	2,570.0	4,765	11,899	7,550	17,896	215,981
1976	1,273.0	3,008.0	5,837	13,793	1,148.8	2,714.3	5,268	12,446	8,341	18,713	218,086
1977	1,401.4	3,105.1	6,362	14,095	1,277.1	2,829.8	5,797	12,846	9,201	19,426	220,289
1978	1,580.1	3,264.2	7,097	14,662	1,428.8	2,951.6	6,418	13,258	10,292	20,185	222,629
1979	1,769.5	3,353.9	7,861	14,899	1,593.5	3,020.2	7,079	13,417	11,361	20,541	225,106
1980	1,973.3	3,373.3	8,665	14,813	1,760.4	3,009.7	7,730	13,216	12,226	20,252	227,726
1981	2,200.2	3,452.3	9,566	15,009	1,941.3	3,046.4	8,440	13,245	13,547	20,542	230,008
1982	2,347.3	3,483.0	10,108	14,999	2,076.8	3,081.5	8,943	13,270	13,961	19,911	232,218
1983	2,522.4	3,579.9	10,764	15,277	2,283.4	3,240.6	9,744	13,829	14,998	20,527	234,332
1984	2,810.0	3,842.0	11,887	16,252	2,492.3	3,407.6	10,543	14,415	16,508	21,736	236,394
1985	3,002.0	3,958.6	12,587	16,597	2,704.8	3,566.5	11,341	14,954	17,529	22,345	238,506
1986	3,187.6	4,087.0	13,244	16,981	2,892.7	3,708.7	12,019	15,409	18,374	22,810	240,682
1987	3,363.1	4,154.1	13,849	17,106	3,094.5	3,822.3	12,743	15,740	19,323	23,260	242,842
1988	3,640.8	4,318.1	14,857	17,621	3,349.7	3,972.7	13,669	16,211	20,605	23,924	245,061
1989	3,894.5	4,403.7	15,742	17,801	3,594.8	4,064.6	14,531	16,430	21,984	24,497	247,387
1990	4,166.8	4,484.6	16,670	17,941	3,839.3	4,132.2	15,360	16,532	22,979	24,559	249,956
1991	4,343.7	4,486.5	17,191	17,756	3,975.1	4,105.8	15,732	16,249	23,416	24,058	252,680
1992	4,613.7	4,613.7	18,062	18,062	4,219.8	4,219.8	16,520	16,520	24,447	24,447	255,432
1993	4,790.2	4,666.9	18,555	18,078	4,454.1	4,339.5	17,253	16,809	25,383	24,738	258,159
1994	5,021.7	4,778.2	19,264	18,330	4,700.9	4,473.2	18,033	17,159	26,606	25,352	260,681
1995	5,320.8	4,945.8	20,224	18.799	4,924.9	4,577.8	18,719	17,400	27,571	25,630	263,090
1990: I	4,074.8	4,475.5	16,369	17,979	3,759.2	4,128.9	15,102	16,587	22,739	24,722	248,928
II	4,143.3	4,494.3	16,602	18,008	3,811.8	4,134.7	15,274	16,568	23,044	24,741	249,564
III	4,207.6	4,499.7	16,810	17,977	3,879.2	4,148.5	15,498	16,574	23,102	24,551	250,299
IV	4,241.5	4,468.8	16,896	17,802	3,907.0	4,116.4	15,564	16,398	23,031	24,224	251,031
1991: I	4,263.3	4,452.7	16,941	17,694	3,910.7	4,084.5	15,540	16,231	23,136	24,033	251,650
II	4,329.6	4,492.6	17,161	17,807	3,961.0	4,110.0	15,700	16,291	23,355	24,075	252,295
III	4,365.6	4,494.2	17,253	17,761	4,001.6	4,119.5	15,815	16,280	23,515	24,065	253,033
IV	4,416.4	4,506.3	17,405	17,759	4,027.1	4,109.1	15,871	16,194	23,655	24,058	253,743
1992: I	4,515.2	4,565.6	17,753	17,951	4,127.6	4,173.8	16,229	16,410	24,070	24,280	254,338
II	4,585.1	4,599.8	17,979	18,036	4,183.0	4,196.4	16,402	16,454	24,316	24,366	255,032
III	4,613.9	4,600.6	18,036	17,984	4,238.9	4,226.7	16,570	16,522	24,516	24,474	255,815
IV	4,740.5	4,688.7	18,478	18,277	4,329.6	4,282.3	16,877	16,692	24,881	24,664	256,543
1993: I	4,686.7	4,603.0	18,225	17,900	4,367.6	4,289.7	16,984	16,681	25,054	24,602	257,155
II	4,772.3	4,658.0	18,513	18,069	4,424.8	4,318.8	17,164	16,754	25,239	24,658	257,787
III	4,805.2	4,674.8	18,589	18,084	4,481.0	4,359.5	17,335	16,864	25,433	24,733	258,501
IV	4,896.7	4,731.7	18,892	18,256	4,543.1	4,390.0	17,528	16,937	25,806	24,959	259,192
1994: I	4,856.8	4,666.5	18,699	17,966	4,600.9	4,420.5	17,714	17,019	26,088	25,058	259,738
II	4,998.3	4,776.0	19,200	18,346	4,666.2	4,458.7	17,924	17,127	26,469	25,305	260,327
III	5,076.9	4,810.2	19,452	18,430	4,738.3	4,489.4	18,154	17,200	26,793	25,459	261,004
IV	5,154.6	4,859.9	19,700	18,574	4,798.2	4,524.0	18,338	17,290	27,071	25,583	261,653
1995: I	5,234.5	4,903.8	19,965	18,704	4,840.6	4,534.8	18,463	17,296	27,270	25,559	262,181
II	5,272.9	4,907.1	20,068	18,676	4,910.5	4,569.9	18,689	17,393	27,421	25,551	262,748
III	5,348.5	4,959.5	20,306	18,829	4,957.9	4,597.3	18,823	17,454	27,752	25,727	263,399
IV	5,427.3	5,012.9	20,555	18,986	4,990.5	4,609.4	18,901	17,458	27,840	25,681	264,032
1996: I	5,483.5	5,037.6	20,727	19,041	5,060.5	4,649.1	19,128	17,573	28.072	25,757	264,563
II	5,541.8	5,054.5	20,900	19,063	5,139.4	4,687.6	19,383	17,679	28,455	25,994	265,155
III	5,628.9	5,114.6	21,177	19,242	5,165.4	4,693.5	19,433	17,657	28,653	26,066	265,806

[1] Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1960. Annual data are averages of quarterly data. Quarterly data are averages for the period.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

Table B–30.—*Gross saving and investment, 1959–96*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross saving													
	Total	Gross private saving					Gross government saving							Capital grants received by the United States (net)[3]
		Total	Personal saving	Gross business saving			Total	Federal			State and local			
				Total[1]	Undistributed corporate profits[2]	Corporate and noncorporate consumption of fixed capital		Total	Consumption of fixed capital	Current surplus or deficit (–) (NIPA)	Total	Consumption of fixed capital	Current surplus or deficit (–) (NIPA)	
1959	109.0	82.8	24.3	58.4	13.9	44.5	26.2	12.8	10.2	2.6	13.5	3.9	9.6	....
1960	113.9	82.1	23.3	58.8	12.7	46.1	31.8	17.8	10.5	7.4	14.0	4.0	9.9	....
1961	116.8	88.6	28.3	60.2	13.0	47.2	28.3	13.6	10.7	2.9	14.7	4.3	10.4	....
1962	127.4	97.1	29.5	67.6	18.7	48.9	30.3	14.0	11.2	2.8	16.3	4.6	11.7	....
1963	135.4	100.3	28.6	71.7	21.2	50.5	35.1	17.2	11.8	5.4	17.9	4.9	13.0	....
1964	145.8	112.9	35.5	77.4	24.4	53.1	32.9	13.0	12.1	.9	19.9	5.2	14.7	....
1965	161.0	124.4	37.8	86.6	29.9	56.7	36.6	15.9	12.5	3.4	20.8	5.7	15.1	....
1966	171.7	132.6	39.1	93.5	31.7	61.8	39.2	15.6	13.0	2.6	23.5	6.3	17.3	....
1967	174.4	144.7	48.9	95.9	28.9	67.0	29.7	5.6	13.9	–8.3	24.1	6.8	17.3	....
1968	185.8	146.1	46.8	99.3	26.3	73.0	39.7	12.0	14.9	–2.8	27.6	7.6	20.0	....
1969	202.9	149.0	46.9	102.1	22.6	79.5	53.9	24.3	15.6	8.7	29.6	8.5	21.1	....
1970	198.2	164.7	61.0	103.8	17.7	86.1	32.6	2.2	16.2	–14.1	30.4	9.6	20.8	0.9
1971	215.3	190.7	68.6	122.1	27.3	94.4	23.9	–8.5	16.9	–25.3	32.4	10.7	21.7	.7
1972	244.9	202.7	63.6	139.1	34.5	104.9	41.5	–2.4	18.2	–20.5	43.9	11.7	32.2	.7
1973	297.5	242.3	89.6	152.7	37.6	115.1	55.1	8.7	19.9	–11.1	46.4	13.0	33.4	0
1974	302.3	252.7	97.6	155.2	21.5	133.7	51.5	5.1	22.0	–16.9	46.5	16.0	30.5	[6]–2.0
1975	298.3	302.2	104.4	197.8	40.1	157.7	–3.9	–49.9	24.0	–73.9	46.0	18.4	27.6	0
1976	340.9	317.5	96.4	221.1	47.0	174.1	23.5	–31.9	25.4	–57.2	55.3	19.4	35.9	0
1977	395.5	349.4	92.5	256.9	53.4	203.5	46.1	–19.3	27.0	–46.3	65.4	20.7	44.7	0
1978	477.4	405.0	112.6	292.4	62.0	230.4	72.4	–2.8	28.9	–31.7	75.1	22.5	52.6	0
1979	540.9	449.1	130.1	319.0	53.5	265.5	90.7	13.0	31.5	–18.4	77.7	25.4	52.3	1.1
1980	547.4	489.5	161.8	327.6	23.0	304.6	56.8	–26.8	34.1	–61.0	83.6	29.2	54.4	1.2
1981	651.1	581.9	199.1	382.8	33.3	349.5	68.1	–20.6	37.1	–57.8	88.7	33.3	55.4	1.1
1982	604.7	610.1	205.5	404.6	26.3	378.3	–5.3	–92.8	41.9	–134.7	87.5	36.2	51.3	0
1983	589.6	619.1	167.0	452.1	54.3	397.8	–29.4	–131.8	42.6	–174.4	102.4	37.5	64.9	0
1984	751.5	737.5	235.7	501.9	91.0	410.9	14.0	–111.9	44.1	–156.0	125.9	39.0	86.9	0
1985	746.7	731.5	206.2	525.3	92.9	432.4	15.2	–116.9	46.1	–162.9	132.0	41.0	91.0	0
1986	721.0	710.1	196.5	513.6	54.2	459.4	10.8	–127.9	49.6	–177.5	138.8	43.9	94.9	0
1987	780.9	727.2	168.4	558.8	75.7	483.2	53.6	–77.2	51.7	–128.9	130.8	47.1	83.8	0
1988	877.2	808.4	189.1	619.3	103.3	516.0	68.8	–67.0	54.3	–121.3	135.8	49.9	85.9	0
1989	907.9	815.9	187.8	628.1	76.2	551.9	92.0	–56.4	57.0	–113.4	148.4	53.3	95.1	0
1990	904.4	861.7	208.7	653.0	77.2	575.8	42.7	–94.0	60.7	–154.7	136.7	56.6	80.1	0
1991	935.3	931.9	246.4	685.6	86.0	599.6	3.3	–132.2	63.9	–196.0	135.5	59.6	75.8	0
1992	905.4	971.9	272.6	699.2	88.9	626.1	–66.5	–215.0	65.9	–280.9	148.6	62.3	86.3	0
1993	935.5	962.4	214.4	748.0	103.3	640.0	–26.9	–187.4	68.2	–255.6	160.5	65.6	94.9	0
1994	1,056.3	1,006.7	189.4	817.3	123.2	678.7	49.6	–119.6	70.6	–190.2	169.2	69.4	99.7	0
1995	1,151.8	1,071.8	249.3	822.5	140.6	679.2	80.0	–87.8	73.8	–161.7	167.9	72.9	95.0	0
1990: I	896.1	850.2	199.0	651.2	85.6	565.6	45.9	–94.8	59.3	–154.1	140.7	55.2	85.5	0
II	940.7	886.3	213.9	672.4	99.2	573.2	54.5	–84.4	59.7	–144.1	138.9	56.1	82.8	0
III	895.0	838.9	208.3	630.6	50.0	580.6	56.1	–81.9	60.8	–142.6	137.9	57.2	80.7	0
IV	885.7	871.2	213.5	657.7	73.8	583.9	14.5	–115.0	62.8	–177.7	129.4	57.9	71.5	0
1991: I	983.5	928.2	230.8	697.4	105.0	592.5	55.3	–72.0	62.6	–134.6	127.3	58.6	68.8	0
II	928.1	927.8	246.3	681.5	85.1	596.4	.2	–132.9	63.9	–196.7	133.1	59.4	73.7	0
III	905.4	918.0	241.7	676.3	74.9	601.4	–12.6	–149.7	64.3	–214.0	137.1	60.0	77.1	0
IV	924.0	953.7	266.6	687.2	79.1	608.1	–29.7	–174.0	64.8	–238.8	144.4	60.6	83.8	0
1992: I	921.5	977.8	265.2	712.6	111.3	601.3	–56.3	–202.2	65.2	–267.4	145.9	61.1	84.8	0
II	915.1	980.5	280.3	700.1	93.7	606.4	–65.3	–213.9	65.8	–279.6	148.5	62.0	86.6	0
III	901.0	987.8	254.5	733.4	52.9	680.5	–86.9	–231.5	66.0	–297.5	144.6	62.7	82.0	0
IV	884.0	941.3	290.5	650.8	97.7	616.2	–57.3	–212.5	66.5	–279.0	155.2	63.5	91.7	0
1993: I	908.7	981.0	197.4	783.6	85.7	633.8	–72.3	–217.2	67.3	–284.5	144.9	64.4	80.5	0
II	923.8	951.8	226.8	725.0	89.4	634.6	–28.0	–182.5	67.7	–250.2	154.5	65.3	89.1	0
III	937.5	962.4	202.9	759.5	110.1	648.4	–24.9	–185.7	68.6	–254.4	160.9	66.0	94.9	0
IV	972.1	954.6	230.5	724.1	128.2	643.3	17.5	–164.2	69.1	–233.3	181.7	66.7	115.0	0
1994: I	1,034.3	1,013.5	128.8	884.7	83.9	748.7	20.8	–143.2	69.5	–212.7	164.0	69.2	94.8	0
II	1,065.4	991.3	202.2	789.1	132.7	652.7	74.1	–99.7	70.0	–169.6	173.7	68.5	105.2	0
III	1,054.9	1,003.8	206.2	797.6	137.2	656.7	51.1	–118.1	70.4	–188.5	169.2	69.6	99.6	0
IV	1,070.7	1,018.3	220.4	797.9	138.8	656.6	52.4	–117.4	72.7	–190.1	169.8	70.5	99.3	0
1995: I	1,115.0	1,043.8	254.2	789.6	121.0	664.6	71.2	–99.2	73.5	–172.6	170.4	71.4	99.0	0
II	1,102.9	1,018.5	218.5	800.0	123.5	673.6	84.4	–86.9	74.2	–161.1	171.3	72.3	99.0	0
III	1,168.6	1,085.9	241.9	844.0	159.6	681.8	82.7	–84.6	73.8	–158.5	167.3	73.4	93.9	0
IV	1,220.6	1,138.9	282.6	856.3	158.4	697.0	81.7	–80.7	73.8	–154.5	162.4	74.3	88.1	0
1996: I	1,217.9	1,133.8	265.4	868.4	171.8	694.7	84.1	–82.0	73.2	–155.2	166.1	75.1	91.0	0
II	1,244.5	1,121.6	241.1	880.5	176.3	704.2	122.9	–54.1	72.6	–126.7	177.0	76.0	101.0	0
III	1,314.0	1,196.1	299.1	897.0	182.5	714.6	117.8	–48.4	72.3	–120.8	166.3	77.1	89.2	0

[1] Includes private wage accruals less disbursements not shown separately.
[2] With inventory valuation and capital consumption adjustments.
[3] Consists mainly of allocations of special drawing rights (SDRs).

See next page for continuation of table.

TABLE B–30.—*Gross saving and investment, 1959–96*—Continued

[Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross investment: Total	Gross investment: Gross private domestic investment	Gross investment: Gross government investment [4]	Gross investment: Net foreign investment [5]	Statistical discrepancy	Addenda: Gross saving as a percent of gross national product	Addenda: Personal saving as a percent of disposable personal income
1959	106.9	78.8	29.3	–1.2	–2.1	21.4	7.0
1960	110.2	78.8	28.2	3.2	–3.7	21.5	6.4
1961	113.5	77.9	31.3	4.3	–3.3	21.3	7.5
1962	125.0	87.9	33.2	3.9	–2.4	21.6	7.4
1963	131.9	93.4	33.5	5.0	–3.5	21.8	6.8
1964	143.8	101.7	34.5	7.5	–2.1	21.8	7.7
1965	159.6	118.0	35.4	6.2	–1.4	22.2	7.6
1966	174.4	130.4	40.1	3.9	2.7	21.7	7.3
1967	175.1	128.0	43.5	3.5	.6	20.8	8.5
1968	186.0	139.9	44.3	1.7	.2	20.3	7.5
1969	200.7	155.0	43.9	1.8	–2.2	20.5	7.0
1970	199.1	150.2	44.0	4.9	1.0	19.0	8.4
1971	220.4	176.0	43.1	1.3	5.1	19.0	8.7
1972	248.1	205.6	45.4	–2.9	3.2	19.7	7.4
1973	299.9	242.9	48.3	8.7	2.4	21.3	9.3
1974	306.7	245.6	56.0	5.1	4.5	20.0	9.3
1975	309.5	225.4	62.7	21.4	11.2	18.1	9.0
1976	359.9	286.6	64.4	8.9	18.9	18.6	7.6
1977	413.0	356.6	65.4	–9.0	17.5	19.3	6.6
1978	494.9	430.8	74.6	–10.4	17.6	20.6	7.1
1979	568.7	480.9	85.3	2.6	27.8	20.9	7.4
1980	574.8	465.9	96.4	12.5	27.4	19.4	8.2
1981	665.7	556.2	102.1	7.4	14.6	20.7	9.1
1982	601.8	501.1	106.9	–6.1	–2.9	18.5	8.8
1983	626.2	547.1	116.5	–37.3	36.5	16.6	6.6
1984	755.7	715.6	131.7	–91.5	4.2	19.1	8.4
1985	748.0	715.1	149.9	–116.9	1.3	17.8	6.9
1986	743.1	722.5	163.5	–142.9	22.1	16.3	6.2
1987	764.2	747.2	173.5	–156.4	–16.6	16.6	5.0
1988	828.7	773.9	172.9	–118.1	–48.6	17.3	5.2
1989	919.5	829.2	182.7	–92.4	11.6	16.6	4.8
1990	920.5	799.7	199.4	–78.6	16.1	15.7	5.0
1991	944.0	736.2	200.5	7.3	8.8	15.8	5.7
1992	949.1	790.4	209.1	–50.5	43.7	14.5	5.9
1993	993.5	871.1	210.6	–88.2	58.0	14.3	4.5
1994	1,090.4	1,014.4	212.3	–136.4	34.1	15.2	3.8
1995	1,150.9	1,065.3	221.9	–136.3	–.9	15.9	4.7
1990: I	939.2	822.5	196.0	–79.4	43.0	15.8	4.9
II	958.1	835.2	196.7	–73.8	17.4	16.3	5.2
III	911.3	804.9	199.7	–93.3	16.3	15.4	5.0
IV	873.4	736.1	205.4	–68.1	–12.3	15.2	5.0
1991: I	977.0	723.6	198.1	55.3	–6.5	16.8	5.4
II	933.7	716.2	201.5	16.0	5.6	15.7	5.7
III	922.6	743.9	201.3	–22.6	17.2	15.2	5.5
IV	942.8	760.9	201.4	–19.4	18.8	15.4	6.0
1992: I	944.7	755.2	209.5	–19.9	23.3	15.0	5.9
II	951.4	790.8	209.3	–48.7	36.2	14.7	6.1
III	952.6	799.7	208.9	–56.0	51.6	14.3	5.5
IV	947.6	816.1	208.8	–77.2	63.6	13.8	6.1
1993: I	988.2	843.6	207.1	–62.6	79.5	14.1	4.2
II	983.5	855.9	210.6	–83.0	59.8	14.2	4.8
III	987.4	873.8	209.8	–96.2	49.8	14.2	4.2
IV	1,014.8	911.2	214.7	–111.0	42.8	14.5	4.7
1994: I	1,058.4	957.6	207.3	–106.5	24.1	15.3	2.7
II	1,095.3	1,016.5	208.5	–129.7	30.0	15.5	4.0
III	1,100.2	1,033.6	217.2	–150.6	45.3	15.1	4.1
IV	1,107.6	1,050.1	216.3	–158.9	36.9	15.1	4.3
1995: I	1,145.0	1,072.0	219.1	–146.2	30.0	15.6	4.9
II	1,123.2	1,050.3	223.7	–150.8	20.3	15.3	4.1
III	1,161.5	1,074.8	224.7	–138.1	–7.1	16.0	4.5
IV	1,173.9	1,064.0	220.1	–110.2	–46.7	16.6	5.2
1996: I	1,167.9	1,068.9	228.8	–129.9	–50.0	16.4	4.8
II	1,187.0	1,096.0	235.1	–144.2	–57.5	16.5	4.3
III	1,215.9	1,156.2	234.2	–174.6	–98.1	17.3	5.3

[4] For details on government investment, see Table B–18.
[5] Net exports of goods and services plus net receipts of factor income from rest of the world less net transfers plus net capital grants received by the United States. See also Table B–22.
[6] Consists of a U.S. payment to India under the Agricultural Trade Development and Assistance Act. This payment is included in capital grants received by the United States, net.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–31.—*Median money income (in 1995 dollars) and poverty status of families and persons, by race, selected years, 1977–95*

Year	Families [1]						Persons below poverty level		Median money income (in 1995 dollars) of persons 15 years old and over with income [2 3]			
	Number (millions)	Median money income (in 1995 dollars) [2]	Below poverty level				Number (millions)	Percent	Males		Females	
			Total		Female householder							
			Number (millions)	Percent	Number (millions)	Percent			All persons	Year-round full-time workers	All persons	Year-round full-time workers
ALL RACES												
1977	57.2	$38,604	5.3	9.3	2.6	31.7	24.7	11.6	$24,411	$36,340	$9,503	$21,254
1978	57.8	39,827	5.3	9.1	2.7	31.4	24.5	11.4	24,689	36,264	9,185	21,767
1979 [4]	59.6	40,339	5.5	9.2	2.6	30.4	26.1	11.7	24,258	35,997	8,963	21,688
1980	60.3	38,930	6.2	10.3	3.0	32.7	29.3	13.0	23,203	35,504	9,111	21,464
1981	61.0	37,868	6.9	11.2	3.3	34.6	31.8	14.0	22,789	35,000	9,232	21,070
1982	61.4	37,356	7.5	12.2	3.4	36.3	34.4	15.0	22,238	34,521	9,385	21,781
1983 [5]	62.0	37,754	7.6	12.3	3.6	36.0	35.3	15.2	22,433	34,402	9,800	22,135
1984	62.7	38,772	7.3	11.6	3.5	34.5	33.7	14.4	22,882	35,209	10,074	22,621
1985	63.6	39,283	7.2	11.4	3.5	34.0	33.1	14.0	23,102	35,408	10,222	23,019
1986	64.5	40,962	7.0	10.9	3.6	34.6	32.4	13.6	23,797	36,006	10,582	23,420
1987 [6]	65.2	41,548	7.0	10.7	3.7	34.2	32.2	13.4	23,861	35,794	11,128	23,563
1988	65.8	41,470	6.9	10.4	3.6	33.4	31.7	13.0	24,358	35,223	11,445	23,891
1989	66.1	42,049	6.8	10.3	3.5	32.2	31.5	12.8	24,449	34,928	11,828	24,136
1990	66.3	41,223	7.1	10.7	3.8	33.4	33.6	13.5	23,662	33,790	11,742	24,010
1991	67.2	40,214	7.7	11.5	4.2	35.6	35.7	14.2	22,904	33,939	11,722	23,772
1992 [7]	68.2	39,727	8.1	11.9	4.3	35.4	38.0	14.8	22,219	33,491	11,638	23,998
1993	68.5	38,980	8.4	12.3	4.4	35.6	39.3	15.1	22,256	32,776	11,650	23,697
1994	69.3	39,881	8.1	11.6	4.2	34.6	38.1	14.5	22,336	32,508	11,791	23,924
1995	69.6	40,611	7.5	10.8	4.1	32.4	36.4	13.8	22,562	32,199	12,130	23,777
WHITE												
1977	50.5	40,367	3.5	7.0	1.4	24.0	16.4	8.9	25,568	37,082	9,648	21,389
1978	50.9	41,471	3.5	6.9	1.4	23.5	16.3	8.7	25,858	36,937	9,295	21,973
1979 [4]	52.2	42,093	3.6	6.9	1.4	22.3	17.2	9.0	25,342	37,037	9,047	21,878
1980	52.7	40,561	4.2	8.0	1.6	25.7	19.7	10.2	24,680	36,517	9,161	21,671
1981	53.3	39,778	4.7	8.8	1.8	27.4	21.6	11.1	24,181	35,822	9,335	21,422
1982	53.4	39,221	5.1	9.6	1.8	27.9	23.5	12.0	23,510	35,441	9,512	22,074
1983 [5]	53.9	39,534	5.2	9.7	1.9	28.3	24.0	12.1	23,601	35,317	9,972	22,430
1984	54.4	40,610	4.9	9.1	1.9	27.1	23.0	11.5	24,154	36,415	10,193	22,845
1985	55.0	41,290	5.0	9.1	2.0	27.4	22.9	11.4	24,235	36,390	10,420	23,344
1986	55.7	42,840	4.8	8.6	2.0	28.2	22.2	11.0	25,113	37,011	10,790	23,779
1987 [6]	56.1	43,446	4.6	8.1	2.0	26.9	21.2	10.4	25,362	36,628	11,413	23,999
1988	56.5	43,691	4.5	7.9	1.9	26.5	20.7	10.1	25,712	36,409	11,727	24,249
1989	56.6	44,214	4.4	7.8	1.9	25.4	20.8	10.0	25,641	36,468	12,059	24,422
1990	56.8	43,044	4.6	8.1	2.0	26.8	22.3	10.7	24,685	35,075	12,030	24,299
1991	57.2	42,277	5.0	8.8	2.2	28.4	23.7	11.3	23,940	34,635	11,996	24,119
1992 [7]	57.7	42,005	5.3	9.1	2.2	28.5	25.3	11.9	23,252	34,287	11,908	24,276
1993	57.9	41,449	5.5	9.4	2.4	29.2	26.2	12.2	23,183	33,572	11,882	24,235
1994	58.4	42,043	5.3	9.1	2.3	29.0	25.4	11.7	23,311	33,359	11,960	24,571
1995	58.9	42,646	5.0	8.5	2.2	26.6	24.4	11.2	23,895	33,515	12,316	24,264
BLACK												
1977	5.8	23,060	1.6	28.2	1.2	51.0	7.7	31.3	15,172	25,566	8,331	19,990
1978	5.9	24,562	1.6	27.5	1.2	50.6	7.6	30.6	15,491	28,290	8,370	20,365
1979 [4]	6.2	23,836	1.7	27.8	1.2	49.4	8.1	31.0	15,687	26,693	8,234	20,047
1980	6.3	23,469	1.8	28.9	1.3	49.4	8.6	32.5	14,831	25,693	8,481	20,212
1981	6.4	22,439	2.0	30.8	1.4	52.9	9.2	34.2	14,379	25,345	8,293	19,347
1982	6.5	21,677	2.2	33.0	1.5	56.2	9.7	35.6	14,089	25,172	8,390	19,729
1983 [5]	6.7	22,280	2.2	32.3	1.5	53.7	9.9	35.7	13,802	25,196	8,521	19,910
1984	6.8	22,634	2.1	30.9	1.5	51.7	9.5	33.8	13,858	24,852	9,041	20,588
1985	6.9	23,775	2.0	28.7	1.5	50.5	8.9	31.3	15,251	25,453	8,890	20,665
1986	7.1	24,479	2.0	28.0	1.5	50.1	9.0	31.1	15,048	26,094	9,130	20,808
1987 [6]	7.2	24,693	2.1	29.4	1.6	51.1	9.5	32.4	15,045	26,190	9,322	21,435
1988	7.4	24,901	2.1	28.2	1.6	49.0	9.4	31.3	15,516	26,687	9,467	21,729
1989	7.5	24,838	2.1	27.8	1.5	46.5	9.3	30.7	15,497	25,446	9,679	21,964
1990	7.5	24,980	2.2	29.3	1.6	48.1	9.8	31.9	15,004	25,047	9,711	21,623
1991	7.7	24,111	2.3	30.4	1.8	51.2	10.2	32.7	14,504	25,319	9,865	21,410
1992 [7]	8.0	22,923	2.5	31.1	1.9	50.2	10.8	33.4	14,191	24,974	9,653	22,005
1993	8.0	22,720	2.5	31.3	1.9	49.9	10.9	33.1	15,403	24,854	10,028	21,426
1994	8.1	25,398	2.2	27.3	1.7	46.2	10.2	30.6	15,407	25,097	10,843	21,213
1995	8.1	25,970	2.1	26.4	1.7	45.1	9.9	29.3	16,006	24,798	10,961	21,079

[1] The term "family" refers to a group of two or more persons related by birth, marriage, or adoption and residing together. Every family must include a reference person. Beginning 1979, based on householder concept and restricted to primary families.
[2] Current dollar median money income deflated by CPI–U–X1.
[3] Prior to 1979, data are for persons 14 years and over.
[4] Based on 1980 census population controls; comparable with succeeding years.
[5] Reflects implementation of Hispanic population controls; comparable with succeeding years.
[6] Based on revised methodology; comparable with succeeding years.
[7] Based on 1990 census adjusted population controls; comparable with succeeding years.

Note.—Poverty rates (percent of persons below poverty level) for all races for years not shown above are: 1959, 22.4; 1960, 22.2; 1961, 21.9; 1962, 21.0; 1963, 19.5; 1964, 19.0; 1965, 17.3; 1966, 14.7; 1967, 14.2; 1968, 12.8; 1969, 12.1; 1970, 12.6; 1971, 12.5; 1972, 11.9; 1973, 11.1; 1974, 11.2; 1975, 12.3; and 1976, 11.8.

Poverty thresholds are updated each year to reflect changes in the consumer price index (CPI–U).

For details see "Current Population Reports," Series P–60.

Source: Department of Commerce, Bureau of the Census.

TABLE B–32.—*Population by age group, 1929–96*

[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	227,726	16,451	38,838	17,167	21,590	63,470	44,504	25,707
1981	229,966	16,893	38,144	16,812	21,869	65,528	44,500	26,221
1982	232,188	17,228	37,784	16,332	21,902	67,692	44,462	26,787
1983	234,307	17,547	37,526	15,823	21,844	69,733	44,474	27,361
1984	236,348	17,695	37,461	15,295	21,737	71,735	44,547	27,878
1985	238,466	17,842	37,450	15,005	21,478	73,673	44,602	28,416
1986	240,651	17,963	37,404	15,024	20,942	75,651	44,660	29,008
1987	242,804	18,052	37,333	15,215	20,385	77,338	44,854	29,626
1988	245,021	18,195	37,593	15,198	19,846	78,595	45,471	30,124
1989	247,342	18,508	37,972	14,913	19,442	79,943	45,882	30,682
1990	249,913	18,849	38,588	14,449	19,307	81,196	46,288	31,235
1991	252,650	19,198	39,197	13,929	19,356	82,449	46,758	31,763
1992	255,419	19,506	39,905	13,671	19,192	82,530	48,345	32,270
1993	258,137	19,689	40,546	13,798	18,895	82,849	49,583	32,777
1994	260,660	19,734	41,223	14,032	18,451	83,180	50,887	33,152
1995	263,034	19,591	41,924	14,287	17,972	83,511	52,216	33,532
1996	265,455	19,423	42,447	14,791	17,456	83,814	53,675	33,849

Note.—Includes Armed Forces overseas beginning 1940. Includes Alaska and Hawaii beginning 1950. All estimates are consistent with decennial census enumerations.

Source: Department of Commerce, Bureau of the Census.

TABLE B–33.—*Civilian population and labor force, 1929–96*

[Monthly data seasonally adjusted, except as noted]

Year or month	Civilian noninstitutional population[1]	Civilian labor force: Total	Civilian labor force: Employment: Total	Civilian labor force: Employment: Agricultural	Civilian labor force: Employment: Nonagricultural	Civilian labor force: Unemployment	Not in labor force	Civilian labor force participation rate[2]	Civilian employment/population ratio[3]	Unemployment rate, civilian workers[4]
	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	44,200	55.7	47.6	14.6
1941	99,900	55,910	50,350	9,100	41,250	5,560	43,990	56.0	50.4	9.9
1942	98,640	56,410	53,750	9,250	44,500	2,660	42,230	57.2	54.5	4.7
1943	94,640	55,540	54,470	9,080	45,390	1,070	39,100	58.7	57.6	1.9
1944	93,220	54,630	53,960	8,950	45,010	670	38,590	58.6	57.9	1.2
1945	94,090	53,860	52,820	8,580	44,240	1,040	40,230	57.2	56.1	1.9
1946	103,070	57,520	55,250	8,320	46,930	2,270	45,550	55.8	53.6	3.9
1947	106,018	60,168	57,812	8,256	49,557	2,356	45,850	56.8	54.5	3.9
	Thousands of persons 16 years of age and over									
1947	101,827	59,350	57,038	7,890	49,148	2,311	42,477	58.3	56.0	3.9
1948	103,068	60,621	58,343	7,629	50,714	2,276	42,447	58.8	56.6	3.8
1949	103,994	61,286	57,651	7,658	49,993	3,637	42,708	58.9	55.4	5.9
1950	104,995	62,208	58,918	7,160	51,758	3,288	42,787	59.2	56.1	5.3
1951	104,621	62,017	59,961	6,726	53,235	2,055	42,604	59.2	57.3	3.3
1952	105,231	62,138	60,250	6,500	53,749	1,883	43,093	59.0	57.3	3.0
1953[5]	107,056	63,015	61,179	6,260	54,919	1,834	44,041	58.9	57.1	2.9
1954	108,321	63,643	60,109	6,205	53,904	3,532	44,678	58.8	55.5	5.5
1955	109,683	65,023	62,170	6,450	55,722	2,852	44,660	59.3	56.7	4.4
1956	110,954	66,552	63,799	6,283	57,514	2,750	44,402	60.0	57.5	4.1
1957	112,265	66,929	64,071	5,947	58,123	2,859	45,336	59.6	57.1	4.3
1958	113,727	67,639	63,036	5,586	57,450	4,602	46,088	59.5	55.4	6.8
1959	115,329	68,369	64,630	5,565	59,065	3,740	46,960	59.3	56.0	5.5
1960[5]	117,245	69,628	65,778	5,458	60,318	3,852	47,617	59.4	56.1	5.5
1961	118,771	70,459	65,746	5,200	60,546	4,714	48,312	59.3	55.4	6.7
1962[5]	120,153	70,614	66,702	4,944	61,759	3,911	49,539	58.8	55.5	5.5
1963	122,416	71,833	67,762	4,687	63,076	4,070	50,583	58.7	55.4	5.7
1964	124,485	73,091	69,305	4,523	64,782	3,786	51,394	58.7	55.7	5.2
1965	126,513	74,455	71,088	4,361	66,726	3,366	52,058	58.9	56.2	4.5
1966	128,058	75,770	72,895	3,979	68,915	2,875	52,288	59.2	56.9	3.8
1967	129,874	77,347	74,372	3,844	70,527	2,975	52,527	59.6	57.3	3.8
1968	132,028	78,737	75,920	3,817	72,103	2,817	53,291	59.6	57.5	3.6
1969	134,335	80,734	77,902	3,606	74,296	2,832	53,602	60.1	58.0	3.5
1970	137,085	82,771	78,678	3,463	75,215	4,093	54,315	60.4	57.4	4.9
1971	140,216	84,382	79,367	3,394	75,972	5,016	55,834	60.2	56.6	5.9
1972[5]	144,126	87,034	82,153	3,484	78,669	4,882	57,091	60.4	57.0	5.6
1973[5]	147,096	89,429	85,064	3,470	81,594	4,365	57,667	60.8	57.8	4.9
1974	150,120	91,949	86,794	3,515	83,279	5,156	58,171	61.3	57.8	5.6
1975	153,153	93,775	85,846	3,408	82,438	7,929	59,377	61.2	56.1	8.5
1976	156,150	96,158	88,752	3,331	85,421	7,406	59,991	61.6	56.8	7.7
1977	159,033	99,009	92,017	3,283	88,734	6,991	60,025	62.3	57.9	7.1
1978[5]	161,910	102,251	96,048	3,387	92,661	6,202	59,659	63.2	59.3	6.1
1979	164,863	104,962	98,824	3,347	95,477	6,137	59,900	63.7	59.9	5.8
1980	167,745	106,940	99,303	3,364	95,938	7,637	60,806	63.8	59.2	7.1
1981	170,130	108,670	100,397	3,368	97,030	8,273	61,460	63.9	59.0	7.6
1982	172,271	110,204	99,526	3,401	96,125	10,678	62,067	64.0	57.8	9.7
1983	174,215	111,550	100,834	3,383	97,450	10,717	62,665	64.0	57.9	9.6
1984	176,383	113,544	105,005	3,321	101,685	8,539	62,839	64.4	59.5	7.5
1985	178,206	115,461	107,150	3,179	103,971	8,312	62,744	64.8	60.1	7.2
1986[5]	180,587	117,834	109,597	3,163	106,434	8,237	62,752	65.3	60.7	7.0
1987	182,753	119,865	112,440	3,208	109,232	7,425	62,888	65.6	61.5	6.2
1988	184,613	121,669	114,968	3,169	111,800	6,701	62,944	65.9	62.3	5.5
1989	186,393	123,869	117,342	3,199	114,142	6,528	62,523	66.5	63.0	5.3
1990[5]	189,164	125,840	118,793	3,223	115,570	7,047	63,324	66.5	62.8	5.6
1991	190,925	126,346	117,718	3,269	114,449	8,628	64,578	66.2	61.7	6.8
1992	192,805	128,105	118,492	3,247	115,245	9,613	64,700	66.4	61.5	7.5
1993	194,838	129,200	120,259	3,115	117,144	8,940	65,638	66.3	61.7	6.9
1994[5]	196,814	131,056	123,060	3,409	119,651	7,996	65,758	66.6	62.5	6.1
1995	198,584	132,304	124,900	3,440	121,460	7,404	66,280	66.6	62.9	5.6
1996	200,591	133,943	126,708	3,443	123,264	7,236	66,647	66.8	63.2	5.4

[1] Not seasonally adjusted.
[2] Civilian labor force as percent of civilian noninstitutional population.
[3] Civilian employment as percent of civilian noninstitutional population.
[4] Unemployed as percent of civilian labor force.

See next page for continuation of table.

TABLE B–33.—*Civilian population and labor force, 1929–96*—Continued

[Monthly data seasonally adjusted, except as noted]

Year or month	Civilian noninstitutional population[1]	Civilian labor force: Total	Civilian labor force: Employment: Total	Civilian labor force: Employment: Agricultural	Civilian labor force: Employment: Nonagricultural	Civilian labor force: Unemployment	Not in labor force	Civilian labor force participation rate[2]	Civilian employment/population ratio[3]	Unemployment rate, civilian workers[4]
	Thousands of persons 16 years of age and over							Percent		
1993: Jan	193,962	128,400	119,075	3,222	115,853	9,325	65,562	66.2	61.4	7.3
Feb	194,108	128,458	119,275	3,125	116,150	9,183	65,650	66.2	61.4	7.1
Mar	194,248	128,598	119,542	3,119	116,423	9,056	65,650	66.2	61.5	7.0
Apr	194,398	128,584	119,474	3,074	116,400	9,110	65,814	66.1	61.5	7.1
May	194,549	129,264	120,115	3,100	117,015	9,149	65,285	66.4	61.7	7.1
June	194,719	129,411	120,290	3,108	117,182	9,121	65,308	66.5	61.8	7.0
July	194,882	129,397	120,467	3,126	117,341	8,930	65,485	66.4	61.8	6.9
Aug	195,063	129,619	120,856	3,026	117,830	8,763	65,444	66.4	62.0	6.8
Sept	195,259	129,268	120,554	3,174	117,380	8,714	65,991	66.2	61.7	6.7
Oct	195,444	129,573	120,823	3,084	117,739	8,750	65,871	66.3	61.8	6.8
Nov	195,625	129,711	121,169	3,157	118,012	8,542	65,914	66.3	61.9	6.6
Dec	195,794	129,941	121,464	3,116	118,348	8,477	65,853	66.4	62.0	6.5
1994: Jan[5]	195,953	130,709	121,999	3,307	118,692	8,710	65,244	66.7	62.3	6.7
Feb	196,090	130,685	122,104	3,325	118,779	8,581	65,405	66.6	62.3	6.6
Mar	196,213	130,501	122,001	3,354	118,647	8,500	65,712	66.5	62.2	6.5
Apr	196,363	130,644	122,331	3,425	118,906	8,313	65,719	66.5	62.3	6.4
May	196,510	130,828	122,961	3,412	119,549	7,867	65,682	66.6	62.6	6.0
June	196,693	130,590	122,653	3,295	119,358	7,937	66,103	66.4	62.4	6.1
July	196,859	130,644	122,717	3,343	119,374	7,927	66,215	66.4	62.3	6.1
Aug	197,043	131,223	123,274	3,460	119,814	7,949	65,820	66.6	62.6	6.1
Sept	197,248	131,284	123,544	3,441	120,103	7,740	65,964	66.6	62.6	5.9
Oct	197,430	131,676	124,052	3,486	120,566	7,624	65,754	66.7	62.8	5.8
Nov	197,607	131,846	124,474	3,576	120,898	7,372	65,761	66.7	63.0	5.6
Dec	197,765	131,847	124,689	3,577	121,112	7,158	65,918	66.7	63.0	5.4
1995: Jan	197,753	132,198	124,766	3,530	121,236	7,432	65,555	66.9	63.1	5.6
Feb	197,886	132,140	124,937	3,579	121,358	7,203	65,746	66.8	63.1	5.5
Mar	198,007	132,271	125,070	3,625	121,445	7,201	65,736	66.8	63.2	5.4
Apr	198,148	132,613	125,023	3,572	121,451	7,590	65,535	66.9	63.1	5.7
May	198,286	131,935	124,577	3,350	121,227	7,358	66,351	66.5	62.8	5.6
June	198,453	131,978	124,533	3,455	121,078	7,445	66,475	66.5	62.8	5.6
July	198,615	132,300	124,804	3,398	121,406	7,496	66,315	66.6	62.8	5.7
Aug	198,801	132,246	124,729	3,387	121,342	7,517	66,555	66.5	62.7	5.7
Sept	199,005	132,450	124,927	3,307	121,620	7,523	66,555	66.6	62.8	5.7
Oct	199,192	132,564	125,235	3,427	121,808	7,329	66,628	66.6	62.9	5.5
Nov	199,355	132,533	125,124	3,340	121,784	7,409	66,822	66.5	62.8	5.6
Dec	199,508	132,422	125,068	3,344	121,724	7,354	67,086	66.4	62.7	5.6
1996: Jan	199,634	132,899	125,311	3,498	121,813	7,588	66,735	66.6	62.8	5.7
Feb	199,772	133,070	125,706	3,499	122,207	7,364	66,703	66.6	62.9	5.5
Mar	199,921	133,464	126,062	3,470	122,592	7,402	66,457	66.8	63.1	5.5
Apr	200,101	133,427	126,125	3,412	122,713	7,302	66,674	66.7	63.0	5.5
May	200,278	133,759	126,428	3,474	122,954	7,331	66,519	66.8	63.1	5.5
June	200,459	133,709	126,590	3,408	123,182	7,119	66,750	66.7	63.2	5.3
July	200,641	134,165	126,889	3,470	123,419	7,276	66,476	66.9	63.2	5.4
Aug	200,847	133,898	126,988	3,418	123,570	6,910	66,949	66.7	63.2	5.2
Sept	201,060	134,291	127,248	3,480	123,768	7,043	66,770	66.8	63.3	5.2
Oct	201,273	134,636	127,617	3,450	124,167	7,019	66,637	66.9	63.4	5.2
Nov	201,463	134,831	127,644	3,354	124,290	7,187	66,632	66.9	63.4	5.3
Dec	201,636	135,022	127,855	3,426	124,429	7,167	66,614	67.0	63.4	5.3

[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 350,000 to labor force, total employment, and agricultural employment. Beginning 1960, inclusion of Alaska and Hawaii added about 500,000 to population, 300,000 to labor force, and 240,000 to nonagricultural employment. Beginning 1962, introduction of 1960 census data reduced population by about 50,000 and labor force and employment by 200,000. Beginning 1972, introduction of 1970 census data added about 800,000 to civilian noninstitutional population and 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. Beginning 1986, the introduction of revised population controls added about 400,000 to the civilian population and labor force and 350,000 to civilian employment. Unemployment levels and rates were not significantly affected.

Beginning 1990, the introduction of 1990 census-based population controls, adjusted for the estimated undercount, added about 1.1 million to the civilian population and labor force, 880,000 to civilian employment, and 175,000 to unemployment. The overall unemployment rate rose by about 0.1 percentage point.

Beginning 1994, data are not strictly comparable with data for 1993 and prior years because of the introduction of a major redesign of the Current Population Survey and collection methodology.

Note.—Labor force data in Tables B–33 through B–42 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–34.—*Civilian employment and unemployment by sex and age, 1948–96*

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Year or month	Civilian employment							Unemployment						
	Total	Males			Females			Total	Males			Females		
		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1948	58,343	41,725	2,344	39,382	16,617	1,682	14,936	2,276	1,559	256	1,305	717	153	564
1949	57,651	40,925	2,124	38,803	16,723	1,588	15,137	3,637	2,572	353	2,219	1,065	223	841
1950	58,918	41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049	195	854
1951	59,961	41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834	145	689
1952	60,250	41,682	2,107	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698	140	559
1953	61,179	42,430	2,136	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632	123	510
1954	60,109	41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188	191	997
1955	62,170	42,621	2,095	40,526	19,551	1,547	18,002	2,852	1,854	274	1,580	998	176	823
1956	63,799	43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	269	1,442	1,039	209	832
1957	64,071	43,357	2,115	41,239	20,714	1,663	19,052	2,859	1,841	300	1,541	1,018	197	821
1958	63,036	42,423	2,012	40,411	20,613	1,570	19,043	4,602	3,098	416	2,681	1,504	262	1,242
1959	64,630	43,466	2,198	41,267	21,164	1,640	19,524	3,740	2,420	398	2,022	1,320	256	1,063
1960	65,778	43,904	2,361	41,543	21,874	1,768	20,105	3,852	2,486	426	2,060	1,366	286	1,080
1961	65,746	43,656	2,315	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717	349	1,368
1962	66,702	44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	408	2,016	1,488	313	1,175
1963	67,762	44,657	2,406	42,251	23,105	1,849	21,257	4,070	2,472	501	1,971	1,598	383	1,216
1964	69,305	45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581	385	1,195
1965	71,088	46,340	2,918	43,422	24,748	2,118	22,630	3,366	1,914	479	1,435	1,452	395	1,056
1966	72,895	46,919	3,253	43,668	25,976	2,468	23,510	2,875	1,551	432	1,120	1,324	405	921
1967	74,372	47,479	3,186	44,294	26,893	2,496	24,397	2,975	1,508	448	1,060	1,468	391	1,078
1968	75,920	48,114	3,255	44,859	27,807	2,526	25,281	2,817	1,419	426	993	1,397	412	985
1969	77,902	48,818	3,430	45,388	29,084	2,687	26,397	2,832	1,403	440	963	1,429	413	1,015
1970	78,678	48,990	3,409	45,581	29,688	2,735	26,952	4,093	2,238	599	1,638	1,855	506	1,349
1971	79,367	49,390	3,478	45,912	29,976	2,730	27,246	5,016	2,789	693	2,097	2,227	568	1,658
1972	82,153	50,896	3,765	47,130	31,257	2,980	28,276	4,882	2,659	711	1,948	2,222	598	1,625
1973	85,064	52,349	4,039	48,310	32,715	3,231	29,484	4,365	2,275	653	1,624	2,089	583	1,507
1974	86,794	53,024	4,103	48,922	33,769	3,345	30,424	5,156	2,714	757	1,957	2,441	665	1,777
1975	85,846	51,857	3,839	48,018	33,989	3,263	30,726	7,929	4,442	966	3,476	3,486	802	2,684
1976	88,752	53,138	3,947	49,190	35,615	3,389	32,226	7,406	4,036	939	3,098	3,369	780	2,588
1977	92,017	54,728	4,174	50,555	37,289	3,514	33,775	6,991	3,667	874	2,794	3,324	789	2,535
1978	96,048	56,479	4,336	52,143	39,569	3,734	35,836	6,202	3,142	813	2,328	3,061	769	2,292
1979	98,824	57,607	4,300	53,308	41,217	3,783	37,434	6,137	3,120	811	2,308	3,018	743	2,276
1980	99,303	57,186	4,085	53,101	42,117	3,625	38,492	7,637	4,267	913	3,353	3,370	755	2,615
1981	100,397	57,397	3,815	53,582	43,000	3,411	39,590	8,273	4,577	962	3,615	3,696	800	2,895
1982	99,526	56,271	3,379	52,891	43,256	3,170	40,086	10,678	6,179	1,090	5,089	4,499	886	3,613
1983	100,834	56,787	3,300	53,487	44,047	3,043	41,004	10,717	6,260	1,003	5,257	4,457	825	3,632
1984	105,005	59,091	3,322	55,769	45,915	3,122	42,793	8,539	4,744	812	3,932	3,794	687	3,107
1985	107,150	59,891	3,328	56,562	47,259	3,105	44,154	8,312	4,521	806	3,715	3,791	661	3,129
1986	109,597	60,892	3,323	57,569	48,706	3,149	45,556	8,237	4,530	779	3,751	3,707	675	3,032
1987	112,440	62,107	3,381	58,726	50,334	3,260	47,074	7,425	4,101	732	3,369	3,324	616	2,709
1988	114,968	63,273	3,492	59,781	51,696	3,313	48,383	6,701	3,655	667	2,987	3,046	558	2,487
1989	117,342	64,315	3,477	60,837	53,027	3,282	49,745	6,528	3,525	658	2,867	3,003	536	2,467
1990	118,793	65,104	3,427	61,678	53,689	3,154	50,535	7,047	3,906	667	3,239	3,140	544	2,596
1991	117,718	64,223	3,044	61,178	53,496	2,862	50,634	8,628	4,946	751	4,195	3,683	608	3,074
1992	118,492	64,440	2,944	61,496	54,052	2,724	51,328	9,613	5,523	806	4,717	4,090	621	3,469
1993	120,259	65,349	2,994	62,355	54,910	2,811	52,099	8,940	5,055	768	4,287	3,885	597	3,288
1994	123,060	66,450	3,156	63,294	56,610	3,005	53,606	7,996	4,367	740	3,627	3,629	580	3,049
1995	124,900	67,377	3,292	64,085	57,523	3,127	54,396	7,404	3,983	744	3,239	3,421	602	2,819
1996	126,708	68,207	3,310	64,897	58,501	3,190	55,311	7,236	3,880	733	3,146	3,356	573	2,783
1995: Jan	124,766	67,498	3,276	64,222	57,268	3,117	54,151	7,432	4,074	691	3,383	3,358	575	2,783
Feb	124,937	67,617	3,248	64,369	57,320	3,097	54,223	7,203	3,852	774	3,078	3,351	572	2,779
Mar	125,070	67,702	3,347	64,355	57,368	3,199	54,169	7,201	3,824	673	3,151	3,377	584	2,793
Apr	125,023	67,544	3,316	64,228	57,479	3,113	54,366	7,590	4,002	726	3,276	3,588	623	2,965
May	124,577	67,168	3,242	63,926	57,409	3,117	54,292	7,358	4,034	740	3,294	3,324	606	2,718
June	124,533	67,328	3,327	64,001	57,205	3,167	54,038	7,445	3,990	754	3,236	3,455	591	2,864
July	124,804	67,290	3,312	63,978	57,514	3,056	54,458	7,496	3,968	750	3,218	3,528	647	2,881
Aug	124,729	67,139	3,308	63,831	57,590	3,171	54,419	7,517	4,073	782	3,291	3,444	587	2,857
Sept	124,927	67,328	3,297	64,031	57,599	3,104	54,495	7,523	4,035	761	3,274	3,488	629	2,859
Oct	125,235	67,428	3,245	64,183	57,807	3,150	54,657	7,329	3,856	762	3,094	3,473	575	2,898
Nov	125,124	67,240	3,292	63,948	57,884	3,114	54,770	7,409	4,032	743	3,289	3,377	613	2,764
Dec	125,068	67,290	3,293	63,997	57,778	3,098	54,680	7,354	4,073	767	3,306	3,281	627	2,654
1996: Jan	125,311	67,527	3,269	64,258	57,784	3,100	54,684	7,588	4,059	761	3,298	3,529	619	2,910
Feb	125,706	67,742	3,326	64,416	57,964	3,119	54,845	7,364	4,002	730	3,272	3,362	589	2,773
Mar	126,062	67,856	3,294	64,562	58,206	3,152	55,054	7,402	4,080	756	3,324	3,322	573	2,749
Apr	126,125	67,932	3,359	64,573	58,193	3,118	55,075	7,302	3,990	734	3,256	3,312	570	2,742
May	126,428	68,188	3,400	64,788	58,240	3,173	55,067	7,331	3,932	724	3,208	3,399	581	2,818
June	126,590	68,251	3,318	64,933	58,339	3,143	55,196	7,119	3,859	704	3,155	3,260	547	2,713
July	126,889	68,376	3,305	65,071	58,513	3,198	55,315	7,276	3,941	790	3,151	3,335	511	2,824
Aug	126,988	68,368	3,203	65,165	58,620	3,122	55,498	6,910	3,593	714	2,879	3,317	585	2,732
Sept	127,248	68,304	3,326	64,978	58,944	3,300	55,644	7,043	3,783	705	3,078	3,260	555	2,705
Oct	127,617	68,647	3,348	65,299	58,970	3,289	55,681	7,019	3,716	742	2,974	3,303	552	2,751
Nov	127,644	68,589	3,240	65,349	59,055	3,302	55,753	7,187	3,773	731	3,042	3,414	593	2,821
Dec	127,855	68,707	3,340	65,367	59,148	3,277	55,871	7,167	3,707	705	3,002	3,460	603	2,857

Note.—See footnote 5 and Note, Table B–33.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–35.—*Civilian employment by demographic characteristic, 1954–96*

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Year or month	All civilian workers	White				Black and other				Black			
		Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19
1954	60,109	53,957	37,846	16,111	3,078	6,152	3,773	2,379	396	......	......	......	......
1955	62,170	55,833	38,719	17,114	3,225	6,341	3,904	2,437	418	......	......	......	......
1956	63,799	57,269	39,368	17,901	3,389	6,534	4,013	2,521	430	......	......	......	......
1957	64,071	57,465	39,349	18,116	3,374	6,604	4,006	2,598	407	......	......	......	......
1958	63,036	56,613	38,591	18,022	3,216	6,423	3,833	2,590	365	......	......	......	......
1959	64,630	58,006	39,494	18,512	3,475	6,623	3,971	2,652	362	......	......	......	......
1960	65,778	58,850	39,755	19,095	3,700	6,928	4,149	2,779	430	......	......	......	......
1961	65,746	58,913	39,588	19,325	3,693	6,833	4,068	2,765	414	......	......	......	......
1962	66,702	59,698	40,016	19,682	3,774	7,003	4,160	2,843	420	......	......	......	......
1963	67,762	60,622	40,428	20,194	3,851	7,140	4,229	2,911	404	......	......	......	......
1964	69,305	61,922	41,115	20,807	4,076	7,383	4,359	3,024	440	......	......	......	......
1965	71,088	63,446	41,844	21,602	4,562	7,643	4,496	3,147	474	......	......	......	......
1966	72,895	65,021	42,331	22,690	5,176	7,877	4,588	3,289	545	......	......	......	......
1967	74,372	66,361	42,833	23,528	5,114	8,011	4,646	3,365	568	......	......	......	......
1968	75,920	67,750	43,411	24,339	5,195	8,169	4,702	3,467	584	......	......	......	......
1969	77,902	69,518	44,048	25,470	5,508	8,384	4,770	3,614	609	......	......	......	......
1970	78,678	70,217	44,178	26,039	5,571	8,464	4,813	3,650	574	......	......	......	......
1971	79,367	70,878	44,595	26,283	5,670	8,488	4,796	3,692	538	......	......	......	......
1972	82,153	73,370	45,944	27,426	6,173	8,783	4,952	3,832	573	7,802	4,368	3,433	509
1973	85,064	75,708	47,085	28,623	6,623	9,356	5,265	4,092	647	8,128	4,527	3,601	570
1974	86,794	77,184	47,674	29,511	6,796	9,610	5,352	4,258	652	8,203	4,527	3,677	554
1975	85,846	76,411	46,697	29,714	6,487	9,435	5,161	4,275	615	7,894	4,275	3,618	507
1976	88,752	78,853	47,775	31,078	6,724	9,899	5,363	4,536	611	8,227	4,404	3,823	508
1977	92,017	81,700	49,150	32,550	7,068	10,317	5,579	4,739	619	8,540	4,565	3,975	508
1978	96,048	84,936	50,544	34,392	7,367	11,112	5,936	5,177	703	9,102	4,796	4,307	571
1979	98,824	87,259	51,452	35,807	7,356	11,565	6,156	5,409	727	9,359	4,923	4,436	579
1980	99,303	87,715	51,127	36,587	7,021	11,588	6,059	5,529	689	9,313	4,798	4,515	547
1981	100,397	88,709	51,315	37,394	6,588	11,688	6,083	5,606	637	9,355	4,794	4,561	505
1982	99,526	87,903	50,287	37,615	5,984	11,624	5,983	5,641	565	9,189	4,637	4,552	428
1983	100,834	88,893	50,621	38,272	5,799	11,941	6,166	5,775	543	9,375	4,753	4,622	416
1984	105,005	92,120	52,462	39,659	5,836	12,885	6,629	6,256	607	10,119	5,124	4,995	474
1985	107,150	93,736	53,046	40,690	5,768	13,414	6,845	6,569	666	10,501	5,270	5,231	532
1986	109,597	95,660	53,785	41,876	5,792	13,937	7,107	6,830	681	10,814	5,428	5,386	536
1987	112,440	97,789	54,647	43,142	5,898	14,652	7,459	7,192	742	11,309	5,661	5,648	587
1988	114,968	99,812	55,550	44,262	6,030	15,156	7,722	7,434	774	11,658	5,824	5,834	601
1989	117,342	101,584	56,352	45,232	5,946	15,757	7,963	7,795	813	11,953	5,928	6,025	625
1990	118,793	102,261	56,703	45,558	5,779	16,533	8,401	8,131	801	12,175	5,995	6,180	598
1991	117,718	101,182	55,797	45,385	5,216	16,536	8,426	8,110	690	12,074	5,961	6,113	494
1992	118,492	101,669	55,959	45,710	4,985	16,823	8,482	8,342	684	12,151	5,930	6,221	492
1993	120,259	103,045	56,656	46,390	5,113	17,214	8,693	8,521	691	12,382	6,047	6,334	494
1994	123,060	105,190	57,452	47,738	5,398	17,870	8,998	8,872	763	12,835	6,241	6,595	552
1995	124,900	106,490	58,146	48,344	5,593	18,409	9,231	9,179	826	13,279	6,422	6,857	586
1996	126,708	107,808	58,888	48,920	5,667	18,900	9,319	9,580	832	13,542	6,456	7,086	613
1995: Jan	124,766	106,438	58,222	48,216	5,667	18,242	9,261	8,981	744	13,129	6,421	6,708	521
Feb	124,937	106,497	58,278	48,219	5,526	18,450	9,351	9,099	804	13,328	6,519	6,809	565
Mar	125,070	106,531	58,297	48,234	5,685	18,480	9,356	9,124	827	13,351	6,551	6,800	580
Apr	125,023	106,509	58,177	48,332	5,637	18,474	9,355	9,119	792	13,317	6,497	6,820	569
May	124,577	106,123	57,883	48,240	5,575	18,448	9,253	9,195	793	13,300	6,419	6,881	563
June	124,533	106,271	58,118	48,153	5,728	18,289	9,204	9,085	808	13,186	6,403	6,783	575
July	124,804	106,609	58,149	48,460	5,595	18,222	9,149	9,073	808	13,086	6,336	6,750	570
Aug	124,729	106,510	58,037	48,473	5,629	18,264	9,145	9,119	827	13,114	6,321	6,793	567
Sept	124,927	106,648	58,159	48,489	5,520	18,298	9,212	9,086	873	13,174	6,397	6,777	613
Oct	125,235	106,724	58,212	48,512	5,538	18,514	9,214	9,300	859	13,380	6,439	6,941	611
Nov	125,124	106,503	58,077	48,426	5,508	18,664	9,179	9,485	911	13,576	6,432	7,144	682
Dec	125,068	106,525	58,195	48,330	5,530	18,567	9,107	9,460	855	13,314	6,341	7,072	614
1996: Jan	125,311	106,631	58,356	48,275	5,560	18,583	9,144	9,439	830	13,388	6,382	7,006	600
Feb	125,706	107,192	58,609	48,583	5,626	18,491	9,125	9,366	785	13,326	6,365	6,961	584
Mar	126,062	107,398	58,633	48,765	5,587	18,635	9,199	9,436	840	13,401	6,380	7,021	632
Apr	126,125	107,364	58,704	48,660	5,615	18,728	9,219	9,509	863	13,432	6,398	7,034	645
May	126,428	107,576	58,848	48,728	5,705	18,857	9,319	9,538	881	13,584	6,487	7,097	683
June	126,590	107,733	58,922	48,811	5,666	18,856	9,304	9,552	810	13,478	6,403	7,075	599
July	126,889	107,862	58,987	48,875	5,680	19,034	9,384	9,650	837	13,612	6,490	7,122	603
Aug	126,988	107,853	58,908	48,945	5,478	19,176	9,504	9,672	814	13,699	6,594	7,105	596
Sept	127,248	108,217	58,970	49,247	5,781	19,061	9,381	9,680	839	13,566	6,456	7,110	604
Oct	127,617	108,527	59,234	49,293	5,794	19,093	9,412	9,681	849	13,647	6,502	7,145	626
Nov	127,644	108,570	59,183	49,387	5,764	19,137	9,437	9,700	804	13,673	6,518	7,155	576
Dec	127,855	108,734	59,299	49,435	5,764	19,132	9,397	9,735	831	13,693	6,502	7,191	607

Note.—See footnote 5 and Note, Table B–33.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–36.—*Unemployment by demographic characteristic, 1954–96*

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Year or month	All civilian workers	White: Total	White: Males	White: Females	White: Both sexes 16–19	Black and other: Total	Black and other: Males	Black and other: Females	Black and other: Both sexes 16–19	Black: Total	Black: Males	Black: Females	Black: Both sexes 16–19
1954	3,532	2,859	1,913	946	423	673	431	242	79	....	....	....	....
1955	2,852	2,252	1,478	774	373	601	376	225	77	....	....	....	....
1956	2,750	2,159	1,366	793	382	591	345	246	95	....	....	....	....
1957	2,859	2,289	1,477	812	401	570	364	206	96	....	....	....	....
1958	4,602	3,680	2,489	1,191	541	923	610	313	138	....	....	....	....
1959	3,740	2,946	1,903	1,043	525	793	517	276	128	....	....	....	....
1960	3,852	3,065	1,988	1,077	575	788	498	290	138	....	....	....	....
1961	4,714	3,743	2,398	1,345	669	971	599	372	159	....	....	....	....
1962	3,911	3,052	1,915	1,137	580	861	509	352	142	....	....	....	....
1963	4,070	3,208	1,976	1,232	708	863	496	367	176	....	....	....	....
1964	3,786	2,999	1,779	1,220	708	787	426	361	165	....	....	....	....
1965	3,366	2,691	1,556	1,135	705	678	360	318	171	....	....	....	....
1966	2,875	2,255	1,241	1,014	651	622	310	312	186	....	....	....	....
1967	2,975	2,338	1,208	1,130	635	638	300	338	203	....	....	....	....
1968	2,817	2,226	1,142	1,084	644	590	277	313	194	....	....	....	....
1969	2,832	2,260	1,137	1,123	660	571	267	304	193	....	....	....	....
1970	4,093	3,339	1,857	1,482	871	754	380	374	235	....	....	....	....
1971	5,016	4,085	2,309	1,777	1,011	930	481	450	249	....	....	....	....
1972	4,882	3,906	2,173	1,733	1,021	977	486	491	288	906	448	458	279
1973	4,365	3,442	1,836	1,606	955	924	440	484	280	846	395	451	262
1974	5,156	4,097	2,169	1,927	1,104	1,058	544	514	318	965	494	470	297
1975	7,929	6,421	3,627	2,794	1,413	1,507	815	692	355	1,369	741	629	330
1976	7,406	5,914	3,258	2,656	1,364	1,492	779	713	355	1,334	698	637	330
1977	6,991	5,441	2,883	2,558	1,284	1,550	784	766	379	1,393	698	695	354
1978	6,202	4,698	2,411	2,287	1,189	1,505	731	774	394	1,330	641	690	360
1979	6,137	4,664	2,405	2,260	1,193	1,473	714	759	362	1,319	636	683	333
1980	7,637	5,884	3,345	2,540	1,291	1,752	922	830	377	1,553	815	738	343
1981	8,273	6,343	3,580	2,762	1,374	1,930	997	933	388	1,731	891	840	357
1982	10,678	8,241	4,846	3,395	1,534	2,437	1,334	1,104	443	2,142	1,167	975	396
1983	10,717	8,128	4,859	3,270	1,387	2,588	1,401	1,187	441	2,272	1,213	1,059	392
1984	8,539	6,372	3,600	2,772	1,116	2,167	1,144	1,022	384	1,914	1,003	911	353
1985	8,312	6,191	3,426	2,765	1,074	2,121	1,095	1,026	394	1,864	951	913	357
1986	8,237	6,140	3,433	2,708	1,070	2,097	1,097	999	383	1,840	946	894	347
1987	7,425	5,501	3,132	2,369	995	1,924	969	955	353	1,684	826	858	312
1988	6,701	4,944	2,766	2,177	910	1,757	888	869	316	1,547	771	776	288
1989	6,528	4,770	2,636	2,135	863	1,757	889	868	331	1,544	773	772	300
1990	7,047	5,186	2,935	2,251	903	1,860	971	889	308	1,565	806	758	268
1991	8,628	6,560	3,859	2,701	1,029	2,068	1,087	981	330	1,723	890	833	280
1992	9,613	7,169	4,209	2,959	1,037	2,444	1,314	1,130	390	2,011	1,067	944	324
1993	8,940	6,655	3,828	2,827	992	2,285	1,227	1,058	373	1,844	971	872	313
1994	7,996	5,892	3,275	2,617	960	2,104	1,092	1,011	360	1,666	848	818	300
1995	7,404	5,459	2,999	2,460	952	1,945	984	961	394	1,538	762	777	325
1996	7,236	5,300	2,896	2,404	939	1,936	984	952	367	1,592	808	784	310
1995: Jan	7,432	5,450	3,053	2,397	912	1,931	983	948	353	1,517	765	752	286
Feb	7,203	5,252	2,896	2,356	940	1,944	951	993	398	1,541	743	798	329
Mar	7,201	5,326	2,930	2,396	909	1,874	894	980	352	1,451	662	789	278
Apr	7,590	5,594	3,037	2,557	957	1,990	974	1,016	403	1,584	763	821	319
May	7,358	5,522	3,071	2,451	951	1,874	972	902	393	1,481	768	713	318
June	7,445	5,449	2,990	2,459	916	1,982	992	990	415	1,571	783	788	346
July	7,496	5,452	2,921	2,531	971	1,989	1,017	972	416	1,589	794	795	345
Aug	7,517	5,475	3,016	2,459	935	2,056	1,075	981	437	1,618	829	789	369
Sept	7,523	5,492	3,025	2,467	967	2,044	1,016	1,028	420	1,653	791	862	365
Oct	7,329	5,473	2,946	2,527	977	1,920	948	972	372	1,478	694	784	306
Nov	7,409	5,553	3,087	2,466	992	1,841	934	907	376	1,441	709	732	311
Dec	7,354	5,500	3,037	2,463	1,004	1,884	1,045	839	387	1,530	837	693	329
1996: Jan	7,588	5,576	3,041	2,535	1,018	1,957	979	978	360	1,594	800	794	312
Feb	7,364	5,459	2,994	2,465	957	1,900	1,010	890	355	1,536	806	730	286
Mar	7,402	5,429	3,025	2,404	960	1,974	1,059	915	372	1,618	867	751	307
Apr	7,302	5,356	2,960	2,396	935	1,941	1,038	903	376	1,572	813	759	316
May	7,331	5,449	2,940	2,509	945	1,929	1,000	929	359	1,554	796	758	288
June	7,119	5,207	2,889	2,318	916	1,891	960	931	321	1,532	780	752	277
July	7,276	5,277	2,905	2,372	953	1,956	1,009	947	339	1,600	846	754	304
Aug	6,910	5,051	2,718	2,333	917	1,880	897	983	388	1,598	754	844	350
Sept	7,043	5,117	2,810	2,307	896	1,938	979	959	366	1,618	827	791	311
Oct	7,019	5,098	2,781	2,317	912	1,962	969	993	388	1,629	813	816	325
Nov	7,187	5,246	2,807	2,439	945	1,927	956	971	388	1,617	813	804	316
Dec	7,167	5,257	2,777	2,480	918	1,943	932	1,011	390	1,613	766	847	322

Note.—See footnote 5 and Note, Table B–33.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–37.—*Civilian labor force participation rate and employment/population ratio, 1948–96*

[Percent;[1] monthly data seasonally adjusted]

Year or month	Labor force participation rate: All civilian workers	Males	Females	Both sexes 16–19 years	White	Black and other	Black	Employment/population ratio: All civilian workers	Males	Females	Both sexes 16–19 years	White	Black and other	Black
1948	58.8	86.6	32.7	52.5	....	....	....	56.6	83.5	31.3	47.7	....	....	....
1949	58.9	86.4	33.1	52.2	....	....	....	55.4	81.3	31.2	45.2	....	....	
1950	59.2	86.4	33.9	51.8	....	....	....	56.1	82.0	32.0	45.5	....	....	....
1951	59.2	86.3	34.6	52.2	....	....	....	57.3	84.0	33.1	47.9	....	....	....
1952	59.0	86.3	34.7	51.3	....	....	....	57.3	83.9	33.4	46.9	....	....	....
1953	58.9	86.0	34.4	50.2	....	....	....	57.1	83.6	33.3	46.4	....	....	....
1954	58.8	85.5	34.6	48.3	58.2	64.0	....	55.5	81.0	32.5	42.3	55.2	58.0	....
1955	59.3	85.4	35.7	48.9	58.7	64.2	....	56.7	81.8	34.0	43.5	56.5	58.7	....
1956	60.0	85.5	36.9	50.9	59.4	64.9	....	57.5	82.3	35.1	45.3	57.3	59.5	....
1957	59.6	84.8	36.9	49.6	59.1	64.4	....	57.1	81.3	35.1	43.9	56.8	59.3	....
1958	59.5	84.2	37.1	47.4	58.9	64.8	....	55.4	78.5	34.5	39.9	55.3	56.7	....
1959	59.3	83.7	37.1	46.7	58.7	64.3	....	56.0	79.3	35.0	39.9	55.9	57.5	....
1960	59.4	83.3	37.7	47.5	58.8	64.5	....	56.1	78.9	35.5	40.5	55.9	57.9	....
1961	59.3	82.9	38.1	46.9	58.8	64.1	....	55.4	77.6	35.4	39.1	55.3	56.2	....
1962	58.8	82.0	37.9	46.1	58.3	63.2	....	55.5	77.7	35.6	39.4	55.4	56.3	....
1963	58.7	81.4	38.3	45.2	58.2	63.0	....	55.4	77.1	35.8	37.4	55.3	56.2	....
1964	58.7	81.0	38.7	44.5	58.2	63.1	....	55.7	77.3	36.3	37.3	55.5	57.0	....
1965	58.9	80.7	39.3	45.7	58.4	62.9	....	56.2	77.5	37.1	38.9	56.0	57.8	....
1966	59.2	80.4	40.3	48.2	58.7	63.0	....	56.9	77.9	38.3	42.1	56.8	58.4	....
1967	59.6	80.4	41.1	48.4	59.2	62.8	....	57.3	78.0	39.0	42.2	57.2	58.2	....
1968	59.6	80.1	41.6	48.3	59.3	62.2	....	57.5	77.8	39.6	42.2	57.4	58.0	....
1969	60.1	79.8	42.7	49.4	59.9	62.1	....	58.0	77.6	40.7	43.4	58.0	58.1	....
1970	60.4	79.7	43.3	49.9	60.2	61.8	....	57.4	76.2	40.8	42.3	57.5	56.8	....
1971	60.2	79.1	43.4	49.7	60.1	60.9	....	56.6	74.9	40.4	41.3	56.8	54.9	....
1972	60.4	78.9	43.9	51.9	60.4	60.2	59.9	57.0	75.0	41.0	43.5	57.4	54.1	53.7
1973	60.8	78.8	44.7	53.7	60.8	60.5	60.2	57.8	75.5	42.0	45.9	58.2	55.0	54.5
1974	61.3	78.7	45.7	54.8	61.4	60.3	59.8	57.8	74.9	42.6	46.0	58.3	54.3	53.5
1975	61.2	77.9	46.3	54.0	61.5	59.6	58.8	56.1	71.7	42.0	43.3	56.7	51.4	50.1
1976	61.6	77.5	47.3	54.5	61.8	59.8	59.0	56.8	72.0	43.2	44.2	57.5	52.0	50.8
1977	62.3	77.7	48.4	56.0	62.5	60.4	59.8	57.9	72.8	44.5	46.1	58.6	52.5	51.4
1978	63.2	77.9	50.0	57.8	63.3	62.2	61.5	59.3	73.8	46.4	48.3	60.0	54.7	53.6
1979	63.7	77.8	50.9	57.9	63.9	62.2	61.4	59.9	73.8	47.5	48.5	60.6	55.2	53.8
1980	63.8	77.4	51.5	56.7	64.1	61.7	61.0	59.2	72.0	47.7	46.6	60.0	53.6	52.3
1981	63.9	77.0	52.1	55.4	64.3	61.3	60.8	59.0	71.3	48.0	44.6	60.0	52.6	51.3
1982	64.0	76.6	52.6	54.1	64.3	61.6	61.0	57.8	69.0	47.7	41.5	58.8	50.9	49.4
1983	64.0	76.4	52.9	53.5	64.3	62.1	61.5	57.9	68.8	48.0	41.5	58.9	51.0	49.5
1984	64.4	76.4	53.6	53.9	64.6	62.6	62.2	59.5	70.7	49.5	43.7	60.5	53.6	52.3
1985	64.8	76.3	54.5	54.5	65.0	63.3	62.9	60.1	70.9	50.4	44.4	61.0	54.7	53.4
1986	65.3	76.3	55.3	54.7	65.5	63.7	63.3	60.7	71.0	51.4	44.6	61.5	55.4	54.1
1987	65.6	76.2	56.0	54.7	65.8	64.3	63.8	61.5	71.5	52.5	45.5	62.3	56.8	55.6
1988	65.9	76.2	56.6	55.3	66.2	64.0	63.8	62.3	72.0	53.4	46.8	63.1	57.4	56.3
1989	66.5	76.4	57.4	55.9	66.7	64.7	64.2	63.0	72.5	54.3	47.5	63.8	58.2	56.9
1990	66.5	76.4	57.5	53.7	66.9	64.4	64.0	62.8	72.0	54.3	45.3	63.7	57.9	56.7
1991	66.2	75.8	57.4	51.6	66.6	63.8	63.3	61.7	70.4	53.7	42.0	62.6	56.7	55.4
1992	66.4	75.8	57.8	51.3	66.8	64.6	63.9	61.5	69.8	53.8	41.0	62.4	56.4	54.9
1993	66.3	75.4	57.9	51.5	66.8	63.8	63.2	61.7	70.0	54.1	41.7	62.7	56.3	55.0
1994	66.6	75.1	58.8	52.7	67.1	63.9	63.4	62.5	70.4	55.3	43.4	63.5	57.2	56.1
1995	66.6	75.0	58.9	53.5	67.1	64.3	63.7	62.9	70.8	55.6	44.2	63.8	58.1	57.1
1996	66.8	74.9	59.3	52.3	67.2	64.6	64.1	63.2	70.9	56.0	43.5	64.1	58.6	57.4
1995: Jan	66.9	75.5	58.9	53.7	67.3	64.3	63.4	63.1	71.2	55.6	44.8	64.0	58.1	56.9
Feb	66.8	75.4	58.9	53.8	67.1	64.9	64.3	63.1	71.3	55.6	44.4	64.0	58.7	57.7
Mar	66.8	75.4	58.9	54.4	67.2	64.6	64.0	63.2	71.4	55.6	45.6	64.0	58.7	57.7
Apr	66.9	75.3	59.2	54.1	67.3	64.9	64.3	63.1	71.1	55.7	44.7	63.9	58.6	57.5
May	66.5	74.9	58.8	53.3	67.0	64.4	63.7	62.8	70.7	55.6	44.0	63.7	58.4	57.3
June	66.5	75.0	58.7	54.1	67.0	64.1	63.6	62.8	70.8	55.4	44.8	63.7	57.8	56.8
July	66.6	74.9	59.0	53.4	67.1	63.8	63.1	62.8	70.7	55.6	43.8	63.9	57.5	56.3
Aug	66.5	74.7	59.0	53.9	67.0	64.0	63.3	62.7	70.5	55.6	44.5	63.8	57.5	56.3
Sept	66.6	74.8	59.0	53.2	67.1	64.0	63.6	62.8	70.6	55.6	43.7	63.8	57.5	56.5
Oct	66.6	74.6	59.1	52.7	67.1	64.1	63.6	62.9	70.6	55.7	43.6	63.8	58.1	57.3
Nov	66.5	74.6	59.0	52.6	66.9	64.3	64.2	62.8	70.3	55.8	43.4	63.6	58.5	58.0
Dec	66.4	74.6	58.8	52.9	66.9	64.0	63.8	62.7	70.3	55.6	43.5	63.6	58.1	57.3
1996: Jan	66.6	74.8	59.0	52.7	66.9	64.3	64.0	62.8	70.6	55.6	43.3	63.6	58.1	57.2
Feb	66.6	74.9	59.0	52.7	67.2	63.7	63.4	62.9	70.7	55.7	43.8	63.9	57.8	56.8
Mar	66.8	75.0	59.1	52.7	67.2	64.3	64.0	63.1	70.8	55.9	43.7	64.0	58.1	57.1
Apr	66.7	75.0	59.1	52.6	67.1	64.3	63.8	63.0	70.8	55.9	43.7	63.9	58.3	57.1
May	66.8	75.1	59.1	53.1	67.2	64.6	64.3	63.1	71.0	55.9	44.3	64.0	58.6	57.7
June	66.7	75.0	59.0	51.8	67.1	64.4	63.7	63.2	71.0	55.9	43.4	64.0	58.5	57.2
July	66.9	75.2	59.2	52.2	67.2	65.0	64.4	63.2	71.1	56.0	43.5	64.1	58.9	57.7
Aug	66.7	74.7	59.3	50.7	67.0	65.1	64.7	63.2	71.0	56.1	42.0	64.0	59.3	57.9
Sept	66.8	74.7	59.5	52.2	67.2	64.8	64.1	63.3	70.8	56.3	43.9	64.2	58.8	57.3
Oct	66.9	74.9	59.5	52.4	67.3	64.8	64.4	63.4	71.1	56.3	43.8	64.3	58.8	57.5
Nov	66.9	74.9	59.6	52.0	67.4	64.7	64.3	63.4	71.0	56.3	43.3	64.3	58.8	57.5
Dec	67.0	74.9	59.7	52.3	67.4	64.7	64.3	63.4	71.0	56.4	43.7	64.3	58.7	57.5

[1] Civilian labor force or 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–33.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–38.—*Civilian labor force participation rate by demographic characteristic, 1954–96*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	White: Total	White: Males: Total	White: Males: 16–19 years	White: Males: 20 years and over	White: Females: Total	White: Females: 16–19 years	White: Females: 20 years and over	Black and other or black: Total	Black and other or black: Males: Total	Black and other or black: Males: 16–19 years	Black and other or black: Males: 20 years and over	Black and other or black: Females: Total	Black and other or black: Females: 16–19 years	Black and other or black: Females: 20 years and over
									Black and other						
1954	58.8	58.2	85.6	57.6	87.8	33.3	40.6	32.7	64.0	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	64.2	85.1	60.8	87.8	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	84.2	58.8	87.0	47.1	33.2	48.6
1958	59.5	58.9	84.3	56.5	86.6	35.8	40.1	35.5	64.8	84.1	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	80.1	49.9	84.1	48.6	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	49.4	33.5	51.6
1967	59.6	59.2	80.6	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	77.7	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
									Black						
1972	60.4	60.4	79.6	60.1	82.0	43.2	48.1	42.7	59.9	73.6	46.3	78.5	48.7	32.2	51.2
1973	60.8	60.8	79.4	62.0	81.6	44.1	50.1	43.5	60.2	73.4	45.7	78.4	49.3	34.2	51.6
1974	61.3	61.4	79.4	62.9	81.4	45.2	51.7	44.4	59.8	72.9	46.7	77.6	49.0	33.4	51.4
1975	61.2	61.5	78.7	61.9	80.7	45.9	51.5	45.3	58.8	70.9	42.6	76.0	48.8	34.2	51.1
1976	61.6	61.8	78.4	62.3	80.3	46.9	52.8	46.2	59.0	70.0	41.3	75.4	49.8	32.9	52.5
1977	62.3	62.5	78.5	64.0	80.2	48.0	54.5	47.3	59.8	70.6	43.2	75.6	50.8	32.9	53.6
1978	63.2	63.3	78.6	65.0	80.1	49.4	56.7	48.7	61.5	71.5	44.9	76.2	53.1	37.3	55.5
1979	63.7	63.9	78.6	64.8	80.1	50.5	57.4	49.8	61.4	71.3	43.6	76.3	53.1	36.8	55.4
1980	63.8	64.1	78.2	63.7	79.8	51.2	56.2	50.6	61.0	70.3	43.2	75.1	53.1	34.9	55.6
1981	63.9	64.3	77.9	62.4	79.5	51.9	55.4	51.5	60.8	70.0	41.6	74.5	53.5	34.0	56.0
1982	64.0	64.3	77.4	60.0	79.2	52.4	55.0	52.2	61.0	70.1	39.8	74.7	53.7	33.5	56.2
1983	64.0	64.3	77.1	59.4	78.9	52.7	54.5	52.5	61.5	70.6	39.9	75.2	54.2	33.0	56.8
1984	64.4	64.6	77.1	59.0	78.7	53.3	55.4	53.1	62.2	70.8	41.7	74.8	55.2	35.0	57.6
1985	64.8	65.0	77.0	59.7	78.5	54.1	55.2	54.0	62.9	70.8	44.6	74.4	56.5	37.9	58.6
1986	65.3	65.5	76.9	59.3	78.5	55.0	56.3	54.9	63.3	71.2	43.7	74.8	56.9	39.1	58.9
1987	65.6	65.8	76.8	59.0	78.4	55.7	56.5	55.6	63.8	71.1	43.6	74.7	58.0	39.6	60.0
1988	65.9	66.2	76.9	60.0	78.3	56.4	57.2	56.3	63.8	71.0	43.8	74.6	58.0	37.9	60.1
1989	66.5	66.7	77.1	61.0	78.5	57.2	57.1	57.2	64.2	71.0	44.6	74.4	58.7	40.4	60.6
1990	66.5	66.9	77.1	59.6	78.5	57.4	55.3	57.6	64.0	71.0	40.7	75.0	58.3	36.8	60.6
1991	66.2	66.6	76.5	57.3	78.0	57.4	54.1	57.6	63.3	70.4	37.3	74.6	57.5	33.5	60.0
1992	66.4	66.8	76.5	56.9	78.0	57.7	52.5	58.1	63.9	70.7	40.6	74.3	58.5	35.2	60.8
1993	66.3	66.8	76.2	56.6	77.7	58.0	53.5	58.3	63.2	69.6	39.5	73.2	57.9	34.6	60.2
1994	66.6	67.1	75.9	57.7	77.3	58.9	55.1	59.2	63.4	69.1	40.8	72.5	58.7	36.3	60.9
1995	66.6	67.1	75.7	58.5	77.1	59.0	55.5	59.2	63.7	69.0	40.1	72.5	59.5	39.8	61.4
1996	66.8	67.2	75.8	57.1	77.3	59.1	54.7	59.4	64.1	68.7	39.5	72.3	60.4	38.9	62.6
1995: Jan	66.9	67.3	76.2	58.7	77.5	58.9	57.3	59.0	63.4	69.5	38.0	73.3	58.5	34.2	60.9
Feb	66.8	67.1	76.0	58.5	77.4	58.8	55.3	59.1	64.3	70.2	42.7	73.4	59.6	37.1	61.8
Mar	66.8	67.2	76.0	59.2	77.4	58.9	56.6	59.0	64.0	69.6	36.6	73.6	59.4	39.6	61.3
Apr	66.9	67.3	76.0	59.2	77.3	59.1	56.3	59.3	64.3	70.0	39.8	73.6	59.7	38.9	61.8
May	66.5	67.0	75.6	58.4	76.9	58.9	55.7	59.1	63.7	69.2	38.7	73.0	59.3	38.3	61.4
June	66.5	67.0	75.7	59.4	77.0	58.8	56.6	58.9	63.6	69.1	40.9	72.5	59.0	40.0	60.9
July	66.6	67.1	75.6	58.9	76.9	59.2	55.4	59.4	63.1	68.5	40.6	71.8	58.8	39.9	60.6
Aug	66.5	67.0	75.6	58.7	76.9	59.1	55.4	59.3	63.3	68.6	41.4	71.8	59.0	40.8	60.8
Sept	66.6	67.1	75.6	58.1	77.0	59.0	54.4	59.4	63.6	68.8	41.0	72.2	59.3	43.7	60.9
Oct	66.6	67.1	75.5	58.0	76.9	59.1	54.7	59.4	63.6	68.2	38.6	71.8	59.9	40.8	61.8
Nov	66.5	66.9	75.5	57.7	76.9	58.9	54.6	59.2	64.2	68.1	41.7	71.6	61.0	42.3	62.9
Dec	66.4	66.9	75.5	58.0	76.9	58.7	54.5	59.0	63.8	68.4	40.4	71.8	60.1	41.0	62.0
1996: Jan	66.6	66.9	75.7	58.3	77.0	58.7	54.9	59.0	64.0	68.5	38.8	72.1	60.3	40.2	62.3
Feb	66.6	67.2	75.9	58.2	77.3	59.0	54.7	59.3	63.4	68.3	37.6	72.0	59.4	37.6	61.6
Mar	66.8	67.2	75.9	57.5	77.4	59.1	54.5	59.4	64.0	68.9	41.3	72.3	59.9	39.7	62.0
Apr	66.7	67.1	75.8	58.0	77.3	58.9	53.6	59.3	63.8	68.5	42.5	71.6	60.0	40.0	62.0
May	66.8	67.2	75.9	58.7	77.3	59.1	54.2	59.4	64.3	69.0	42.6	72.3	60.4	40.4	62.4
June	66.7	67.1	75.9	57.1	77.4	58.9	54.3	59.2	63.7	68.0	36.9	71.8	60.1	37.7	62.4
July	66.9	67.2	75.9	57.2	77.4	59.0	54.7	59.3	64.4	69.3	42.1	72.7	60.4	35.0	63.0
Aug	66.7	67.0	75.5	54.0	77.3	59.0	53.6	59.4	64.7	69.3	40.0	73.0	60.9	39.2	63.1
Sept	66.8	67.2	75.7	56.5	77.2	59.3	55.5	59.5	64.1	68.6	37.5	72.6	60.4	38.6	62.7
Oct	66.9	67.3	75.9	57.0	77.4	59.3	55.2	59.6	64.4	68.8	40.1	72.4	60.8	39.1	63.0
Nov	66.9	67.4	75.8	56.3	77.3	59.5	55.7	59.8	64.3	68.8	37.1	72.7	60.7	37.9	63.0
Dec	67.0	67.4	75.8	56.3	77.4	59.6	54.9	59.9	64.3	68.1	37.1	72.0	61.2	40.6	63.3

[1] Civilian labor force as percent of civilian noninstitutional population in group specified.

Note.—See Note, Table B–37.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–39.—*Civilian employment/population ratio by demographic characteristic, 1954–96*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	White: Total	White: Males: Total	White: Males: 16–19 years	White: Males: 20 years and over	White: Females: Total	White: Females: 16–19 years	White: Females: 20 years and over	Black and other or black: Total	Black and other or black: Males: Total	Black and other or black: Males: 16–19 years	Black and other or black: Males: 20 years and over	Black and other or black: Females: Total	Black and other or black: Females: 16–19 years	Black and other or black: Females: 20 years and over
									Black and other						
1954	55.5	55.2	81.5	49.9	84.0	31.4	36.4	31.1	58.0	76.5	52.4	79.2	41.9	24.7	43.7
1955	56.7	56.5	82.2	52.0	84.7	33.0	37.0	32.7	58.7	77.6	52.7	80.4	42.2	26.4	43.9
1956	57.5	57.3	82.7	54.1	85.0	34.2	38.9	33.8	59.5	78.4	52.2	81.3	43.0	28.0	44.7
1957	57.1	56.8	81.8	52.4	84.1	34.2	38.2	33.9	59.3	77.2	48.0	80.5	43.7	26.5	45.5
1958	55.4	55.3	79.2	47.6	81.8	33.6	35.0	33.5	56.7	72.5	42.0	76.0	42.8	22.8	45.0
1959	56.0	55.9	79.9	48.1	82.8	34.0	34.8	34.0	57.5	73.8	41.4	77.6	43.2	20.3	45.7
1960	56.1	55.9	79.4	48.1	82.4	34.6	35.1	34.5	57.9	74.1	43.8	77.9	43.6	24.8	45.8
1961	55.4	55.3	78.2	45.9	81.4	34.5	34.6	34.5	56.2	71.7	41.0	75.5	42.6	23.2	44.8
1962	55.5	55.4	78.4	46.4	81.5	34.7	34.8	34.7	56.3	72.0	41.7	75.7	42.7	23.1	44.9
1963	55.4	55.3	77.7	44.7	81.1	35.0	32.9	35.2	56.2	71.8	37.4	76.2	42.7	21.3	45.2
1964	55.7	55.5	77.8	45.0	81.3	35.5	32.2	35.8	57.0	72.9	37.8	77.7	43.4	21.8	46.1
1965	56.2	56.0	77.9	47.1	81.5	36.2	33.7	36.5	57.8	73.7	39.4	78.7	44.1	20.2	47.3
1966	56.9	56.8	78.3	50.1	81.7	37.5	37.5	37.5	58.4	74.0	40.5	79.2	45.1	23.1	48.2
1967	57.3	57.2	78.4	50.2	81.7	38.3	37.7	38.3	58.2	73.8	38.8	79.4	45.0	24.8	47.9
1968	57.5	57.4	78.3	50.3	81.6	38.9	37.8	39.1	58.0	73.3	38.7	78.9	45.2	24.7	48.2
1969	58.0	58.0	78.2	51.1	81.4	40.1	39.5	40.1	58.1	72.8	39.0	78.4	45.9	25.1	48.9
1970	57.4	57.5	76.8	49.6	80.1	40.3	39.5	40.4	56.8	70.9	35.5	76.8	44.9	22.4	48.2
1971	56.6	56.8	75.7	49.2	79.0	39.9	38.6	40.1	54.9	68.1	31.8	74.2	43.9	20.2	47.3
1972	57.0	57.4	76.0	51.5	79.0	40.7	41.3	40.6	54.1	67.3	32.4	73.2	43.3	19.9	46.7
									Black						
1972	57.0	57.4	76.0	51.5	79.0	40.7	41.3	40.6	53.7	66.8	31.6	73.0	43.0	19.2	46.5
1973	57.8	58.2	76.5	54.3	79.2	41.8	43.6	41.6	54.5	67.5	32.8	73.7	43.8	22.0	47.2
1974	57.8	58.3	75.9	54.4	78.6	42.4	44.3	42.2	53.5	65.8	31.4	71.9	43.5	20.9	46.9
1975	56.1	56.7	73.0	50.6	75.7	42.0	42.5	41.9	50.1	60.6	26.3	66.5	41.6	20.2	44.9
1976	56.8	57.5	73.4	51.5	76.0	43.2	44.2	43.1	50.8	60.6	25.8	66.8	42.8	19.2	46.4
1977	57.9	58.6	74.1	54.4	76.5	44.5	45.9	44.4	51.4	61.4	26.4	67.5	43.3	18.5	47.0
1978	59.3	60.0	75.0	56.3	77.2	46.3	48.5	46.1	53.6	63.3	28.5	69.1	45.8	22.1	49.3
1979	59.9	60.6	75.1	55.7	77.3	47.5	49.4	47.3	53.8	63.4	28.7	69.1	46.0	22.4	49.3
1980	59.2	60.0	73.4	53.4	75.6	47.8	47.9	47.8	52.3	60.4	27.0	65.8	45.7	21.0	49.1
1981	59.0	60.0	72.8	51.3	75.1	48.3	46.2	48.5	51.3	59.1	24.6	64.5	45.1	19.7	48.5
1982	57.8	58.8	70.6	47.0	73.0	48.1	44.6	48.4	49.4	56.0	20.3	61.4	44.2	17.7	47.5
1983	57.9	58.9	70.4	47.4	72.6	48.5	44.5	48.9	49.5	56.3	20.4	61.6	44.1	17.0	47.4
1984	59.5	60.5	72.1	49.1	74.3	49.8	47.0	50.0	52.3	59.2	23.9	64.1	46.7	20.1	49.8
1985	60.1	61.0	72.3	49.9	74.3	50.7	47.1	51.0	53.4	60.0	26.3	64.6	48.1	23.1	50.9
1986	60.7	61.5	72.3	49.6	74.3	51.7	47.9	52.0	54.1	60.6	26.5	65.1	48.8	23.8	51.6
1987	61.5	62.3	72.7	49.9	74.7	52.8	49.0	53.1	55.6	62.0	28.5	66.4	50.3	25.8	53.0
1988	62.3	63.1	73.2	51.7	75.1	53.8	50.2	54.0	56.3	62.7	29.4	67.1	51.2	25.8	53.9
1989	63.0	63.8	73.7	52.6	75.4	54.6	50.5	54.9	56.9	62.8	30.4	67.0	52.0	27.1	54.6
1990	62.8	63.7	73.3	51.0	75.1	54.7	48.3	55.2	56.7	62.6	27.7	67.1	51.9	25.8	54.7
1991	61.7	62.6	71.6	47.2	73.5	54.2	45.9	54.8	55.4	61.3	23.8	65.9	50.6	21.5	53.6
1992	61.5	62.4	71.1	46.4	73.1	54.2	44.2	54.9	54.9	59.9	23.6	64.3	50.8	22.1	53.6
1993	61.7	62.7	71.4	46.6	73.3	54.6	45.7	55.2	55.0	60.0	23.6	64.3	50.9	21.6	53.8
1994	62.5	63.5	71.8	48.3	73.6	55.8	47.5	56.4	56.1	60.8	25.4	65.0	52.3	24.5	55.0
1995	62.9	63.8	72.0	49.4	73.8	56.1	48.1	56.7	57.1	61.7	25.2	66.1	53.4	26.1	56.1
1996	63.2	64.1	72.3	48.2	74.2	56.3	47.6	57.0	57.4	61.1	24.9	65.5	54.4	27.1	57.1
1995: Jan	63.1	64.0	72.4	49.9	74.1	56.1	50.0	56.5	56.9	62.1	25.0	66.5	52.6	21.6	55.6
Feb	63.1	64.0	72.4	49.2	74.2	56.1	48.0	56.6	57.7	63.0	25.6	67.4	53.3	24.8	56.1
Mar	63.2	64.0	72.4	50.4	74.1	56.1	49.4	56.5	57.7	63.2	24.9	67.8	53.2	26.6	55.8
Apr	63.1	63.9	72.2	50.1	73.9	56.2	48.6	56.7	57.5	62.6	25.3	67.1	53.3	25.2	56.1
May	62.8	63.7	71.8	49.5	73.5	56.0	48.1	56.6	57.3	61.8	23.0	66.6	53.7	26.2	56.4
June	62.8	63.7	72.0	50.3	73.7	55.9	49.7	56.3	56.8	61.6	25.1	66.0	52.9	25.5	55.6
July	62.8	63.9	72.0	50.3	73.7	56.2	47.2	56.9	56.3	60.9	24.6	65.2	52.6	25.5	55.3
Aug	62.7	63.8	71.8	49.5	73.6	56.2	48.4	56.7	56.3	60.6	23.6	65.1	52.8	26.1	55.5
Sept	62.8	63.8	71.9	48.8	73.7	56.2	47.0	56.8	56.5	61.2	26.2	65.5	52.6	26.9	55.2
Oct	62.9	63.8	71.9	48.3	73.8	56.2	47.6	56.8	57.3	61.5	25.2	66.0	53.8	27.7	56.4
Nov	62.8	63.6	71.7	48.3	73.5	56.0	46.8	56.7	58.0	61.4	28.4	65.6	55.3	29.2	57.9
Dec	62.7	63.6	71.8	48.7	73.6	55.9	46.6	56.5	57.3	60.4	24.7	64.8	54.7	28.3	57.3
1996: Jan	62.8	63.6	71.9	48.8	73.7	55.8	46.9	56.4	57.2	60.8	24.0	65.3	54.2	27.9	56.8
Feb	62.9	63.9	72.2	49.2	74.0	56.1	47.3	56.7	56.8	60.6	25.4	64.9	53.7	25.1	56.6
Mar	63.1	64.0	72.2	48.3	74.1	56.3	47.2	56.9	57.1	60.7	26.3	64.8	54.1	28.1	56.7
Apr	63.0	63.9	72.2	49.1	74.0	56.1	46.6	56.8	57.1	60.7	27.7	64.8	54.2	27.7	56.8
May	63.1	64.0	72.3	49.7	74.1	56.2	47.2	56.8	57.7	61.5	29.8	65.4	54.6	28.6	57.2
June	63.2	64.0	72.4	48.6	74.3	56.2	47.3	56.9	57.2	60.6	23.4	65.2	54.4	27.6	57.1
July	63.2	64.1	72.4	48.0	74.3	56.3	47.9	56.9	57.7	61.4	24.0	65.9	54.6	27.1	57.4
Aug	63.2	64.0	72.2	45.6	74.4	56.3	46.6	57.0	57.9	62.2	24.7	66.9	54.4	25.2	57.4
Sept	63.3	64.2	72.2	48.1	74.2	56.6	48.9	57.2	57.3	60.8	23.5	65.6	54.4	26.7	57.2
Oct	63.4	64.3	72.5	48.2	74.4	56.6	48.8	57.2	57.5	61.1	25.5	65.6	54.6	26.7	57.4
Nov	63.4	64.3	72.3	47.5	74.3	56.7	48.7	57.3	57.5	61.2	21.8	66.0	54.6	26.5	57.4
Dec	63.4	64.3	72.4	48.0	74.4	56.7	48.0	57.3	57.5	61.0	22.8	65.7	54.8	28.0	57.5

[1] 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–33.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–40.—*Civilian unemployment rate, 1948–96*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	Males			Females			Both sexes 16–19 years	White	Black and other	Black	Experienced wage and salary workers	Married men, spouse present[2]	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	5.3	5.1	12.7	4.7	5.7	11.4	5.1	12.2	4.9	9.0	....	6.0	4.6	....
1951	3.3	2.8	8.1	2.5	4.4	8.3	4.0	8.2	3.1	5.3	....	3.7	1.5	....
1952	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	2.9	2.8	7.9	2.5	3.3	7.2	2.9	7.6	2.7	4.5	....	3.2	1.7	....
1954	5.5	5.3	13.5	4.9	6.0	11.4	5.5	12.6	5.0	9.9	....	6.2	4.0	....
1955	4.4	4.2	11.6	3.8	4.9	10.2	4.4	11.0	3.9	8.7	....	4.8	2.6	....
1956	4.1	3.8	11.1	3.4	4.8	11.2	4.2	11.1	3.6	8.3	....	4.4	2.3	....
1957	4.3	4.1	12.4	3.6	4.7	10.6	4.1	11.6	3.8	7.9	....	4.6	2.8	....
1958	6.8	6.8	17.1	6.2	6.8	14.3	6.1	15.9	6.1	12.6	....	7.3	5.1	....
1959	5.5	5.2	15.3	4.7	5.9	13.5	5.2	14.6	4.8	10.7	....	5.7	3.6	....
1960	5.5	5.4	15.3	4.7	5.9	13.9	5.1	14.7	5.0	10.2	....	5.7	3.7	....
1961	6.7	6.4	17.1	5.7	7.2	16.3	6.3	16.8	6.0	12.4	....	6.8	4.6	....
1962	5.5	5.2	14.7	4.6	6.2	14.6	5.4	14.7	4.9	10.9	....	5.6	3.6	....
1963	5.7	5.2	17.2	4.5	6.5	17.2	5.4	17.2	5.0	10.8	....	5.6	3.4	....
1964	5.2	4.6	15.8	3.9	6.2	16.6	5.2	16.2	4.6	9.6	....	5.0	2.8	....
1965	4.5	4.0	14.1	3.2	5.5	15.7	4.5	14.8	4.1	8.1	....	4.3	2.4	....
1966	3.8	3.2	11.7	2.5	4.8	14.1	3.8	12.8	3.4	7.3	....	3.5	1.9	....
1967	3.8	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	3.6	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	3.5	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	4.9	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	5.9	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	5.6	5.0	15.9	4.0	6.6	16.7	5.4	16.2	5.1	10.0	10.4	5.3	2.8	7.2
1973	4.9	4.2	13.9	3.3	6.0	15.3	4.9	14.5	4.3	9.0	9.4	4.5	2.3	7.1
1974	5.6	4.9	15.6	3.8	6.7	16.6	5.5	16.0	5.0	9.9	10.5	5.3	2.7	7.0
1975	8.5	7.9	20.1	6.8	9.3	19.7	8.0	19.9	7.8	13.8	14.8	8.2	5.1	10.0
1976	7.7	7.1	19.2	5.9	8.6	18.7	7.4	19.0	7.0	13.1	14.0	7.3	4.2	10.1
1977	7.1	6.3	17.3	5.2	8.2	18.3	7.0	17.8	6.2	13.1	14.0	6.6	3.6	9.4
1978	6.1	5.3	15.8	4.3	7.2	17.1	6.0	16.4	5.2	11.9	12.8	5.6	2.8	8.5
1979	5.8	5.1	15.9	4.2	6.8	16.4	5.7	16.1	5.1	11.3	12.3	5.5	2.8	8.3
1980	7.1	6.9	18.3	5.9	7.4	17.2	6.4	17.8	6.3	13.1	14.3	6.9	4.2	9.2
1981	7.6	7.4	20.1	6.3	7.9	19.0	6.8	19.6	6.7	14.2	15.6	7.3	4.3	10.4
1982	9.7	9.9	24.4	8.8	9.4	21.9	8.3	23.2	8.6	17.3	18.9	9.3	6.5	11.7
1983	9.6	9.9	23.3	8.9	9.2	21.3	8.1	22.4	8.4	17.8	19.5	9.2	6.5	12.2
1984	7.5	7.4	19.6	6.6	7.6	18.0	6.8	18.9	6.5	14.4	15.9	7.1	4.6	10.3
1985	7.2	7.0	19.5	6.2	7.4	17.6	6.6	18.6	6.2	13.7	15.1	6.8	4.3	10.4
1986	7.0	6.9	19.0	6.1	7.1	17.6	6.2	18.3	6.0	13.1	14.5	6.6	4.4	9.8
1987	6.2	6.2	17.8	5.4	6.2	15.9	5.4	16.9	5.3	11.6	13.0	5.8	3.9	9.2
1988	5.5	5.5	16.0	4.8	5.6	14.4	4.9	15.3	4.7	10.4	11.7	5.2	3.3	8.1
1989	5.3	5.2	15.9	4.5	5.4	14.0	4.7	15.0	4.5	10.0	11.4	5.0	3.0	8.1
1990	5.6	5.7	16.3	5.0	5.5	14.7	4.9	15.5	4.8	10.1	11.4	5.3	3.4	8.3
1991	6.8	7.2	19.8	6.4	6.4	17.5	5.7	18.7	6.1	11.1	12.5	6.6	4.4	9.3
1992	7.5	7.9	21.5	7.1	7.0	18.6	6.3	20.1	6.6	12.7	14.2	7.2	5.1	10.0
1993	6.9	7.2	20.4	6.4	6.6	17.5	5.9	19.0	6.1	11.7	13.0	6.6	4.4	9.7
1994	6.1	6.2	19.0	5.4	6.0	16.2	5.4	17.6	5.3	10.5	11.5	5.9	3.7	8.9
1995	5.6	5.6	18.4	4.8	5.6	16.1	4.9	17.3	4.9	9.6	10.4	5.4	3.3	8.0
1996	5.4	5.4	18.1	4.6	5.4	15.2	4.8	16.7	4.7	9.3	10.5	5.2	3.0	8.2
1995: Jan	5.6	5.7	17.4	5.0	5.5	15.6	4.9	16.5	4.9	9.6	10.4	5.4	3.3	8.9
Feb	5.5	5.4	19.2	4.6	5.5	15.6	4.9	17.5	4.7	9.5	10.4	5.2	3.2	8.4
Mar	5.4	5.3	16.7	4.7	5.6	15.4	4.9	16.1	4.8	9.2	9.8	5.2	3.2	7.9
Apr	5.7	5.6	18.0	4.9	5.9	16.7	5.2	17.3	5.0	9.7	10.6	5.5	3.3	9.2
May	5.6	5.7	18.6	4.9	5.5	16.3	4.8	17.5	4.9	9.2	10.0	5.5	3.4	8.0
June	5.6	5.6	18.5	4.8	5.7	15.7	5.0	17.2	4.9	9.8	10.6	5.4	3.4	8.5
July	5.7	5.6	18.5	4.8	5.8	17.5	5.0	18.0	4.9	9.8	10.8	5.5	3.4	8.0
Aug	5.7	5.7	19.1	4.9	5.6	15.6	5.0	17.4	4.9	10.1	11.0	5.5	3.3	7.0
Sept	5.7	5.7	18.8	4.9	5.7	16.8	5.0	17.8	4.9	10.0	11.1	5.5	3.4	8.0
Oct	5.5	5.4	19.0	4.6	5.7	15.4	5.0	17.3	4.9	9.4	9.9	5.4	3.1	7.9
Nov	5.6	5.7	18.4	4.9	5.5	16.4	4.8	17.5	5.0	9.0	9.6	5.4	3.2	7.7
Dec	5.6	5.7	18.9	4.9	5.4	16.8	4.6	17.9	4.9	9.2	10.2	5.4	3.2	6.8
1996: Jan	5.7	5.7	18.9	4.9	5.8	16.6	5.1	17.8	5.0	9.5	10.6	5.4	3.2	8.2
Feb	5.5	5.6	18.0	4.8	5.5	15.9	4.8	17.0	4.8	9.3	10.3	5.3	3.1	7.6
Mar	5.5	5.7	18.7	4.9	5.4	15.4	4.8	17.1	4.8	9.6	10.8	5.4	3.1	7.7
Apr	5.5	5.5	17.9	4.8	5.4	15.5	4.7	16.8	4.8	9.4	10.5	5.3	3.0	7.3
May	5.5	5.5	17.6	4.7	5.5	15.5	4.9	16.6	4.8	9.3	10.3	5.4	3.0	8.5
June	5.3	5.4	17.5	4.6	5.3	14.8	4.7	16.2	4.6	9.1	10.2	5.1	3.0	7.8
July	5.4	5.4	19.3	4.6	5.4	13.8	4.9	16.7	4.7	9.3	10.5	5.2	3.0	8.8
Aug	5.2	5.0	18.2	4.2	5.4	15.8	4.7	17.0	4.5	8.9	10.4	5.0	2.9	8.5
Sept	5.2	5.2	17.5	4.5	5.2	14.4	4.6	16.0	4.5	9.2	10.7	5.1	3.0	8.3
Oct	5.2	5.1	18.1	4.4	5.3	14.4	4.7	16.3	4.5	9.3	10.7	5.0	3.0	8.5
Nov	5.3	5.2	18.4	4.4	5.5	15.2	4.8	16.8	4.6	9.1	10.6	5.2	3.0	8.8
Dec	5.3	5.1	17.4	4.4	5.5	15.5	4.9	16.5	4.6	9.2	10.5	5.1	3.0	8.4

[1] Unemployed as percent of civilian labor force in group specified.
[2] 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–33.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–41.—*Civilian unemployment rate by demographic characteristic, 1954–96*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black and other or black						
		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
									Black and other						
1954	5.5	5.0	4.8	13.4	4.4	5.5	10.4	5.1	9.9	10.3	14.4	9.9	9.2	20.6	8.4
1955	4.4	3.9	3.7	11.3	3.3	4.3	9.1	3.9	8.7	8.8	13.4	8.4	8.5	19.2	7.7
1956	4.1	3.6	3.4	10.5	3.0	4.2	9.7	3.7	8.3	7.9	15.0	7.4	8.9	22.8	7.8
1957	4.3	3.8	3.6	11.5	3.2	4.3	9.5	3.8	7.9	8.3	18.4	7.6	7.3	20.2	6.4
1958	6.8	6.1	6.1	15.7	5.5	6.2	12.7	5.6	12.6	13.7	26.8	12.7	10.8	28.4	9.5
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	27.7	8.3
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	24.8	8.3
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	29.2	10.6
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	11.0	30.2	9.6
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	34.7	9.4
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	31.6	9.0
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	31.7	7.5
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	31.3	6.6
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	29.6	7.1
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	28.7	6.3
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	27.6	5.8
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	34.5	6.9
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	35.4	8.7
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	38.4	8.8
									Black						
1972	5.6	5.1	4.5	14.2	3.6	5.9	14.2	4.9	10.4	9.3	31.7	7.0	11.8	40.5	9.0
1973	4.9	4.3	3.8	12.3	3.0	5.3	13.0	4.3	9.4	8.0	27.8	6.0	11.1	36.1	8.6
1974	5.6	5.0	4.4	13.5	3.5	6.1	14.5	5.1	10.5	9.8	33.1	7.4	11.3	37.4	8.8
1975	8.5	7.8	7.2	18.3	6.2	8.6	17.4	7.5	14.8	14.8	38.1	12.5	14.8	41.0	12.2
1976	7.7	7.0	6.4	17.3	5.4	7.9	16.4	6.8	14.0	13.7	37.5	11.4	14.3	41.6	11.7
1977	7.1	6.2	5.5	15.0	4.7	7.3	15.9	6.2	14.0	13.3	39.2	10.7	14.9	43.4	12.3
1978	6.1	5.2	4.6	13.5	3.7	6.2	14.4	5.2	12.8	11.8	36.7	9.3	13.8	40.8	11.2
1979	5.8	5.1	4.5	13.9	3.6	5.9	14.0	5.0	12.3	11.4	34.2	9.3	13.3	39.1	10.9
1980	7.1	6.3	6.1	16.2	5.3	6.5	14.8	5.6	14.3	14.5	37.5	12.4	14.0	39.8	11.9
1981	7.6	6.7	6.5	17.9	5.6	6.9	16.6	5.9	15.6	15.7	40.7	13.5	15.6	42.2	13.4
1982	9.7	8.6	8.8	21.7	7.8	8.3	19.0	7.3	18.9	20.1	48.9	17.8	17.6	47.1	15.4
1983	9.6	8.4	8.8	20.2	7.9	7.9	18.3	6.9	19.5	20.3	48.8	18.1	18.6	48.2	16.5
1984	7.5	6.5	6.4	16.8	5.7	6.5	15.2	5.8	15.9	16.4	42.7	14.3	15.4	42.6	13.5
1985	7.2	6.2	6.1	16.5	5.4	6.4	14.8	5.7	15.1	15.3	41.0	13.2	14.9	39.2	13.1
1986	7.0	6.0	6.0	16.3	5.3	6.1	14.9	5.4	14.5	14.8	39.3	12.9	14.2	39.2	12.4
1987	6.2	5.3	5.4	15.5	4.8	5.2	13.4	4.6	13.0	12.7	34.4	11.1	13.2	34.9	11.6
1988	5.5	4.7	4.7	13.9	4.1	4.7	12.3	4.1	11.7	11.7	32.7	10.1	11.7	32.0	10.4
1989	5.3	4.5	4.5	13.7	3.9	4.5	11.5	4.0	11.4	11.5	31.9	10.0	11.4	33.0	9.8
1990	5.6	4.8	4.9	14.3	4.3	4.7	12.6	4.1	11.4	11.9	31.9	10.4	10.9	29.9	9.7
1991	6.8	6.1	6.5	17.6	5.8	5.6	15.2	5.0	12.5	13.0	36.3	11.5	12.0	36.0	10.6
1992	7.5	6.6	7.0	18.5	6.4	6.1	15.8	5.5	14.2	15.2	42.0	13.5	13.2	37.2	11.8
1993	6.9	6.1	6.3	17.7	5.7	5.7	14.7	5.2	13.0	13.8	40.1	12.1	12.1	37.4	10.7
1994	6.1	5.3	5.4	16.3	4.8	5.2	13.8	4.6	11.5	12.0	37.6	10.3	11.0	32.6	9.8
1995	5.6	4.9	4.9	15.6	4.3	4.8	13.4	4.3	10.4	10.6	37.1	8.8	10.2	34.3	8.6
1996	5.4	4.7	4.7	15.5	4.1	4.7	12.9	4.1	10.5	11.1	36.9	9.4	10.0	30.3	8.7
1995: Jan	5.6	4.9	5.0	15.0	4.4	4.7	12.7	4.2	10.4	10.6	34.1	9.2	10.1	36.9	8.6
Feb	5.5	4.7	4.7	15.8	4.1	4.7	13.1	4.1	10.4	10.2	40.0	8.2	10.5	33.3	9.1
Mar	5.4	4.8	4.8	14.8	4.2	4.7	12.6	4.2	9.8	9.2	31.9	7.8	10.4	32.8	9.0
Apr	5.7	5.0	5.0	15.3	4.3	5.0	13.6	4.5	10.6	10.5	36.5	8.8	10.7	35.3	9.2
May	5.6	4.9	5.0	15.4	4.4	4.8	13.7	4.3	10.0	10.7	40.6	8.7	9.4	31.6	8.0
June	5.6	4.9	4.9	15.2	4.3	4.9	12.2	4.4	10.6	10.9	38.7	9.0	10.4	36.4	8.7
July	5.7	4.9	4.8	14.7	4.2	5.0	14.9	4.3	10.8	11.1	39.3	9.2	10.5	36.1	8.9
Aug	5.7	4.9	4.9	15.8	4.3	4.8	12.6	4.3	11.0	11.6	42.9	9.4	10.4	36.0	8.7
Sept	5.7	4.9	4.9	16.1	4.3	4.8	13.6	4.3	11.1	11.0	36.1	9.2	11.3	38.5	9.4
Oct	5.5	4.9	4.8	16.8	4.1	5.0	13.0	4.4	9.9	9.7	34.8	8.1	10.1	32.1	8.7
Nov	5.6	5.0	5.0	16.2	4.4	4.8	14.2	4.2	9.6	9.9	31.7	8.3	9.3	30.9	7.9
Dec	5.6	4.9	5.0	16.1	4.3	4.8	14.6	4.2	10.2	11.7	38.9	9.8	8.9	31.0	7.5
1996: Jan	5.7	5.0	5.0	16.3	4.3	5.0	14.6	4.4	10.6	11.1	38.1	9.4	10.2	30.6	8.9
Feb	5.5	4.8	4.9	15.4	4.2	4.8	13.6	4.3	10.3	11.2	32.5	9.9	9.5	33.3	8.0
Mar	5.5	4.8	4.9	15.9	4.3	4.7	13.3	4.1	10.8	12.0	36.3	10.3	9.7	29.1	8.4
Apr	5.5	4.8	4.8	15.3	4.2	4.7	13.1	4.2	10.5	11.3	34.9	9.6	9.7	30.8	8.4
May	5.5	4.8	4.8	15.3	4.1	4.9	13.0	4.4	10.3	10.9	30.0	9.6	9.6	29.3	8.4
June	5.3	4.6	4.7	14.9	4.1	4.5	12.8	4.0	10.2	10.9	36.6	9.2	9.6	26.9	8.6
July	5.4	4.7	4.7	16.1	4.0	4.6	12.4	4.1	10.5	11.5	43.0	9.3	9.6	22.4	8.9
Aug	5.2	4.5	4.4	15.7	3.8	4.5	12.9	4.0	10.4	10.3	38.2	8.3	10.6	35.8	9.0
Sept	5.2	4.5	4.5	14.8	3.9	4.5	11.9	4.0	10.7	11.4	37.2	9.7	10.0	30.9	8.7
Oct	5.2	4.5	4.5	15.4	3.8	4.5	11.6	4.0	10.7	11.1	36.5	9.3	10.2	31.9	8.9
Nov	5.3	4.6	4.5	15.5	3.9	4.7	12.6	4.2	10.6	11.1	41.2	9.2	10.1	30.0	8.9
Dec	5.3	4.6	4.5	14.8	3.9	4.8	12.6	4.3	10.5	10.5	38.6	8.8	10.5	31.2	9.2

[1] Unemployed as percent of civilian labor force in group specified.

Note.—See Note, Table B–40.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–42.—*Unemployment by duration and reason, 1950–96*

[Thousands of persons, except as noted; monthly data seasonally adjusted [1]]

Year or month	Unemployment	Duration of unemployment						Reason for unemployment					
		Less than 5 weeks	5–14 weeks	15–26 weeks	27 weeks and over	Average (mean) duration (weeks)	Median duration (weeks)	Job losers [3]			Job leavers	Reentrants	New entrants
								Total	On layoff	Other			
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]	2,975	1,634	893	271	177	8.7	2.3	1,229	394	836	438	945	396
1968	2,817	1,594	810	256	156	8.4	4.5	1,070	334	736	431	909	407
1969	2,832	1,629	827	242	133	7.8	4.4	1,017	339	678	436	965	413
1970	4,093	2,139	1,290	428	235	8.6	4.9	1,811	675	1,137	550	1,228	504
1971	5,016	2,245	1,585	668	519	11.3	6.3	2,323	735	1,588	590	1,472	630
1972	4,882	2,242	1,472	601	566	12.0	6.2	2,108	582	1,526	641	1,456	677
1973	4,365	2,224	1,314	483	343	10.0	5.2	1,694	472	1,221	683	1,340	649
1974	5,156	2,604	1,597	574	381	9.8	5.2	2,242	746	1,495	768	1,463	681
1975	7,929	2,940	2,484	1,303	1,203	14.2	8.4	4,386	1,671	2,714	827	1,892	823
1976	7,406	2,844	2,196	1,018	1,348	15.8	8.2	3,679	1,050	2,628	903	1,928	895
1977	6,991	2,919	2,132	913	1,028	14.3	7.0	3,166	865	2,300	909	1,963	953
1978	6,202	2,865	1,923	766	648	11.9	5.9	2,585	712	1,873	874	1,857	885
1979	6,137	2,950	1,946	706	535	10.8	5.4	2,635	851	1,784	880	1,806	817
1980	7,637	3,295	2,470	1,052	820	11.9	6.5	3,947	1,488	2,459	891	1,927	872
1981	8,273	3,449	2,539	1,122	1,162	13.7	6.9	4,267	1,430	2,837	923	2,102	981
1982	10,678	3,883	3,311	1,708	1,776	15.6	8.7	6,268	2,127	4,141	840	2,384	1,185
1983	10,717	3,570	2,937	1,652	2,559	20.0	10.1	6,258	1,780	4,478	830	2,412	1,216
1984	8,539	3,350	2,451	1,104	1,634	18.2	7.9	4,421	1,171	3,250	823	2,184	1,110
1985	8,312	3,498	2,509	1,025	1,280	15.6	6.8	4,139	1,157	2,982	877	2,256	1,039
1986	8,237	3,448	2,557	1,045	1,187	15.0	6.9	4,033	1,090	2,943	1,015	2,160	1,029
1987	7,425	3,246	2,196	943	1,040	14.5	6.5	3,566	943	2,623	965	1,974	920
1988	6,701	3,084	2,007	801	809	13.5	5.9	3,092	851	2,241	983	1,809	816
1989	6,528	3,174	1,978	730	646	11.9	4.8	2,983	850	2,133	1,024	1,843	677
1990	7,047	3,265	2,257	822	703	12.0	5.3	3,387	1,028	2,359	1,041	1,930	688
1991	8,628	3,480	2,791	1,246	1,111	13.7	6.8	4,694	1,292	3,402	1,004	2,139	792
1992	9,613	3,376	2,830	1,453	1,954	17.7	8.7	5,389	1,260	4,129	1,002	2,285	937
1993	8,940	3,262	2,584	1,297	1,798	18.0	8.3	4,848	1,115	3,733	976	2,198	919
1994	7,996	2,728	2,408	1,237	1,623	18.8	9.2	3,815	977	2,838	791	2,786	604
1995	7,404	2,700	2,342	1,085	1,278	16.6	8.3	3,476	1,030	2,446	824	2,525	579
1996	7,236	2,633	2,287	1,053	1,262	16.7	8.3	3,370	1,021	2,349	774	2,512	580
1995: Jan	7,432	2,813	2,155	1,032	1,367	17.1	7.9	3,560	999	2,561	716	2,553	573
Feb	7,203	2,582	2,212	1,109	1,245	17.1	8.3	3,378	1,021	2,357	788	2,485	575
Mar	7,201	2,589	2,300	927	1,328	17.2	8.2	3,377	1,028	2,349	798	2,436	597
Apr	7,590	2,669	2,353	1,059	1,377	17.4	8.3	3,423	1,067	2,356	827	2,765	618
May	7,358	2,595	2,302	1,253	1,288	16.9	8.9	3,525	956	2,569	879	2,440	558
June	7,445	2,744	2,382	1,097	1,183	15.7	7.8	3,431	1,059	2,372	855	2,540	564
July	7,496	2,573	2,548	1,079	1,246	16.5	8.7	3,516	1,112	2,404	836	2,538	543
Aug	7,517	2,747	2,444	1,156	1,239	16.2	8.3	3,516	1,084	2,432	863	2,532	587
Sept	7,523	2,848	2,313	1,064	1,277	16.3	8.0	3,452	922	2,530	871	2,570	614
Oct	7,329	2,808	2,351	1,036	1,250	16.2	8.1	3,553	1,044	2,509	748	2,511	560
Nov	7,409	2,739	2,383	1,082	1,273	16.5	8.1	3,511	1,062	2,449	830	2,502	582
Dec	7,354	2,683	2,368	1,120	1,247	16.4	8.2	3,512	1,024	2,488	879	2,443	587
1996: Jan	7,588	2,774	2,370	1,114	1,255	16.2	8.2	3,586	1,106	2,480	835	2,481	620
Feb	7,364	2,736	2,291	1,097	1,225	16.6	8.1	3,543	1,041	2,502	749	2,499	603
Mar	7,402	2,632	2,305	1,102	1,304	17.2	8.2	3,508	1,031	2,477	783	2,538	593
Apr	7,302	2,450	2,330	1,098	1,289	17.3	8.6	3,535	1,092	2,443	723	2,487	567
May	7,331	2,754	2,310	1,048	1,306	16.9	8.4	3,409	1,070	2,339	688	2,709	546
June	7,119	2,544	2,201	1,051	1,302	17.2	8.1	3,399	1,000	2,399	702	2,437	545
July	7,276	2,603	2,307	994	1,332	16.9	8.5	3,348	980	2,368	754	2,522	590
Aug	6,910	2,534	2,199	1,003	1,270	17.2	8.5	3,095	931	2,164	775	2,467	552
Sept	7,043	2,522	2,245	1,040	1,237	16.9	8.6	3,236	989	2,247	800	2,441	559
Oct	7,019	2,556	2,265	1,062	1,232	16.7	8.3	3,171	957	2,214	797	2,489	577
Nov	7,187	2,819	2,252	1,018	1,166	16.0	7.7	3,261	994	2,267	825	2,523	586
Dec	7,167	2,671	2,357	976	1,203	15.8	7.8	3,221	987	2,234	845	2,556	626

[1] Because of independent seasonal adjustment of the various series, detail will not add to totals.
[2] Data for 1967 by reason for unemployment are not equal to total unemployment.
[3] Beginning January 1994, job losers and persons who completed temporary jobs.

Note.—Data relate to persons 16 years of age and over.
See footnote 5 and Note, Table B–33.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–43.—*Unemployment insurance programs, selected data, 1963–96*

Year or month	All programs: Covered employment[1]	All programs: Insured unemployment (weekly average)[2 3]	All programs: Total benefits paid (millions of dollars)[2 4]	State programs: Insured unemployment[3]	State programs: Initial claims	State programs: Exhaustions[5]	State programs: Insured unemployment as percent of covered employment	State programs: Benefits paid: Total (millions of dollars)[4]	State programs: Benefits paid: Average weekly check (dollars)[6]
	Thousands			Weekly average; thousands					
1963	48,434	[7] 1,973	3,026	[7] 1,806	[7] 298	30	4.3	2,775	35.27
1964	49,637	1,753	2,749	1,605	268	26	3.8	2,522	35.92
1965	51,580	1,450	2,360	1,328	232	21	3.0	2,166	37.19
1966	54,739	1,129	1,891	1,061	203	15	2.3	1,771	39.75
1967	56,342	1,270	2,222	1,205	226	17	2.5	2,092	41.25
1968	57,977	1,187	2,191	1,111	201	16	2.2	2,032	43.43
1969	59,999	1,177	2,299	1,101	200	16	2.1	2,128	46.17
1970	59,526	2,070	4,209	1,805	296	25	3.4	3,849	50.34
1971	59,375	2,608	6,154	2,150	295	39	4.1	4,957	54.02
1972	66,458	2,192	5,491	1,848	261	35	3.5	4,471	56.76
1973	69,897	1,793	4,517	1,632	247	29	2.7	4,008	59.00
1974	72,451	2,558	6,934	2,262	363	37	3.5	5,975	64.25
1975	71,037	4,937	16,802	3,986	478	81	6.0	11,755	70.23
1976	73,459	3,846	12,345	2,991	386	63	4.6	8,975	75.16
1977	76,419	3,308	10,999	2,655	375	55	3.9	8,357	78.79
1978	88,804	2,645	9,007	2,359	346	39	3.3	7,717	83.67
1979	92,062	2,592	9,401	2,434	388	39	2.9	8,613	89.67
1980	92,659	3,837	16,175	3,350	488	59	3.9	13,761	98.95
1981	93,300	3,410	15,287	3,047	460	57	3.5	13,262	106.70
1982	91,628	4,592	24,491	4,059	583	80	4.6	20,649	119.34
1983	91,898	3,774	21,000	3,395	438	80	3.9	17,787	123.59
1984	96,474	2,560	13,838	2,475	377	50	2.8	12,610	123.47
1985	99,186	2,699	15,283	2,617	397	49	2.9	14,131	128.14
1986	101,099	2,739	16,670	2,643	378	52	2.8	15,329	135.65
1987	103,936	2,369	14,929	2,300	328	46	2.4	13,607	140.55
1988	107,157	2,135	13,694	2,081	310	38	2.0	12,565	144.97
1989	109,925	2,205	14,948	2,158	330	37	2.1	13,760	151.73
1990	111,498	2,575	18,721	2,522	388	45	2.4	17,356	161.56
1991	109,613	3,406	26,717	3,342	447	67	3.2	24,526	169.88
1992	110,167	3,348	[9] 26,460	3,245	408	74	3.1	23,869	173.64
1993	112,147	2,845	[9] 22,950	2,751	341	62	2.6	20,539	179.62
1994	115,255	2,746	22,844	2,670	340	57	2.4	20,401	182.16
1995	[8] 118,068	2,641	22,386	2,575	357	51	2.3	20,125	187.29
1996 *p*	....	2,654	....	2,594	356	53	....	....	189.39
				**	**		**		
1995: Jan	....	3,283	2,220.9	2,504	333	57	2.3	2,146.9	186.19
Feb	....	3,182	2,098.0	2,508	336	52	2.3	2,030.4	189.50
Mar	....	2,957	2,317.2	2,494	342	52	2.3	2,244.1	189.92
Apr	....	2,728	1,788.4	2,496	352	57	2.3	1,730.0	188.46
May	....	2,481	1,815.7	2,558	373	52	2.3	1,753.0	187.64
June	....	2,402	1,718.3	2,636	376	49	2.4	1,660.4	186.74
July	....	2,638	1,723.0	2,683	373	54	2.4	1,668.0	184.92
Aug	....	2,465	1,807.5	2,634	346	50	2.4	1,745.9	183.31
Sept	....	2,201	1,483.5	2,632	357	45	2.4	1,430.5	186.58
Oct	....	2,297	1,572.5	2,678	365	48	2.4	1,508.6	187.48
Nov	....	2,427	1,672.7	2,652	375	48	2.4	1,606.4	187.00
Dec	....	2,675	1,823.8	2,625	363	50	2.4	1,758.6	188.88
1996: Jan	....	3,507	2,568.1	2,655	374	58	2.4	2,488.2	191.92
Feb	....	3,343	2,371.7	2,660	371	53	2.4	2,305.3	193.85
Mar	....	3,170	2,247.9	2,641	393	55	2.4	2,188.1	193.45
Apr	....	2,941	2,130.0	2,576	356	61	2.3	2,073.8	192.11
May	....	2,358	1,793.7	2,544	348	53	2.3	1,744.3	189.02
June	....	2,387	1,550.6	2,570	356	52	2.3	1,504.0	187.70
July	....	2,554	1,838.7	2,537	335	56	2.2	1,782.3	176.96
Aug	....	2,258	1,599.6	2,523	323	49	2.2	1,549.1	184.79
Sept	....	2,188	1,452.0	2,462	334	47	2.2	1,405.4	188.92
Oct	....	2,049	1,520.0	2,464	332	46	2.2	1,467.3	189.07
Nov	....	2,108	1,418.6	2,456	335	44	2.2	1,371.3	190.43
Dec *p*	....	2,741	1,915.2	2,514	355	53	2.2	1,858.2	190.92

** Monthly data are seasonally adjusted.

[1] Includes persons under the State, UCFE (Federal employee, effective January 1955), RRB (Railroad Retirement Board) programs, and UCX (unemployment compensation for ex-servicemembers, effective October 1958) programs.

[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), Federal Supplemental Compensation, and Emergency Unemployment Compensation programs, except as noted in footnote 9.

[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.

[9] Including Emergency Unemployment Compensation and Federal Supplemental Compensation, total benefits paid for 1992 and 1993 would be approximately (in millions of dollars): for 1992, 39,990 and for 1993, 34,876.

Source: Department of Labor, Employment and Training Administration.

TABLE B–44.—*Employees on nonagricultural payrolls, by major industry, 1948–96*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total	Goods-producing industries					
		Total	Mining	Construction	Manufacturing		
					Total	Durable goods	Nondurable goods
1948	44,866	18,774	994	2,198	15,582	8,298	7,285
1949	43,754	17,565	930	2,194	14,441	7,462	6,979
1950	45,197	18,506	901	2,364	15,241	8,066	7,175
1951	47,819	19,959	929	2,637	16,393	9,059	7,334
1952	48,793	20,198	898	2,668	16,632	9,320	7,313
1953	50,202	21,074	866	2,659	17,549	10,080	7,468
1954	48,990	19,751	791	2,646	16,314	9,101	7,213
1955	50,641	20,513	792	2,839	16,882	9,511	7,370
1956	52,369	21,104	822	3,039	17,243	9,802	7,442
1957	52,855	20,967	828	2,962	17,176	9,825	7,351
1958	51,322	19,513	751	2,817	15,945	8,801	7,144
1959	53,270	20,411	732	3,004	16,675	9,342	7,333
1960	54,189	20,434	712	2,926	16,796	9,429	7,367
1961	53,999	19,857	672	2,859	16,326	9,041	7,285
1962	55,549	20,451	650	2,948	16,853	9,450	7,403
1963	56,653	20,640	635	3,010	16,995	9,586	7,410
1964	58,283	21,005	634	3,097	17,274	9,785	7,489
1965	60,763	21,926	632	3,232	18,062	10,374	7,688
1966	63,901	23,158	627	3,317	19,214	11,250	7,963
1967	65,803	23,308	613	3,248	19,447	11,408	8,039
1968	67,897	23,737	606	3,350	19,781	11,594	8,187
1969	70,384	24,361	619	3,575	20,167	11,862	8,304
1970	70,880	23,578	623	3,588	19,367	11,176	8,190
1971	71,211	22,935	609	3,704	18,623	10,604	8,019
1972	73,675	23,668	628	3,889	19,151	11,022	8,129
1973	76,790	24,893	642	4,097	20,154	11,863	8,291
1974	78,265	24,794	697	4,020	20,077	11,897	8,181
1975	76,945	22,600	752	3,525	18,323	10,662	7,661
1976	79,382	23,352	779	3,576	18,997	11,051	7,946
1977	82,471	24,346	813	3,851	19,682	11,570	8,112
1978	86,697	25,585	851	4,229	20,505	12,245	8,259
1979	89,823	26,461	958	4,463	21,040	12,730	8,310
1980	90,406	25,658	1,027	4,346	20,285	12,159	8,127
1981	91,152	25,497	1,139	4,188	20,170	12,082	8,089
1982	89,544	23,812	1,128	3,904	18,780	11,014	7,766
1983	90,152	23,330	952	3,946	18,432	10,707	7,725
1984	94,408	24,718	966	4,380	19,372	11,476	7,896
1985	97,387	24,842	927	4,668	19,248	11,458	7,790
1986	99,344	24,533	777	4,810	18,947	11,195	7,752
1987	101,958	24,674	717	4,958	18,999	11,154	7,845
1988	105,210	25,125	713	5,098	19,314	11,363	7,951
1989	107,895	25,254	692	5,171	19,391	11,394	7,997
1990	109,419	24,905	709	5,120	19,076	11,109	7,968
1991	108,256	23,745	689	4,650	18,406	10,569	7,837
1992	108,604	23,231	635	4,492	18,104	10,277	7,827
1993	110,730	23,352	610	4,668	18,075	10,221	7,854
1994	114,172	23,908	601	4,986	18,321	10,448	7,873
1995	117,203	24,206	580	5,158	18,468	10,654	7,814
1996 p	119,549	24,258	570	5,405	18,282	10,676	7,606
1995: Jan	116,250	24,269	593	5,132	18,544	10,632	7,912
Feb	116,502	24,281	587	5,137	18,557	10,657	7,900
Mar	116,701	24,282	588	5,134	18,560	10,674	7,886
Apr	116,861	24,276	585	5,136	18,555	10,679	7,876
May	116,907	24,217	582	5,116	18,519	10,668	7,851
June	117,100	24.212	580	5,139	18,493	10,655	7,838
July	117,201	24,171	578	5,146	18,447	10,647	7,800
Aug	117,499	24,179	576	5,164	18,439	10,653	7,786
Sept	117,623	24,176	574	5,187	18,415	10,648	7,767
Oct	117,749	24,151	573	5,200	18,378	10,631	7,747
Nov	117,899	24,133	569	5,211	18,353	10,628	7,725
Dec	118,136	24,160	570	5,223	18,367	10,667	7,700
1996: Jan	118,070	24,112	569	5,234	18,309	10,643	7,666
Feb	118,579	24,254	573	5,349	18,332	10,659	7,673
Mar	118,750	24,196	574	5,341	18,281	10,623	7,658
Apr	118,922	24,209	573	5,353	18,283	10,654	7,629
May	119,332	24,263	576	5,384	18,303	10,679	7,624
June	119,537	24,274	575	5,401	18,298	10,696	7,602
July	119,772	24,264	570	5,427	18,267	10,680	7,587
Aug	120,052	24,298	570	5,437	18,291	10,711	7,580
Sept	120,050	24,257	567	5,449	18,241	10,675	7,566
Oct	120,311	24,284	566	5,464	18,254	10,684	7,570
Nov p	120,438	24,308	567	5,487	18,254	10,690	7,564
Dec p	120,700	24,348	565	5,510	18,273	10,708	7,565

Note.—Data in Tables B–44 and B–45 are based on reports from employing establishments and relate to full- and part-time wage and salary workers in nonagricultural establishments who received pay for any part of the pay period which includes the 12th of the month. Not comparable with labor force data (Tables B–33 through B–42), which include proprietors, self-employed persons, domestic servants,

See next page for continuation of table.

TABLE B–44.—*Employees on nonagricultural payrolls, by major industry, 1948–96*—Continued

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Service-producing industries								
	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government		
							Total	Federal	State and local
1948	26,092	4,189	2,612	6,659	1,800	5,181	5,650	1,863	3,787
1949	26,189	4,001	2,610	6,654	1,828	5,239	5,856	1,908	3,948
1950	26,691	4,034	2,643	6,743	1,888	5,356	6,026	1,928	4,098
1951	27,860	4,226	2,735	7,007	1,956	5,547	6,389	2,302	4,087
1952	28,595	4,248	2,821	7,184	2,035	5,699	6,609	2,420	4,188
1953	29,128	4,290	2,862	7,385	2,111	5,835	6,645	2,305	4,340
1954	29,239	4,084	2,875	7,360	2,200	5,969	6,751	2,188	4,563
1955	30,128	4,141	2,934	7,601	2,298	6,240	6,914	2,187	4,727
1956	31,264	4,244	3,027	7,831	2,389	6,497	7,278	2,209	5,069
1957	31,889	4,241	3,037	7,848	2,438	6,708	7,616	2,217	5,399
1958	31,811	3,976	2,989	7,761	2,481	6,765	7,839	2,191	5,648
1959	32,857	4,011	3,092	8,035	2,549	7,087	8,083	2,233	5,850
1960	33,755	4,004	3,153	8,238	2,628	7,378	8,353	2,270	6,083
1961	34,142	3,903	3,142	8,195	2,688	7,619	8,594	2,279	6,315
1962	35,098	3,906	3,207	8,359	2,754	7,982	8,890	2,340	6,550
1963	36,013	3,903	3,258	8,520	2,830	8,277	9,225	2,358	6,868
1964	37,278	3,951	3,347	8,812	2,911	8,660	9,596	2,348	7,248
1965	38,839	4,036	3,477	9,239	2,977	9,036	10,074	2,378	7,696
1966	40,743	4,158	3,608	9,637	3,058	9,498	10,784	2,564	8,220
1967	42,495	4,268	3,700	9,906	3,185	10,045	11,391	2,719	8,672
1968	44,158	4,318	3,791	10,308	3,337	10,567	11,839	2,737	9,102
1969	46,023	4,442	3,919	10,785	3,512	11,169	12,195	2,758	9,437
1970	47,302	4,515	4,006	11,034	3,645	11,548	12,554	2,731	9,823
1971	48,276	4,476	4,014	11,338	3,772	11,797	12,881	2,696	10,185
1972	50,007	4,541	4,127	11,822	3,908	12,276	13,334	2,684	10,649
1973	51,897	4,656	4,291	12,315	4,046	12,857	13,732	2,663	11,068
1974	53,471	4,725	4,447	12,539	4,148	13,441	14,170	2,724	11,446
1975	54,345	4,542	4,430	12,630	4,165	13,892	14,686	2,748	11,937
1976	56,030	4,582	4,562	13,193	4,271	14,551	14,871	2,733	12,138
1977	58,125	4,713	4,723	13,792	4,467	15,302	15,127	2,727	12,399
1978	61,113	4,923	4,985	14,556	4,724	16,252	15,672	2,753	12,919
1979	63,363	5,136	5,221	14,972	4,975	17,112	15,947	2,773	13,174
1980	64,748	5,146	5,292	15,018	5,160	17,890	16,241	2,866	13,375
1981	65,655	5,165	5,375	15,171	5,298	18,615	16,031	2,772	13,259
1982	65,732	5,081	5,295	15,158	5,340	19,021	15,837	2,739	13,098
1983	66,821	4,952	5,283	15,587	5,466	19,664	15,869	2,774	13,096
1984	69,690	5,156	5,568	16,512	5,684	20,746	16,024	2,807	13,216
1985	72,544	5,233	5,727	17,315	5,948	21,927	16,394	2,875	13,519
1986	74,811	5,247	5,761	17,880	6,273	22,957	16,693	2,899	13,794
1987	77,284	5,362	5,848	18,422	6,533	24,110	17,010	2,943	14,067
1988	80,086	5,514	6,030	19,023	6,630	25,504	17,386	2,971	14,415
1989	82,642	5,625	6,187	19,475	6,668	26,907	17,779	2,988	14,791
1990	84,514	5,793	6,173	19,601	6,709	27,934	18,304	3,085	15,219
1991	84,511	5,762	6,081	19,284	6,646	28,336	18,402	2,966	15,436
1992	85,373	5,721	5,997	19,356	6,602	29,052	18,645	2,969	15,676
1993	87,378	5,829	5,981	19,773	6,757	30,197	18,841	2,915	15,926
1994	90,264	5,993	6,162	20,507	6,896	31,579	19,128	2,870	16,258
1995	92,997	6,165	6,412	21,173	6,830	33,107	19,310	2,822	16,489
1996 p	95,291	6,318	6,587	21,591	6,977	34,360	19,459	2,757	16,703
1995: Jan	91,981	6,094	6,312	21,005	6,823	32,492	19,255	2,842	16,413
Feb	92,221	6,114	6,341	21,048	6,812	32,644	19,262	2,835	16,427
Mar	92,419	6,125	6,360	21,056	6,809	32,798	19,271	2,831	16,440
Apr	92,585	6,134	6,374	21,115	6,806	32,867	19,289	2,830	16,459
May	92,690	6,139	6,389	21,119	6,807	32,947	19,289	2,831	16,458
June	92,888	6,152	6,408	21,179	6,810	33,038	19,301	2,831	16,470
July	93,030	6,160	6,427	21,196	6,821	33,106	19,320	2,825	16,495
Aug	93,320	6,187	6,437	21,225	6,833	33,269	19,369	2,822	16,547
Sept	93,447	6,194	6,451	21,258	6,842	33,377	19,325	2,812	16,513
Oct	93,598	6,212	6,465	21,263	6,859	33,460	19,339	2,801	16,538
Nov	93,766	6,233	6,478	21,300	6,871	33,546	19,338	2,796	16,542
Dec	93,976	6,249	6,498	21,334	6,887	33,661	19,347	2,790	16,557
1996: Jan	93,958	6,254	6,512	21,268	6,894	33,694	19,336	2,783	16,553
Feb	94,325	6,270	6,529	21,340	6,919	33,902	19,365	2,780	16,585
Mar	94,554	6,292	6,548	21,350	6,931	34,039	19,394	2,780	16,614
Apr	94,713	6,294	6,550	21,415	6,942	34,117	19,395	2,776	16,619
May	95,069	6,309	6,567	21,485	6,964	34,285	19,459	2,776	16,683
June	95,263	6,329	6,575	21,568	6,967	34,378	19,446	2,756	16,690
July	95,508	6,333	6,585	21,671	6,987	34,448	19,484	2,752	16,732
Aug	95,754	6,342	6,603	21,672	6,999	34,532	19,606	2,739	16,867
Sept	95,793	6,337	6,619	21,702	7,009	34,607	19,519	2,739	16,780
Oct	96,027	6,338	6,643	21,803	7,026	34,709	19,508	2,731	16,777
Nov p	96,130	6,355	6,648	21,835	7,036	34,771	19,485	2,732	16,753
Dec p	96,352	6,360	6,657	21,883	7,053	34,883	19,516	2,720	16,796

Note (cont'd).—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–45.—*Hours and earnings in private nonagricultural indutries, 1959–96*[1]

[Monthly data seasonally adjusted, except as noted]

Year or month	Average weekly hours: Total private	Average weekly hours: Manufacturing: Total	Average weekly hours: Manufacturing: Overtime	Average hourly earnings: Total private: Current dollars	Average hourly earnings: Total private: 1982 dollars[2]	Average hourly earnings: Manufacturing (current dollars)	Average weekly earnings, total private: Level: Current dollars	Average weekly earnings, total private: Level: 1982 dollars[2]	Average weekly earnings, total private: Percent change from year earlier[3]: Current dollars	Average weekly earnings, total private: Percent change from year earlier[3]: 1982 dollars[2]
1959	39.0	40.3	2.7	$2.02	$6.69	$2.19	$78.78	$260.86	4.9	4.2
1960	38.6	39.7	2.5	2.09	6.79	2.26	80.67	261.92	2.4	.4
1961	38.6	39.8	2.4	2.14	6.88	2.32	82.60	265.59	2.4	1.4
1962	38.7	40.4	2.8	2.22	7.07	2.39	85.91	273.60	4.0	3.0
1963	38.8	40.5	2.8	2.28	7.17	2.45	88.46	278.18	3.0	1.7
1964	38.7	40.7	3.1	2.36	7.33	2.53	91.33	283.63	3.2	2.0
1965	38.8	41.2	3.6	2.46	7.52	2.61	95.45	291.90	4.5	2.9
1966	38.6	41.4	3.9	2.56	7.62	2.71	98.82	294.11	3.5	.8
1967	38.0	40.6	3.4	2.68	7.72	2.82	101.84	293.49	3.1	–.2
1968	37.8	40.7	3.6	2.85	7.89	3.01	107.73	298.42	5.8	1.7
1969	37.7	40.6	3.6	3.04	7.98	3.19	114.61	300.81	6.4	.8
1970	37.1	39.8	3.0	3.23	8.03	3.35	119.83	298.08	4.6	–.9
1971	36.9	39.9	2.9	3.45	8.21	3.57	127.31	303.12	6.2	1.7
1972	37.0	40.5	3.5	3.70	8.53	3.82	136.90	315.44	7.5	4.1
1973	36.9	40.7	3.8	3.94	8.55	4.09	145.39	315.38	6.2	–.0
1974	36.5	40.0	3.3	4.24	8.28	4.42	154.76	302.27	6.4	–4.2
1975	36.1	39.5	2.6	4.53	8.12	4.83	163.53	293.06	5.7	–3.0
1976	36.1	40.1	3.1	4.86	8.24	5.22	175.45	297.37	7.3	1.5
1977	36.0	40.3	3.5	5.25	8.36	5.68	189.00	300.96	7.7	1.2
1978	35.8	40.4	3.6	5.69	8.40	6.17	203.70	300.89	7.8	–.0
1979	35.7	40.2	3.3	6.16	8.17	6.70	219.91	291.66	8.0	–3.1
1980	35.3	39.7	2.8	6.66	7.78	7.27	235.10	274.65	6.9	–5.8
1981	35.2	39.8	2.8	7.25	7.69	7.99	255.20	270.63	8.5	–1.5
1982	34.8	38.9	2.3	7.68	7.68	8.49	267.26	267.26	4.7	–1.2
1983	35.0	40.1	3.0	8.02	7.79	8.83	280.70	272.52	5.0	2.0
1984	35.2	40.7	3.4	8.32	7.80	9.19	292.86	274.73	4.3	.8
1985	34.9	40.5	3.3	8.57	7.77	9.54	299.09	271.16	2.1	–1.3
1986	34.8	40.7	3.4	8.76	7.81	9.73	304.85	271.94	1.9	.3
1987	34.8	41.0	3.7	8.98	7.73	9.91	312.50	269.16	2.5	–1.0
1988	34.7	41.1	3.9	9.28	7.69	10.19	322.02	266.79	3.0	–.9
1989	34.6	41.0	3.8	9.66	7.64	10.48	334.24	264.22	3.8	–1.0
1990	34.5	40.8	3.6	10.01	7.52	10.83	345.35	259.47	3.3	–1.8
1991	34.3	40.7	3.6	10.32	7.45	11.18	353.98	255.40	2.5	–1.6
1992	34.4	41.0	3.8	10.57	7.41	11.46	363.61	254.99	2.7	–.2
1993	34.5	41.4	4.1	10.83	7.39	11.74	373.64	254.87	2.8	–.0
1994	34.7	42.0	4.7	11.12	7.40	12.07	385.86	256.73	3.3	.7
1995	34.5	41.6	4.4	11.44	7.40	12.37	394.68	255.29	2.3	–.6
1996 p	34.4	41.6	4.5	11.82	7.43	12.78	406.61	255.73	3.0	.2
1995: Jan	34.7	42.2	4.8	11.30	7.40	12.22	392.11	256.78	2.6	–.3
Feb	34.5	41.9	4.7	11.31	7.39	12.25	390.20	255.03	3.2	.3
Mar	34.5	41.8	4.6	11.32	7.37	12.28	390.54	254.42	2.1	–.9
Apr	34.6	41.5	4.4	11.38	7.39	12.31	393.75	255.68	2.3	–.9
May	34.2	41.5	4.3	11.36	7.36	12.30	388.51	251.63	.7	–2.5
June	34.4	41.5	4.2	11.43	7.39	12.33	393.19	254.16	2.2	–.8
July	34.5	41.3	4.2	11.47	7.41	12.39	395.72	255.80	2.8	–.0
Aug	34.4	41.5	4.3	11.46	7.39	12.42	394.22	254.34	2.4	–.1
Sept	34.4	41.5	4.4	11.52	7.42	12.43	396.29	255.34	2.4	–.1
Oct	34.5	41.4	4.3	11.55	7.42	12.46	398.48	255.93	2.0	–.6
Nov	34.4	41.5	4.3	11.59	7.44	12.49	398.70	255.91	2.3	–.1
Dec	34.3	41.2	4.2	11.61	7.44	12.51	398.22	255.11	2.1	–.4
1996: Jan	33.8	40.0	4.1	11.62	7.41	12.63	392.76	250.48	.2	–2.5
Feb	34.5	41.4	4.3	11.65	7.42	12.56	401.93	255.84	2.7	.0
Mar	34.5	41.3	4.3	11.68	7.40	12.55	402.96	255.36	3.1	.3
Apr	34.3	41.5	4.6	11.72	7.40	12.74	402.00	253.79	2.6	–.3
May	34.2	41.7	4.6	11.74	7.39	12.73	401.51	252.68	3.6	.6
June	34.7	41.8	4.6	11.83	7.44	12.77	410.50	258.18	4.6	1.8
July	34.2	41.6	4.4	11.81	7.41	12.79	403.90	253.55	2.5	–.4
Aug	34.4	41.7	4.5	11.87	7.45	12.89	408.33	256.17	3.5	.7
Sept	34.7	41.7	4.5	11.91	7.45	12.87	413.28	258.46	4.4	1.4
Oct	34.3	41.7	4.4	11.90	7.42	12.88	408.17	254.47	2.5	–.5
Nov p	34.5	41.7	4.5	11.99	7.45	12.93	413.66	257.09	3.8	.5
Dec p	34.8	42.0	4.7	12.05	7.47	13.01	419.34	259.98	5.2	1.8

[1] For production or nonsupervisory workers; total includes private industry groups shown in Table B–44.
[2] Current dollars divided by the consumer price index for urban wage earners and clerical workers on a 1982=100 base.
[3] Percent changes are based on data that are not seasonally adjusted.

Note.—See Note, Table B–44.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–46.—*Employment cost index, private industry, 1980–96*

Year and month	Total private: Total compensation	Total private: Wages and salaries	Total private: Benefits [1]	Goods-producing: Total compensation	Goods-producing: Wages and salaries	Goods-producing: Benefits [1]	Service-producing: Total compensation	Service-producing: Wages and salaries	Service-producing: Benefits [1]	Manufacturing: Total compensation	Manufacturing: Wages and salaries	Manufacturing: Benefits [1]	Nonmanufacturing: Total compensation	Nonmanufacturing: Wages and salaries	Nonmanufacturing: Benefits [1]
	Index, June 1989=100; not seasonally adjusted														
December:															
1980	64.8	67.1	59.4	66.7	69.7	60.5	63.3	65.3	58.4	66.0	68.9	59.9	64.2	66.2	59.1
1981	71.2	73.0	66.6	73.3	75.7	68.2	69.5	71.1	65.1	72.5	74.9	67.5	70.4	72.1	66.1
1982	75.8	77.6	71.4	77.8	80.0	73.2	74.1	75.9	69.6	76.9	79.1	72.4	75.1	76.8	70.6
1983	80.1	81.4	76.7	81.6	83.2	78.3	78.9	80.2	75.2	80.8	82.5	77.5	79.6	81.0	76.2
1984	84.0	84.8	81.7	85.4	86.4	83.2	82.9	83.7	80.4	85.0	86.1	82.7	83.4	84.2	81.1
1985	87.3	88.3	84.6	88.2	89.4	85.7	86.6	87.7	83.6	87.8	89.2	85.0	87.0	88.0	84.4
1986	90.1	91.1	87.5	91.0	92.3	88.3	89.3	90.3	86.8	90.7	92.1	87.5	89.7	90.6	87.5
1987	93.1	94.1	90.5	93.8	95.2	90.9	92.6	93.4	90.2	93.4	95.2	89.8	92.9	93.7	91.0
1988	97.6	98.0	96.7	97.9	98.2	97.3	97.3	97.8	96.1	97.6	98.1	96.6	97.5	97.8	96.8
1989	102.3	102.0	102.6	102.1	102.0	102.6	102.3	102.2	102.6	102.0	101.9	102.3	102.3	102.2	102.8
1990	107.0	106.1	109.4	107.0	105.8	109.9	107.0	106.3	109.0	107.2	106.2	109.5	106.9	106.1	109.3
1991	111.7	110.0	116.2	111.9	109.7	116.7	111.6	110.2	115.7	112.2	110.3	116.1	111.5	109.8	116.2
1992	115.6	112.9	122.2	116.1	112.8	123.4	115.2	113.0	121.2	116.5	113.7	122.6	115.1	112.6	122.0
1993	119.8	116.4	128.3	120.6	116.1	130.3	119.3	116.6	126.7	121.3	117.3	130.0	119.0	116.0	127.4
1994	123.5	119.7	133.0	124.3	119.6	134.8	122.8	119.7	131.5	125.1	120.8	134.3	122.6	119.1	132.3
1995	126.7	123.1	135.9	127.3	122.9	137.1	126.2	123.2	134.7	128.3	124.3	136.7	125.9	122.5	135.3
1995: Mar	124.5	120.6	134.5	125.3	120.4	135.9	123.9	120.7	133.2	126.2	121.9	135.4	123.7	120.0	133.9
June	125.4	121.5	135.1	125.9	121.4	135.9	124.9	121.6	134.1	126.9	122.9	135.2	124.6	120.9	134.7
Sept	126.2	122.4	135.6	126.5	122.1	136.2	125.8	122.6	134.8	127.3	123.5	135.5	125.5	121.9	135.4
Dec	126.7	123.1	135.9	127.3	122.9	137.1	126.2	123.2	134.7	128.3	124.3	136.7	125.9	122.5	135.3
1996: Mar	127.9	124.4	136.6	128.2	123.9	137.7	127.6	124.7	135.5	129.3	125.4	137.5	127.2	123.9	136.0
June	129.0	125.6	137.4	129.3	125.1	138.6	128.6	125.8	136.2	130.4	126.5	138.5	128.2	125.1	136.7
Sept	129.8	126.5	138.1	130.1	126.1	138.8	129.5	126.7	137.2	131.3	127.7	138.8	129.1	125.9	137.5
	Index, June 1989=100; seasonally adjusted														
1995: Mar	124.4	120.6	133.8	125.3	120.4	135.4	124.0	120.7	132.9	126.0	121.9	134.8	123.6	120.0	133.5
June	125.3	121.5	134.6	126.0	121.4	135.7	124.9	121.6	133.9	126.7	122.9	135.1	124.6	120.9	134.5
Sept	126.1	122.4	135.4	126.7	122.1	136.3	125.8	122.5	134.8	127.4	123.5	135.7	125.4	121.8	135.4
Dec	126.9	123.2	136.1	127.7	122.9	137.7	126.5	123.3	135.2	128.4	124.3	137.1	126.2	122.6	135.9
1996: Mar	127.8	124.5	136.0	128.2	123.9	137.2	127.5	124.8	135.2	129.0	125.4	137.0	127.2	124.0	135.7
June	128.8	125.6	136.9	129.4	125.1	138.4	128.5	125.8	136.0	130.2	126.5	138.4	128.2	125.1	136.5
Sept	129.6	126.4	137.8	130.3	126.1	138.9	129.4	126.5	137.1	131.3	127.7	139.0	128.9	125.7	137.4
	Percent change from 12 months earlier, not seasonally adjusted														
December:															
1980	9.6	9.1	11.7	9.9	9.4	10.8	9.7	8.8	12.5	9.8	9.4	10.5	9.7	8.9	12.6
1981	9.9	8.8	12.1	9.9	8.6	12.7	9.8	8.9	11.5	9.8	8.7	12.7	9.7	8.9	11.8
1982	6.5	6.3	7.2	6.1	5.7	7.3	6.6	6.8	6.9	6.1	5.6	7.3	6.7	6.5	6.8
1983	5.7	4.9	7.4	4.9	4.0	7.0	6.5	5.7	8.0	5.1	4.3	7.0	6.0	5.5	7.9
1984	4.9	4.2	6.5	4.7	3.8	6.3	5.1	4.4	6.9	5.2	4.4	6.7	4.8	4.0	6.4
1985	3.9	4.1	3.5	3.3	3.5	3.0	4.5	4.8	4.0	3.3	3.6	2.8	4.3	4.5	4.1
1986	3.2	3.2	3.4	3.2	3.2	3.0	3.1	3.0	3.8	3.3	3.3	2.9	3.1	3.0	3.7
1987	3.3	3.3	3.4	3.1	3.1	2.9	3.7	3.4	3.9	3.0	3.4	2.6	3.6	3.4	4.0
1988	4.8	4.1	6.9	4.4	3.2	7.0	5.1	4.7	6.5	4.5	3.0	7.6	5.0	4.4	6.4
1989	4.8	4.1	6.1	4.3	3.9	5.4	5.1	4.5	6.8	4.5	3.9	5.9	4.9	4.5	6.2
1990	4.6	4.0	6.6	4.8	3.7	7.1	4.6	4.0	6.2	5.1	4.2	7.0	4.5	3.8	6.3
1991	4.4	3.7	6.2	4.6	3.7	6.2	4.3	3.7	6.1	4.7	3.9	6.0	4.3	3.5	6.3
1992	3.5	2.6	5.2	3.8	2.8	5.7	3.2	2.5	4.8	3.8	3.1	5.6	3.2	2.6	5.0
1993	3.6	3.1	5.0	3.9	2.9	5.6	3.6	3.2	4.5	4.1	3.2	6.0	3.4	3.0	4.4
1994	3.1	2.8	3.7	3.1	3.0	3.5	2.9	2.7	3.8	3.1	3.0	3.3	3.0	2.7	3.8
1995	2.6	2.8	2.2	2.4	2.8	1.7	2.8	2.9	2.4	2.6	2.9	1.8	2.7	2.9	2.3
1995: Mar	2.9	2.9	2.9	2.9	3.0	2.4	2.9	2.9	3.3	3.0	3.3	2.6	2.8	2.7	3.1
June	2.8	2.9	2.6	2.4	2.9	1.5	3.1	2.9	3.4	2.8	3.3	1.7	2.8	2.7	3.0
Sept	2.6	2.8	2.1	2.1	2.7	1.0	2.9	2.9	2.7	2.3	2.9	1.2	2.6	2.7	2.4
Dec	2.6	2.8	2.2	2.4	2.8	1.7	2.8	2.9	2.4	2.6	2.9	1.8	2.7	2.9	2.3
1996: Mar	2.7	3.2	1.6	2.3	2.9	1.3	3.0	3.3	1.7	2.5	2.9	1.6	2.8	3.3	1.6
June	2.9	3.4	1.7	2.7	3.0	2.0	3.0	3.5	1.6	2.8	2.9	2.4	2.9	3.5	1.5
Sept	2.9	3.3	1.8	2.8	3.3	1.9	2.9	3.3	1.8	3.1	3.4	2.4	2.9	3.3	1.6
	Percent change from 3 months earlier, seasonally adjusted														
1995: Mar	0.7	0.8	0.1	0.7	0.7	0	0.9	0.8	0.7	0.6	0.9	0	0.7	0.7	0.5
June	.7	.7	.6	.6	.8	.2	.7	.7	.8	.6	.8	.2	.8	.8	.7
Sept	.6	.7	.6	.6	.6	.4	.7	.7	.7	.6	.5	.4	.6	.7	.7
Dec	.7	.7	.6	.8	.7	1.0	.6	.7	.4	.8	.6	1.0	.7	.7	.4
1996: Mar	.7	1.1	–.1	.4	.8	–.4	.8	1.2	0	.5	.9	–.1	.8	1.1	–.1
June	.8	.9	.7	.9	1.0	.9	.8	.8	.6	.9	.9	1.0	.8	.9	.6
Sept	.6	.6	.7	.7	.8	.4	.7	.6	.8	.8	.9	.4	.5	.5	.7

[1] Employer costs for employee benefits.

Note.—The employment cost index is a measure of the change in the cost of labor, free from the influence of employment shifts among occupations and industries.

Data exclude farm and household workers.

Through December 1981, percent changes are based on unrounded data; thereafter changes are based on indexes as published.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–47.—*Productivity and related data, business sector, 1959–96*

[Index numbers, 1992=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 costs		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
1959	50.7	54.3	33.8	33.5	66.6	61.7	13.1	13.7	63.2	66.0	25.8	25.2	25.5	25.0
1960	51.5	54.9	34.3	34.0	66.7	62.0	13.7	14.3	64.8	67.8	26.6	26.0	25.8	25.3
1961	53.2	56.6	34.9	34.7	65.6	61.2	14.2	14.8	66.7	69.4	26.7	26.1	26.1	25.5
1962	55.6	59.2	37.1	37.1	66.7	62.6	14.9	15.4	69.0	71.5	26.7	26.0	26.4	25.8
1963	57.8	61.3	38.8	38.7	67.1	63.2	15.4	15.9	70.6	73.1	26.6	26.0	26.5	26.0
1964	60.5	63.9	41.3	41.4	68.3	64.7	16.2	16.7	73.3	75.5	26.8	26.1	26.8	26.3
1965	62.6	65.8	44.2	44.3	70.6	67.2	16.8	17.2	74.8	76.7	26.8	26.2	27.3	26.7
1966	65.0	68.1	47.1	47.4	72.4	69.6	17.9	18.2	77.6	78.9	27.6	26.8	28.0	27.3
1967	66.5	69.3	48.0	48.2	72.2	69.6	18.9	19.3	79.6	81.0	28.5	27.8	28.8	28.2
1968	68.8	71.7	50.4	50.8	73.3	70.8	20.5	20.8	82.6	83.9	29.8	29.0	29.9	29.3
1969	69.1	71.7	52.0	52.3	75.2	72.9	21.9	22.2	83.8	85.0	31.7	31.0	31.1	30.5
1970	70.4	72.7	51.8	52.2	73.6	71.7	23.6	23.8	85.4	86.2	33.6	32.8	32.6	31.9
1971	73.4	75.7	53.8	54.1	73.3	71.5	25.1	25.4	87.1	87.9	34.3	33.5	34.0	33.3
1972	75.8	78.3	57.4	57.9	75.7	73.9	26.7	27.0	89.7	90.6	35.3	34.5	35.2	34.3
1973	78.2	80.8	61.3	62.1	78.5	76.8	29.0	29.2	91.7	92.4	37.1	36.2	37.0	35.5
1974	77.1	79.5	60.6	61.1	78.6	76.9	31.8	32.1	90.6	91.4	41.3	40.4	40.4	39.1
1975	79.7	81.7	59.9	60.1	75.1	73.6	35.1	35.4	91.5	92.2	44.1	43.3	44.3	43.2
1976	82.6	84.6	64.0	64.3	77.5	76.0	38.2	38.4	94.2	94.7	46.2	45.4	46.6	45.6
1977	84.2	86.0	67.8	68.0	80.5	79.1	41.2	41.5	95.4	96.1	48.9	48.3	49.3	48.6
1978	84.8	87.1	71.6	72.3	84.5	83.1	44.9	45.3	96.6	97.4	52.9	52.0	53.1	51.9
1979	84.5	86.4	73.8	74.3	87.3	86.0	49.2	49.6	95.1	95.8	58.2	57.3	57.7	56.4
1980	84.3	86.1	72.9	73.5	86.5	85.3	54.5	54.9	92.8	93.5	64.7	63.8	62.9	61.9
1981	86.0	87.1	74.9	74.8	87.1	85.9	59.7	60.2	92.2	92.9	69.4	69.2	68.6	67.9
1982	85.5	86.4	72.6	72.4	84.9	83.8	64.2	64.7	93.3	94.0	75.1	74.8	72.6	72.2
1983	88.3	90.0	76.2	76.8	86.3	85.3	66.8	67.4	94.2	95.0	75.7	74.9	75.3	74.7
1984	90.3	91.5	82.5	82.8	91.3	90.5	69.8	70.3	94.2	94.9	77.2	76.8	77.7	77.0
1985	92.0	92.5	85.9	85.8	93.4	92.8	73.2	73.5	95.4	95.9	79.6	79.5	79.9	79.7
1986	94.2	94.9	88.6	88.7	94.0	93.5	77.0	77.3	98.5	99.0	81.7	81.5	81.6	81.4
1987	94.1	94.6	91.1	91.4	96.8	96.5	79.9	80.2	98.7	99.1	84.9	84.7	83.8	83.5
1988	94.6	95.2	94.6	95.1	100.0	99.9	83.5	83.6	99.0	99.2	88.3	87.8	86.8	86.4
1989	95.3	95.7	97.8	98.1	102.5	102.5	85.8	85.9	97.1	97.1	90.0	89.7	90.5	90.0
1990	96.1	96.2	98.7	98.8	102.6	102.7	90.7	90.6	97.4	97.3	94.4	94.2	94.0	93.8
1991	96.7	96.9	96.9	97.1	100.2	100.2	95.1	95.1	97.9	97.9	98.3	98.1	97.7	97.6
1992	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
1993	100.2	100.2	102.7	102.9	102.5	102.8	102.5	102.3	99.5	99.3	102.3	102.1	102.5	102.5
1994	100.7	100.7	107.0	107.0	106.2	106.3	104.5	104.3	99.0	98.8	103.8	103.7	104.7	104.9
1995	100.8	100.9	109.6	109.9	108.8	108.9	107.8	107.7	99.2	99.1	106.9	106.7	107.1	107.2
1992: I	99.3	99.3	98.8	98.8	99.5	99.5	98.6	98.6	99.8	99.7	99.3	99.3	99.3	99.2
II	99.9	99.9	99.6	99.6	99.8	99.7	99.5	99.6	99.8	99.9	99.6	99.6	99.7	99.8
III	99.7	99.7	99.8	99.8	100.1	100.1	100.7	100.7	100.3	100.3	101.0	101.0	100.1	100.1
IV	101.1	101.1	101.7	101.8	100.7	100.7	101.2	101.2	99.9	99.9	100.1	100.1	100.9	100.9
1993: I	100.2	100.1	101.4	101.6	101.3	101.4	101.7	101.5	99.6	99.5	101.5	101.4	101.7	101.8
II	99.8	99.7	102.1	102.2	102.3	102.6	102.3	102.0	99.5	99.3	102.6	102.4	102.3	102.4
III	100.0	100.1	102.8	103.3	102.9	103.2	102.8	102.5	99.6	99.3	102.9	102.4	102.7	102.7
IV	100.9	100.8	104.5	104.7	103.5	103.9	103.3	103.0	99.3	99.0	102.4	102.2	103.3	103.3
1994: I	100.5	100.3	104.9	104.9	104.4	104.6	104.0	103.8	99.5	99.2	103.6	103.4	103.9	103.9
II	100.6	100.6	106.7	106.7	106.0	106.1	104.2	104.1	99.0	98.9	103.6	103.5	104.4	104.5
III	101.1	101.0	107.7	107.8	106.6	106.7	104.7	104.5	98.6	98.4	103.6	103.5	105.1	105.3
IV	101.1	101.1	108.7	108.8	107.6	107.6	105.5	105.4	98.8	98.7	104.4	104.2	105.6	105.7
1995: I	100.4	100.5	108.8	109.0	108.4	108.4	106.2	106.2	98.8	98.7	105.8	105.6	106.4	106.5
II	100.8	100.9	109.0	109.2	108.2	108.3	107.3	107.2	98.9	98.8	106.5	106.3	106.9	107.1
III	101.2	101.3	110.3	110.6	109.0	109.1	108.3	108.2	99.3	99.2	107.0	106.8	107.5	107.5
IV	101.0	101.1	110.4	110.7	109.3	109.5	109.4	109.3	99.8	99.6	108.3	108.1	107.8	107.8
1996: I	101.5	101.5	111.2	111.4	109.6	109.8	110.3	110.2	99.8	99.7	108.6	108.5	108.2	108.1
II	101.8	101.7	112.6	112.8	110.6	110.9	111.4	111.3	99.9	99.7	109.4	109.4	108.8	108.7
III	101.8	101.6	113.2	113.3	111.1	111.5	112.5	112.2	100.2	100.0	110.5	110.4	109.1	109.0

[1] Output refers to real gross domestic product originating in the sector.

[2] Hours at work 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 output divided by the output index.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–48.—*Changes in productivity and related data, business sector, 1960–96*

[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 costs		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
1960	1.6	1.2	1.6	1.6	0.1	0.5	4.3	4.4	2.6	2.7	2.7	3.2	1.3	1.1
1961	3.3	3.1	1.7	1.9	–1.6	–1.1	4.0	3.4	2.9	2.4	.6	.3	1.0	.9
1962	4.6	4.6	6.4	6.9	1.7	2.1	4.5	4.1	3.5	3.0	–.1	–.5	.9	.8
1963	3.9	3.4	4.5	4.5	.6	1.1	3.7	3.5	2.3	2.2	–.2	.1	.7	.9
1964	4.6	4.3	6.4	6.8	1.7	2.4	5.2	4.6	3.8	3.3	.5	.3	1.0	1.2
1965	3.5	3.0	7.0	7.0	3.4	3.9	3.7	3.3	2.1	1.7	.3	.3	1.7	1.5
1966	3.9	3.5	6.6	7.1	2.6	3.6	6.7	5.8	3.7	2.8	2.7	2.3	2.6	2.3
1967	2.3	1.7	2.0	1.7	–.3	–.0	5.7	5.8	2.5	2.7	3.3	4.0	2.8	3.3
1968	3.5	3.4	5.0	5.2	1.5	1.7	8.1	7.9	3.8	3.5	4.5	4.3	3.8	3.9
1969	.4	.1	3.0	3.0	2.6	2.9	7.0	6.8	1.5	1.3	6.6	6.7	4.3	4.2
1970	1.8	1.4	–.3	–.2	–2.0	–1.6	7.8	7.2	1.9	1.4	5.9	5.7	4.6	4.5
1971	4.3	4.1	3.8	3.8	–.4	–.3	6.4	6.5	1.9	2.0	2.1	2.3	4.5	4.6
1972	3.3	3.4	6.6	6.9	3.3	3.4	6.3	6.4	3.0	3.1	2.9	2.9	3.4	2.9
1973	3.1	3.1	6.9	7.3	3.7	4.0	8.6	8.2	2.2	1.9	5.3	4.9	5.2	3.6
1974	–1.3	–1.6	–1.2	–1.5	.1	.1	9.7	9.9	–1.2	–1.1	11.2	11.6	9.0	10.0
1975	3.3	2.7	–1.2	–1.7	–4.4	–4.3	10.3	10.1	1.1	.9	6.8	7.2	9.8	10.6
1976	3.7	3.6	6.9	7.1	3.1	3.4	8.8	8.6	2.9	2.7	4.9	4.9	5.1	5.6
1977	1.9	1.6	5.9	5.7	3.9	4.0	7.9	8.0	1.3	1.4	5.8	6.3	5.9	6.4
1978	.7	1.3	5.6	6.4	4.9	5.0	9.0	9.1	1.3	1.4	8.2	7.7	7.8	6.9
1979	–.3	–.8	3.0	2.8	3.4	3.6	9.7	9.5	–1.5	–1.7	10.0	10.3	8.6	8.6
1980	–.2	–.4	–1.1	–1.2	–.9	–.8	10.8	10.8	–2.4	–2.4	11.0	11.2	9.0	9.8
1981	2.0	1.1	2.7	1.9	.7	.7	9.5	9.7	–.7	–.6	7.4	8.5	9.0	9.6
1982	–.6	–.8	–3.1	–3.3	–2.5	–2.5	7.5	7.4	1.2	1.2	8.1	8.2	5.9	6.4
1983	3.3	4.2	5.0	6.1	1.7	1.8	4.2	4.2	.9	1.0	.9	.1	3.7	3.4
1984	2.3	1.7	8.2	7.9	5.8	6.0	4.4	4.2	.0	–.1	2.0	2.5	3.2	3.1
1985	1.8	1.0	4.1	3.6	2.2	2.5	4.9	4.6	1.3	1.0	3.0	3.6	2.8	3.4
1986	2.5	2.6	3.2	3.4	.7	.8	5.2	5.2	3.3	3.3	2.6	2.5	2.2	2.2
1987	–.2	–.3	2.9	3.0	3.0	3.2	3.8	3.7	.2	.1	4.0	4.0	2.7	2.6
1988	.5	.6	3.8	4.1	3.3	3.5	4.5	4.3	.3	.1	4.0	3.7	3.5	3.4
1989	.8	.5	3.4	3.2	2.5	2.6	2.8	2.7	–2.0	–2.1	1.9	2.1	4.2	4.2
1990	.8	.5	.9	.7	.1	.2	5.7	5.5	.3	.1	4.9	5.0	4.0	4.2
1991	.6	.7	–1.8	–1.8	–2.3	–2.5	4.8	4.9	.6	.7	4.2	4.2	3.9	4.1
1992	3.4	3.2	3.2	3.0	–.2	–.2	5.2	5.2	2.1	2.1	1.7	1.9	2.4	2.4
1993	.2	.2	2.7	2.9	2.5	2.8	2.5	2.3	–.5	–.7	2.3	2.1	2.5	2.5
1994	.5	.5	4.2	4.0	3.7	3.5	1.9	2.1	–.6	–.5	1.4	1.5	2.2	2.3
1995	.1	.3	2.5	2.7	2.4	2.4	3.1	3.2	.3	.3	3.0	2.9	2.3	2.2
1992: I	8.1	7.2	6.2	5.6	–1.7	–1.5	8.0	7.8	5.2	5.0	–.1	.5	2.8	3.0
II	2.1	2.5	3.2	3.1	1.1	.6	3.4	4.1	.1	.7	1.3	1.6	1.9	2.1
III	–.5	–1.0	.8	.7	1.4	1.7	4.9	4.6	1.9	1.5	5.5	5.6	1.5	1.4
IV	5.4	5.9	7.9	8.4	2.4	2.4	2.0	2.0	–1.5	–1.5	–3.2	–3.7	3.0	3.2
1993: I	–3.5	–3.8	–1.2	–.9	2.4	3.0	1.9	1.3	–1.0	–1.6	5.6	5.2	3.5	3.8
II	–1.6	–1.8	2.5	2.7	4.2	4.6	2.6	2.1	–.3	–.8	4.3	4.0	2.5	2.1
III	.8	1.7	3.0	4.1	2.2	2.4	2.0	1.8	.1	–.1	1.2	.1	1.3	1.2
IV	3.8	2.8	6.5	5.5	2.6	2.6	2.0	2.0	–1.2	–1.1	–1.8	–.7	2.4	2.5
1994: I	–1.7	–1.8	1.7	.8	3.5	2.7	2.8	2.9	.8	.9	4.6	4.9	2.4	2.5
II	.5	1.0	6.9	7.0	6.4	6.0	.7	1.3	–1.8	–1.2	.2	.3	1.8	2.2
III	1.9	1.7	4.1	4.2	2.1	2.4	2.0	1.8	–1.7	–1.9	.1	.1	2.7	2.9
IV	.2	.4	3.8	4.0	3.6	3.6	2.9	3.3	.7	1.0	2.8	2.9	2.0	1.9
1995: I	–2.6	–2.3	.3	.6	3.0	2.9	2.8	2.9	–.0	.1	5.6	5.3	3.0	3.0
II	1.4	1.5	.7	.9	–.7	–.6	4.1	4.0	.7	.6	2.6	2.5	2.2	2.0
III	1.4	1.8	4.8	5.0	3.3	3.2	3.6	3.7	1.5	1.6	2.1	1.9	2.0	1.7
IV	–.6	–1.2	.5	.3	1.1	1.5	4.3	4.0	1.9	1.6	5.0	5.2	1.0	.9
1996: I	2.1	1.9	3.0	2.7	.8	.8	3.2	3.4	–.0	.2	1.1	1.5	1.5	1.4
II	1.2	.6	5.0	4.8	3.8	4.1	4.3	3.9	.4	.1	3.1	3.3	2.4	2.1
III	0	–.3	2.1	1.8	2.0	2.1	3.8	3.4	1.5	1.1	3.8	3.7	1.2	1.1

[1] Output refers to real gross domestic product originating in the sector.

[2] Hours at work 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 output divided by the output index.

Note.—Percent changes are based on original data and may differ slightly from percent changes based on indexes in Table B–47.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–49.—*Industrial production indexes, major industry divisions, 1947–96*

[1987=100; monthly data seasonally adjusted]

Year or month	Total industrial production	Manufacturing: Total	Manufacturing: Durable	Manufacturing: Nondurable	Mining	Utilities
1947	22.7	21.2	19.9	22.6	55.5	11.7
1948	23.6	22.0	20.8	23.4	58.3	13.0
1949	22.3	20.8	18.9	23.0	51.7	13.9
1950	25.8	24.2	23.0	25.6	57.7	15.8
1951	28.0	26.1	25.9	26.4	63.4	18.1
1952	29.1	27.2	27.5	26.9	62.8	19.6
1953	31.6	29.6	31.1	28.0	64.5	21.3
1954	29.9	27.7	27.4	28.2	63.2	22.9
1955	33.7	31.3	31.3	31.3	70.5	25.6
1956	35.1	32.5	32.4	32.9	74.2	28.1
1957	35.6	32.9	32.6	33.5	74.3	30.0
1958	33.3	30.6	28.5	33.7	68.1	31.4
1959	37.3	34.5	32.8	37.1	71.3	34.5
1960	38.1	35.2	33.3	38.0	72.7	36.9
1961	38.4	35.3	32.7	39.1	73.1	39.0
1962	41.6	38.4	36.3	41.5	75.2	41.9
1963	44.0	40.7	38.7	43.8	78.2	44.8
1964	47.0	43.5	41.4	46.6	81.4	48.7
1965	51.7	48.2	47.1	49.8	84.4	51.7
1966	56.3	52.6	52.3	52.9	88.9	55.6
1967	57.5	53.6	52.9	54.6	90.6	58.4
1968	60.7	56.6	55.5	58.1	94.1	63.1
1969	63.5	59.1	57.7	61.1	97.8	68.7
1970	61.4	56.4	53.3	61.1	100.4	72.9
1971	62.2	57.3	53.1	63.6	97.8	76.4
1972	68.3	63.3	59.3	69.3	99.9	81.3
1973	73.8	68.9	66.2	72.7	100.8	84.5
1974	72.7	67.9	64.8	72.3	100.3	83.5
1975	66.3	61.1	56.7	67.7	98.0	84.3
1976	72.4	67.4	62.6	74.6	98.9	87.6
1977	78.2	73.3	68.7	80.1	101.5	89.9
1978	82.6	77.8	73.9	83.5	104.6	92.7
1979	85.7	80.9	78.3	84.6	106.6	95.3
1980	84.1	78.8	75.7	83.1	110.0	95.9
1981	85.7	80.3	77.4	84.5	114.3	94.3
1982	81.9	76.6	72.7	82.5	109.3	91.8
1983	84.9	80.9	76.8	87.0	104.8	93.6
1984	92.8	89.3	88.4	90.8	111.9	97.0
1985	94.4	91.6	91.8	91.5	109.0	99.5
1986	95.3	94.3	93.9	94.9	101.0	96.3
1987	100.0	100.0	100.0	100.0	100.0	100.0
1988	104.4	104.7	106.6	102.3	101.3	105.0
1989	106.0	106.4	108.6	103.7	100.0	108.7
1990	106.0	106.1	107.4	104.4	102.0	109.9
1991	104.2	103.8	104.1	103.4	100.2	112.3
1992	107.7	108.2	109.3	106.7	98.9	111.9
1993	111.5	112.3	115.6	108.6	98.0	116.3
1994	118.1	119.7	125.8	113.0	100.3	117.9
1995	121.9	123.9	132.5	114.3	99.9	122.0
1996 p	125.8	128.0	139.9	114.8	101.2	126.1
1995: Jan	121.8	124.1	131.8	115.6	100.6	117.3
Feb	121.7	123.9	132.1	114.8	100.8	118.5
Mar	121.9	124.0	132.2	115.1	100.3	119.2
Apr	121.4	123.5	131.6	114.6	100.6	118.8
May	121.3	123.2	131.1	114.4	100.5	122.1
June	121.4	123.3	131.5	114.3	101.0	121.0
July	121.5	123.3	131.5	114.3	100.7	122.7
Aug	122.7	124.2	133.2	114.3	100.0	128.8
Sept	122.8	124.9	134.4	114.4	100.0	122.7
Oct	122.2	124.4	133.5	114.3	98.2	121.6
Nov	122.6	124.5	134.3	113.7	98.3	125.4
Dec	122.8	124.8	134.8	113.8	98.1	125.1
1996: Jan	122.5	124.5	134.9	113.1	97.1	125.6
Feb	124.2	126.2	137.5	113.8	98.0	126.6
Mar	123.6	125.2	135.6	113.6	101.1	128.0
Apr	124.5	126.5	138.3	113.5	100.4	126.4
May	125.4	127.4	139.1	114.4	100.5	128.4
June	126.4	128.5	141.1	114.6	102.8	126.6
July	126.3	129.0	141.5	115.2	100.9	122.6
Aug	126.9	129.2	142.2	114.8	102.7	125.6
Sept	127.2	129.6	142.3	115.6	101.9	125.4
Oct p	127.1	129.5	141.5	116.2	102.0	125.5
Nov p	128.1	130.4	142.8	116.7	102.7	128.4
Dec p	129.1	131.8	144.7	117.6	104.0	124.1

Source: Board of Governors of the Federal Reserve System.

TABLE B–50.—*Industrial production indexes, market groupings, 1947–96*

[1987=100; monthly data seasonally adjusted]

Year or month	Total industrial production	Final products: Total	Consumer goods: Total	Consumer goods: Automotive products	Consumer goods: Other durable goods	Consumer goods: Nondurable goods	Equipment: Total [1]	Equipment: Business	Equipment: Defense and space	Intermediate products	Materials: Total	Materials: Durable	Materials: Nondurable	Materials: Energy
1947	22.7	20.8	25.4	21.7	22.8	27.0	15.0	14.7	7.5	22.4	25.1	21.5	....	....
1948	23.6	21.5	26.2	22.6	23.8	27.7	15.8	15.3	8.8	23.6	26.2	22.1	....	....
1949	22.3	20.9	26.1	22.5	22.0	27.9	14.1	13.4	9.2	22.4	23.9	19.8	....	....
1950	25.8	23.5	29.7	28.3	30.4	30.3	15.3	14.3	10.8	26.1	28.6	24.9	....	....
1951	28.0	25.4	29.4	25.0	26.2	31.3	21.2	17.5	26.5	27.4	31.6	28.3	....	....
1952	29.1	27.3	30.1	22.5	26.2	32.6	25.5	19.8	37.2	27.2	32.1	28.9	....	....
1953	31.6	29.1	31.9	28.4	29.6	33.5	27.6	20.6	44.6	29.1	35.6	33.8	....	....
1954	29.9	27.6	31.7	26.5	27.3	33.9	24.2	18.1	39.3	29.0	32.9	29.2	25.2	52.7
1955	33.7	29.8	35.4	35.2	32.2	36.5	24.7	19.6	35.9	32.9	38.9	35.7	28.9	59.3
1956	35.1	31.6	36.7	28.9	33.9	38.8	27.1	22.7	35.1	34.4	39.9	35.8	30.2	62.7
1957	35.6	32.5	37.6	30.3	33.2	40.1	28.2	23.6	36.7	34.4	39.9	35.8	30.1	63.4
1958	33.3	31.0	37.2	24.1	31.3	41.3	25.2	19.9	36.8	33.6	35.9	30.1	29.9	58.8
1959	37.3	34.0	40.9	30.2	36.0	44.1	27.7	22.4	38.8	37.1	41.4	35.9	34.2	62.3
1960	38.1	35.1	42.4	34.6	36.2	45.5	28.5	23.0	39.9	37.4	42.0	36.3	34.8	63.1
1961	38.4	35.4	43.3	31.6	37.3	47.0	28.1	22.3	40.6	38.1	42.0	35.5	36.2	63.6
1962	41.6	38.4	46.2	38.3	40.5	49.2	31.3	24.3	46.9	40.4	45.8	39.4	39.2	65.8
1963	44.0	40.6	48.8	41.9	43.7	51.4	33.1	25.5	50.6	42.7	48.7	42.1	41.6	69.7
1964	47.0	42.9	51.5	43.9	47.7	54.0	35.0	28.5	49.0	45.5	52.6	45.9	45.2	72.5
1965	51.7	47.1	55.5	54.1	54.1	56.3	39.6	32.6	54.3	48.4	58.7	52.6	49.6	75.8
1966	56.3	51.6	58.4	53.9	59.6	59.0	46.1	37.8	63.7	51.4	63.9	57.9	53.6	80.6
1967	57.5	53.7	59.8	47.4	60.4	62.0	49.0	38.6	72.7	53.5	63.3	55.9	54.5	83.4
1968	60.7	56.3	63.4	56.4	64.7	64.5	50.4	40.3	72.9	56.6	67.5	59.2	59.9	87.2
1969	63.5	58.1	65.8	56.7	69.0	66.7	51.8	42.9	69.4	59.6	71.5	62.3	64.9	91.7
1970	61.4	56.0	65.0	47.7	66.9	67.8	48.1	41.3	58.7	58.7	69.0	56.5	65.2	96.2
1971	62.2	56.5	68.8	60.8	70.8	69.7	45.0	39.3	52.8	60.5	70.0	56.8	68.0	97.1
1972	68.3	61.3	74.3	65.6	81.0	74.2	49.3	44.8	51.3	67.6	77.2	64.2	74.9	100.8
1973	73.8	65.9	77.6	72.4	85.7	76.5	55.0	52.4	50.1	71.9	84.5	73.3	80.4	101.5
1974	72.7	65.7	75.2	62.6	79.3	76.5	56.8	54.7	49.4	69.4	82.8	71.2	80.8	98.8
1975	66.3	61.8	72.3	59.0	69.8	74.9	52.0	48.8	48.5	62.6	72.6	59.3	71.9	96.7
1976	72.4	66.2	79.4	73.2	78.2	80.4	53.8	50.6	49.2	69.0	81.2	68.4	81.4	99.0
1977	78.2	71.6	85.1	84.0	87.4	84.4	58.8	56.7	49.2	74.9	87.3	75.3	86.7	101.1
1978	82.6	76.1	88.4	86.3	91.2	87.8	64.2	63.1	49.5	79.1	91.8	81.4	89.7	102.2
1979	85.7	79.0	87.3	78.5	89.8	87.7	71.0	71.5	51.5	81.2	95.4	85.3	92.9	105.0
1980	84.1	80.0	85.3	59.5	85.1	89.1	74.6	73.5	57.4	77.0	91.3	79.3	88.7	106.2
1981	85.7	82.1	85.8	59.2	86.3	89.6	78.2	76.1	58.5	77.0	92.8	82.1	90.5	104.3
1982	81.9	80.8	84.5	57.5	78.1	89.7	77.0	72.9	65.7	75.1	85.1	73.4	82.1	100.7
1983	84.9	83.0	88.8	71.9	86.2	91.9	76.8	71.9	71.8	80.3	88.3	79.2	89.2	98.9
1984	92.8	91.0	92.8	86.6	94.6	93.4	89.2	85.4	78.9	86.2	96.6	92.1	93.0	103.8
1985	94.4	94.2	93.7	92.7	90.6	94.4	94.8	91.1	89.4	88.3	96.6	92.9	91.7	103.4
1986	95.3	95.7	96.8	95.3	93.9	97.6	94.5	93.1	96.0	91.9	95.9	93.7	94.4	99.5
1987	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
1988	104.4	104.8	102.9	106.4	103.0	102.4	107.6	110.7	99.7	101.8	105.0	106.8	104.4	102.2
1989	106.0	106.8	104.0	108.2	105.2	103.2	110.9	115.5	100.1	102.0	106.7	108.4	107.1	103.1
1990	106.0	107.0	103.4	100.7	103.6	103.8	112.1	116.9	98.8	101.2	106.8	107.6	108.0	104.2
1991	104.2	105.4	103.0	91.1	100.3	105.0	108.8	115.9	90.8	96.8	105.5	105.6	106.6	104.4
1992	107.7	108.7	106.0	100.9	104.9	106.9	112.5	123.4	84.8	99.3	109.7	112.8	110.1	103.7
1993	111.5	112.7	109.5	115.1	111.8	108.6	117.5	131.8	79.3	101.8	113.8	120.1	111.6	103.5
1994	118.1	118.3	113.7	130.8	118.5	111.2	125.3	144.9	71.9	107.3	122.0	132.3	118.0	105.3
1995	121.9	121.4	115.1	130.7	118.6	112.9	131.4	155.7	65.9	109.0	127.4	141.5	119.8	106.6
1996 p	125.8	125.6	116.4	131.7	119.0	114.4	140.5	168.5	63.9	110.7	131.8	149.7	119.2	107.8
1995: Jan	121.8	121.3	115.5	134.4	120.8	112.7	130.4	153.2	68.9	109.5	127.1	140.0	122.2	106.2
Feb	121.7	121.1	114.9	135.3	120.4	111.9	131.0	154.3	68.2	109.5	127.1	140.2	121.5	106.4
Mar	121.9	121.5	115.3	134.4	118.6	112.7	131.4	155.1	67.8	109.2	127.2	140.3	121.5	106.4
Apr	121.4	120.9	114.4	131.7	119.0	111.8	131.3	155.0	67.1	108.2	127.0	139.8	121.7	106.6
May	121.3	120.6	114.1	127.1	116.7	112.4	130.8	154.3	66.8	108.2	127.2	139.8	122.2	107.2
June	121.4	121.1	114.8	129.1	116.3	113.1	131.2	155.1	66.8	108.2	126.8	139.7	120.4	107.2
July	121.5	121.2	114.6	125.3	118.1	113.0	131.6	155.7	66.5	108.5	126.8	140.2	118.9	107.5
Aug	122.7	122.4	115.9	130.7	118.1	113.9	132.9	157.5	66.1	109.4	128.1	142.3	118.8	108.5
Sept	122.8	122.6	116.0	132.9	119.6	113.7	133.1	158.2	65.2	109.5	128.1	144.1	117.8	105.8
Oct	122.2	121.3	114.9	128.5	118.9	112.9	131.5	156.5	64.4	109.2	128.1	143.9	118.7	105.5
Nov	122.6	121.9	115.9	130.5	119.9	113.8	131.4	156.9	62.9	109.3	128.4	145.3	116.6	105.7
Dec	122.8	122.1	115.7	132.8	120.5	113.2	132.3	158.4	62.0	110.1	128.4	144.8	117.4	106.0
1996: Jan	122.5	121.9	114.6	125.9	115.5	113.3	133.7	160.5	61.6	108.5	128.5	145.8	115.7	105.9
Feb	124.2	124.5	116.6	133.1	118.1	114.5	137.3	164.8	63.1	109.3	129.4	147.3	116.1	106.1
Mar	123.6	123.4	115.3	120.3	118.5	114.4	136.5	162.7	64.2	109.6	129.1	145.5	116.3	108.2
Apr	124.5	124.8	115.9	133.5	118.5	113.6	139.2	166.3	64.0	108.6	130.3	147.3	118.8	107.0
May	125.4	125.1	116.3	134.1	119.3	114.0	139.2	166.0	64.3	110.1	131.6	148.8	120.0	108.1
June	126.4	126.0	116.8	138.4	123.4	113.5	140.8	168.6	63.7	111.3	132.6	150.5	120.1	108.7
July	126.3	126.7	117.3	143.4	120.5	114.0	142.0	170.3	64.5	109.9	132.1	150.3	121.1	106.3
Aug	126.9	126.5	116.5	137.5	118.7	113.8	142.8	171.1	65.0	111.2	133.5	152.3	119.9	108.4
Sept	127.2	126.8	116.8	135.8	117.7	114.6	143.2	172.0	64.7	111.9	133.4	152.0	120.4	108.2
Oct p	127.1	126.9	116.7	128.4	117.2	115.4	143.4	172.5	64.1	111.8	133.1	151.4	120.3	108.5
Nov p	128.1	128.2	118.2	135.2	117.3	116.4	144.7	174.6	63.5	112.7	133.8	151.8	121.3	109.7
Dec p	129.1	129.2	118.7	135.9	121.8	116.4	146.3	176.6	63.8	113.0	135.1	154.2	122.1	109.1

[1] Two components—oil and gas well drilling and manufactured homes—are included in total equipment, but not in detail shown.

Source: Board of Governors of the Federal Reserve System.

TABLE B–51.—*Industrial production indexes, selected manufactures, 1947–96*

[1987=100; monthly data seasonally adjusted]

Year or month	Durable manufactures: Primary metals: Total	Durable manufactures: Primary metals: Iron and steel	Durable manufactures: Fabricated metal products	Durable manufactures: Industrial machinery and equipment	Durable manufactures: Electrical machinery	Durable manufactures: Transportation equipment: Total	Durable manufactures: Transportation equipment: Motor vehicles and parts	Durable manufactures: Lumber and products	Nondurable manufactures: Apparel products	Nondurable manufactures: Textile mill products	Nondurable manufactures: Printing and publishing	Nondurable manufactures: Chemicals and products	Nondurable manufactures: Foods
1947	70.2	102.1	37.5	12.0	8.5	19.6	27.3	38.8	43.1	35.2	22.1	8.7	33.1
1948	73.0	106.8	38.2	12.1	8.8	21.4	29.6	40.4	45.0	37.7	23.2	9.4	32.8
1949	61.4	91.2	34.4	10.3	8.3	21.5	30.4	35.7	44.5	34.8	23.8	9.3	33.1
1950	77.3	112.4	42.2	11.6	11.3	25.7	39.0	43.4	47.9	39.6	24.9	11.6	34.3
1951	84.1	125.7	45.1	14.7	11.4	28.7	35.8	43.2	47.0	39.2	25.4	13.1	35.0
1952	76.8	110.6	44.0	16.0	13.0	33.3	30.7	42.7	49.5	38.9	25.3	13.7	35.7
1953	87.0	127.5	49.6	16.7	14.9	41.8	38.7	45.1	50.1	39.9	26.5	14.8	36.4
1954	70.4	99.1	44.7	14.2	13.3	36.4	33.3	44.8	49.5	37.3	27.6	15.0	37.2
1955	91.5	131.8	51.0	15.6	15.3	41.9	44.6	50.1	54.7	42.5	30.3	17.6	39.3
1956	90.9	129.3	51.8	17.9	16.5	40.6	36.2	49.5	56.0	43.7	32.3	18.9	41.5
1957	87.1	124.6	53.1	17.9	16.4	43.5	38.0	45.4	55.8	41.6	33.4	19.9	42.2
1958	69.0	93.9	47.6	15.0	15.0	34.3	28.0	46.1	54.3	41.1	32.6	20.6	43.2
1959	80.7	108.1	53.4	17.5	18.2	38.9	36.4	52.3	59.7	46.4	34.8	24.0	45.4
1960	80.4	109.9	53.4	17.6	19.8	40.3	41.1	49.3	60.9	45.6	36.2	24.9	46.6
1961	78.9	104.9	52.1	17.1	21.0	37.8	36.0	51.6	61.3	46.9	36.4	26.1	47.9
1962	84.6	109.3	56.7	19.2	24.1	43.7	43.9	54.4	63.8	50.1	37.7	29.0	49.5
1963	91.2	119.1	58.5	20.5	24.8	48.0	48.6	56.9	66.4	51.9	39.7	31.7	51.2
1964	102.9	135.5	62.1	23.3	26.2	49.2	49.9	61.1	68.7	56.0	42.1	34.8	53.6
1965	113.2	148.7	68.3	26.2	31.3	58.5	63.7	63.5	72.6	61.0	44.8	38.7	54.8
1966	120.2	153.1	73.1	30.5	37.5	62.7	62.6	65.9	74.5	64.7	48.3	42.2	56.9
1967	111.1	141.5	76.5	31.1	37.7	61.3	55.1	65.3	74.1	64.8	50.9	44.2	59.4
1968	115.1	146.1	80.6	31.3	39.8	66.6	66.0	67.2	76.0	72.3	51.7	49.6	61.0
1969	123.8	159.2	81.9	33.9	42.3	66.1	66.3	67.1	78.4	76.0	54.2	53.7	63.0
1970	115.2	148.2	75.9	32.8	40.5	55.5	53.3	66.7	75.3	74.4	52.7	55.9	64.0
1971	109.2	135.5	75.6	30.5	40.7	60.1	66.9	68.5	76.2	78.5	53.2	59.5	66.0
1972	122.4	150.6	82.9	35.4	46.5	64.1	73.0	78.4	80.9	86.0	56.7	66.9	69.5
1973	138.9	171.5	92.1	41.4	53.0	73.0	85.0	78.7	81.5	89.6	58.3	73.1	70.9
1974	134.5	166.1	88.4	44.1	52.4	66.4	73.4	71.4	77.9	81.5	57.4	75.8	71.9
1975	107.2	133.5	76.7	38.1	45.1	59.7	62.2	66.5	71.1	77.7	53.7	69.1	71.4
1976	119.9	147.1	84.9	40.0	50.7	68.0	81.9	75.6	83.9	86.3	58.7	77.3	75.5
1977	121.5	145.1	92.7	45.1	58.4	73.7	94.7	82.3	91.6	91.6	64.3	83.3	79.0
1978	130.7	155.3	96.2	50.2	64.0	79.5	99.2	83.6	93.9	92.0	68.1	88.0	81.8
1979	133.0	156.5	99.5	56.9	71.3	81.0	91.0	82.4	89.0	95.0	69.9	91.3	82.6
1980	110.8	126.0	92.5	60.6	73.3	72.3	67.0	76.9	89.2	92.1	70.3	87.8	84.6
1981	117.5	135.1	91.1	65.9	75.4	68.7	64.4	74.7	91.0	89.4	72.1	89.2	86.5
1982	83.2	86.2	83.2	63.9	75.9	64.8	58.8	67.3	90.1	83.0	75.2	81.8	87.7
1983	91.0	96.1	85.5	64.3	80.3	72.7	74.5	79.9	93.8	93.2	79.0	87.5	90.1
1984	102.4	105.9	93.3	80.8	94.1	83.1	90.6	86.0	95.7	93.7	84.5	91.4	92.1
1985	101.8	104.5	94.5	86.8	93.1	91.8	99.0	88.0	92.6	89.7	87.6	91.4	94.9
1986	93.7	90.8	93.8	90.3	94.3	96.9	98.5	95.1	96.3	93.9	90.6	94.6	97.4
1987	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
1988	108.7	112.7	104.2	113.0	108.5	105.2	105.7	100.1	98.1	98.6	100.9	106.0	101.5
1989	107.2	111.2	102.8	117.3	111.0	109.6	106.9	99.4	95.0	100.3	101.1	109.2	102.5
1990	106.5	111.5	99.5	117.6	111.4	107.0	101.0	97.1	92.2	97.1	100.8	111.8	103.7
1991	98.6	100.5	94.5	114.7	113.9	101.1	94.4	90.2	92.7	96.5	97.0	110.5	105.3
1992	101.9	104.7	99.0	124.0	123.5	104.8	107.4	95.2	95.0	104.0	98.1	114.4	106.9
1993	107.7	111.9	103.1	138.1	134.1	109.2	122.9	97.1	97.1	109.9	98.8	115.4	109.5
1994	116.4	119.3	110.5	157.7	154.3	115.3	141.2	104.0	100.1	113.5	100.1	121.3	113.2
1995	119.2	122.4	113.9	177.8	174.9	113.3	141.9	104.5	95.7	112.6	99.4	125.0	115.3
1996 p	119.8	123.8	117.1	205.4	189.0	114.0	141.6	107.5	90.1	109.3	98.1	129.1	115.9
1995: Jan	121.5	125.5	114.3	171.4	166.7	117.8	147.3	107.1	100.6	117.2	100.1	126.2	115.9
Feb	120.8	124.9	115.0	171.8	167.7	118.5	148.4	105.0	99.8	115.9	100.3	124.7	114.2
Mar	121.3	125.8	114.3	172.4	169.4	118.0	147.6	103.9	99.3	116.2	99.3	125.0	115.0
Apr	120.2	123.5	112.3	174.3	169.6	115.7	143.0	103.9	97.4	117.2	99.2	123.5	115.1
May	119.5	123.0	113.7	174.6	171.1	113.2	138.8	101.7	97.5	113.6	99.0	124.0	115.9
June	117.5	119.2	113.7	174.4	173.0	113.4	139.7	103.0	95.5	110.4	98.6	124.4	116.1
July	118.3	119.3	112.4	176.0	175.7	111.6	136.7	103.7	94.8	109.9	99.0	124.0	115.3
Aug	115.4	117.7	114.3	179.5	178.7	114.1	142.1	103.7	94.5	112.4	100.5	124.4	115.5
Sept	121.0	127.0	115.1	181.3	180.8	114.1	143.3	106.2	94.5	110.5	99.8	125.3	115.5
Oct	115.7	115.1	114.0	183.8	182.4	109.3	139.7	105.7	93.3	111.1	98.9	126.7	115.4
Nov	120.8	126.1	114.5	186.5	183.6	108.6	140.7	104.8	92.4	108.9	99.3	126.0	114.8
Dec	120.0	122.7	115.0	190.1	182.8	109.7	141.2	106.9	91.5	108.3	98.8	126.5	114.8
1996: Jan	121.5	128.1	115.6	191.9	182.4	108.3	135.5	103.1	89.2	104.1	97.9	127.1	114.8
Feb	117.1	119.5	117.0	196.1	188.7	112.1	141.1	103.3	90.9	106.2	98.7	127.1	116.0
Mar	118.0	120.2	116.1	197.8	187.9	103.1	121.3	107.5	89.7	109.0	96.7	126.5	115.6
Apr	119.2	122.9	115.5	199.0	187.3	114.6	144.3	108.4	90.4	108.2	96.3	126.0	115.4
May	118.6	121.0	116.7	201.2	188.8	114.6	144.7	107.7	90.8	108.8	97.7	127.7	115.6
June	121.0	124.2	117.3	205.2	191.0	116.6	148.7	110.6	90.9	111.1	97.2	128.1	115.1
July	118.6	122.8	117.2	205.8	190.1	120.3	154.5	107.4	90.1	112.4	97.2	129.7	115.8
Aug	120.1	124.1	118.1	210.5	190.2	118.7	150.3	109.0	90.6	110.1	97.4	129.2	114.6
Sept	120.9	123.6	117.9	211.3	190.2	117.9	148.0	108.3	90.1	109.6	98.2	130.7	115.5
Oct p	124.0	129.8	117.5	212.3	189.3	113.8	138.0	107.3	90.0	110.3	99.2	132.3	116.5
Nov p	118.3	122.9	118.3	214.9	189.9	118.4	146.3	108.0	89.4	111.5	100.0	132.5	116.9
Dec p	121.8	126.6	119.0	218.4	193.5	119.3	147.0	107.9	90.1	112.5	100.0	132.6	118.3

Source: Board of Governors of the Federal Reserve System.

Table B–52.—*Capacity utilization rates, 1948–96*

[Percent;[1] monthly data seasonally adjusted]

Year or month	Total industry	Manufacturing: Total	Manufacturing: Durable goods	Manufacturing: Non-durable goods	Manufacturing: Primary processing	Manufacturing: Advanced processing	Mining	Utilities
1948	.....	82.5	.....	.....	87.3	80.0	.....	.....
1949	.....	74.2	.....	.....	76.2	73.2	.....	.....
1950	.....	82.8	.....	.....	88.5	79.8	.....	.....
1951	.....	85.8	.....	.....	90.2	83.4	.....	.....
1952	.....	85.4	.....	.....	84.9	85.9	.....	.....
1953	.....	89.3	.....	.....	89.4	89.3	.....	.....
1954	.....	80.1	.....	.....	80.6	80.0	.....	.....
1955	.....	87.0	.....	.....	92.0	84.2	.....	.....
1956	.....	86.1	.....	.....	89.4	84.4	.....	.....
1957	.....	83.6	.....	.....	84.7	83.1	.....	.....
1958	.....	75.0	.....	.....	75.4	74.9	.....	.....
1959	.....	81.6	.....	.....	83.0	81.1	.....	.....
1960	.....	80.1	.....	.....	79.8	80.5	.....	.....
1961	.....	77.3	.....	.....	77.9	77.2	.....	.....
1962	.....	81.4	.....	.....	81.5	81.6	.....	.....
1963	.....	83.5	.....	.....	83.8	83.4	.....	.....
1964	.....	85.6	.....	.....	87.8	84.6	.....	.....
1965	.....	89.5	.....	.....	91.0	88.8	.....	.....
1966	.....	91.1	.....	.....	91.4	91.1	.....	.....
1967	86.4	87.2	87.1	86.3	85.4	88.0	81.2	93.4
1968	86.8	87.2	86.8	86.6	86.3	87.4	83.5	94.1
1969	86.9	86.8	86.3	86.6	86.9	86.5	86.6	95.8
1970	80.8	79.7	76.7	82.9	80.4	79.1	88.9	95.4
1971	79.2	78.2	74.3	82.8	79.3	77.4	87.4	93.9
1972	84.3	83.7	80.9	86.6	86.4	82.5	90.4	94.6
1973	88.4	88.1	87.5	87.5	91.5	86.5	92.5	92.9
1974	84.2	83.8	82.7	84.0	86.0	82.8	92.5	86.8
1975	74.6	73.2	70.2	76.4	72.9	73.5	89.9	84.0
1976	79.3	78.5	75.4	81.8	80.1	77.8	90.0	84.8
1977	83.3	82.8	80.3	85.2	84.0	81.9	90.9	84.6
1978	85.5	85.1	83.5	86.2	86.3	84.3	91.3	84.8
1979	86.2	85.4	84.9	85.1	86.4	84.8	91.9	85.9
1980	82.1	80.2	78.6	81.4	78.0	81.3	94.0	85.5
1981	80.9	78.8	76.6	81.0	78.0	79.1	94.6	82.8
1982	75.0	72.8	69.0	78.0	69.0	74.6	86.5	79.5
1983	75.8	74.9	70.5	81.1	74.8	74.9	79.9	80.3
1984	81.1	80.4	78.3	83.1	80.4	80.3	84.4	82.5
1985	80.3	79.5	77.8	81.9	79.8	79.4	82.9	83.5
1986	79.2	79.1	76.2	83.0	80.9	78.3	78.2	80.2
1987	81.5	81.6	78.6	85.6	84.9	80.1	79.9	82.0
1988	83.7	83.6	81.9	85.9	86.9	82.2	84.1	84.2
1989	83.7	83.2	81.6	85.3	86.2	82.0	85.4	86.0
1990	82.1	81.3	79.1	84.0	84.1	80.1	88.4	85.7
1991	79.2	78.0	75.0	81.6	79.8	77.2	87.4	85.8
1992	80.3	79.5	76.9	82.5	82.4	78.2	86.9	84.7
1993	81.4	80.6	79.1	82.3	84.1	79.0	87.0	87.0
1994	83.9	83.3	82.6	84.0	87.9	81.3	89.6	87.7
1995	83.8	83.0	82.7	83.3	87.4	81.1	89.3	90.3
1996 p	83.2	82.1	82.0	82.2	86.1	80.5	90.5	92.2
1995: Jan	85.1	84.6	84.4	84.9	89.7	82.5	89.8	87.3
Feb	84.7	84.2	84.2	84.2	89.3	82.0	90.0	88.2
Mar	84.6	84.0	83.8	84.2	88.9	81.9	89.6	88.6
Apr	84.0	83.4	83.0	83.7	88.2	81.3	89.9	88.2
May	83.7	82.8	82.3	83.5	87.8	80.8	89.7	90.6
June	83.5	82.7	82.1	83.3	87.0	80.8	90.2	89.7
July	83.3	82.4	81.7	83.1	86.7	80.6	90.0	90.8
Aug	83.9	82.7	82.4	83.0	86.2	81.2	89.3	95.3
Sept	83.4	82.3	82.2	82.4	86.7	80.5	91.2	91.4
Oct	83.0	81.9	81.3	82.7	86.6	80.0	91.2	91.4
Nov	83.4	82.2	81.6	83.0	86.1	80.6	91.9	93.4
Dec	83.8	82.8	82.2	83.5	86.9	81.1	93.0	90.2
1996: Jan	82.4	81.4	81.3	81.4	85.4	79.7	86.8	92.4
Feb	83.3	82.3	82.5	81.9	84.9	81.1	87.6	93.1
Mar	82.6	81.3	80.9	81.6	85.3	79.6	90.3	94.0
Apr	83.0	81.9	82.1	81.5	85.5	80.4	89.7	92.7
May	83.3	82.1	82.1	82.0	86.1	80.5	89.8	94.1
June	83.7	82.6	82.9	82.0	86.8	80.8	91.9	92.6
July	83.4	82.5	82.6	82.3	86.6	80.8	90.3	89.6
Aug	83.5	82.4	82.6	82.0	86.6	80.6	91.9	91.6
Sept	83.4	82.3	82.2	82.4	86.7	80.5	91.2	91.4
Oct p	83.0	81.9	81.3	82.7	86.6	80.0	91.3	91.4
Nov p	83.4	82.2	81.6	83.0	86.1	80.6	91.9	93.4
Dec p	83.8	82.8	82.2	83.5	86.9	81.1	93.0	90.2

[1] Output as percent of capacity.

Source: Board of Governors of the Federal Reserve System.

TABLE B–53.—*New construction activity, 1959–96*

[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]			
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
New series											
1964	75.1	54.9	30.5	24.1	24.4	7.9	5.0	11.5	20.2	3.7	16.5
1965	81.9	60.0	30.2	23.8	29.7	9.4	7.2	13.1	21.9	3.9	18.0
1966	85.8	61.9	28.6	21.8	33.3	9.4	9.3	14.6	23.8	3.8	20.0
1967	87.2	61.8	28.7	21.5	33.1	9.3	8.4	15.4	25.4	3.3	22.1
1968	96.8	69.4	34.2	26.7	35.2	10.4	8.5	16.3	27.4	3.2	24.2
1969	104.9	77.2	37.2	29.2	39.9	12.5	9.6	17.8	27.8	3.2	24.6
1970	105.9	78.0	35.9	27.1	42.1	13.0	9.3	19.8	27.9	3.1	24.8
1971	122.4	92.7	48.5	38.7	44.2	15.3	7.8	21.1	29.7	3.8	25.9
1972	139.1	109.1	60.7	50.1	48.4	18.8	6.7	22.9	30.0	4.2	25.8
1973	153.8	121.4	65.1	54.6	56.3	21.7	9.0	25.6	32.3	4.7	27.6
1974	155.2	117.0	56.0	43.4	61.1	21.7	11.5	27.9	38.1	5.1	33.0
1975	152.6	109.3	51.6	36.3	57.8	17.2	11.7	28.9	43.3	6.1	37.2
1976	172.1	128.2	68.3	50.8	59.9	17.0	10.5	32.4	44.0	6.8	37.2
1977	200.5	157.4	92.0	72.2	65.4	19.7	11.3	34.5	43.1	7.1	36.0
1978	239.9	189.7	109.8	85.6	79.9	24.7	16.2	39.0	50.1	8.1	42.0
1979	272.9	216.2	116.4	89.3	99.8	34.0	22.0	43.7	56.6	8.6	48.1
1980	273.9	210.3	100.4	69.6	109.9	41.7	20.5	47.7	63.6	9.6	54.0
1981	289.1	224.4	99.2	69.4	125.1	48.7	25.4	51.0	64.7	10.4	54.3
1982	279.3	216.3	84.7	57.0	131.6	53.9	26.1	51.6	63.1	10.0	53.1
1983	311.6	248.1	125.5	94.6	122.6	53.4	19.5	49.8	63.5	10.6	52.9
1984	369.0	298.8	153.8	113.8	144.9	71.6	20.9	52.4	70.2	11.2	59.0
1985	401.4	323.6	158.5	114.7	165.1	88.1	24.1	52.9	77.8	12.0	65.8
1986	429.9	345.3	187.1	133.2	158.2	84.0	21.0	53.2	84.6	12.4	72.2
1987	441.6	351.0	194.7	139.9	156.3	83.2	21.2	52.0	90.6	14.1	76.6
1988	455.6	360.9	198.1	138.9	162.8	86.4	23.2	53.2	94.7	12.3	82.5
1989	469.8	371.6	196.6	139.2	175.1	89.2	28.8	57.1	98.2	12.2	86.0
1990	468.5	361.1	182.9	128.0	178.2	85.8	33.6	58.8	107.5	12.1	95.4
1991	424.2	314.1	157.8	110.6	156.2	62.2	31.4	62.6	110.1	12.8	97.3
1992	452.1	336.2	187.8	129.6	148.4	53.2	29.0	66.2	115.8	14.4	101.5
1993	482.7	362.6	210.5	144.1	152.1	57.9	26.5	67.7	120.2	14.4	105.7
1994	527.1	400.0	238.9	167.9	161.1	64.4	28.9	67.8	127.1	14.4	112.7
1995	547.1	410.2	236.6	162.9	173.6	74.7	32.3	66.6	136.9	15.7	121.1
1995: Jan	542.7	411.1	242.5	169.2	168.6	70.7	30.1	67.8	131.6	15.9	115.7
Feb	545.5	414.9	240.5	167.4	174.4	73.1	32.2	69.1	130.6	15.8	114.9
Mar	547.9	413.2	237.8	163.8	175.4	76.2	32.1	67.1	134.7	16.4	118.3
Apr	549.3	410.8	234.2	159.9	176.6	73.7	34.3	68.6	138.5	15.6	122.9
May	541.5	405.5	232.5	157.6	173.0	73.3	33.6	66.1	136.1	16.1	120.0
June	545.1	406.8	231.1	155.9	175.7	75.5	32.7	67.5	138.3	15.4	123.0
July	545.0	409.4	231.3	158.3	178.1	77.8	33.1	67.3	135.6	15.4	120.2
Aug	542.3	405.9	234.5	161.8	171.4	74.8	31.8	64.8	136.4	16.2	120.3
Sept	550.5	411.3	237.7	164.3	173.7	75.0	32.4	66.2	139.1	16.7	122.4
Oct	550.0	410.6	238.0	165.8	172.6	74.6	31.4	66.6	139.4	13.7	125.7
Nov	549.7	411.0	239.9	166.4	171.1	75.3	32.0	63.8	138.7	15.9	122.8
Dec	555.7	417.2	243.1	168.1	174.1	76.9	32.0	65.2	138.5	15.4	123.1
1996: Jan	559.0	418.9	242.5	169.2	176.4	76.8	32.5	67.1	140.1	15.7	124.4
Feb	544.6	411.2	238.6	166.9	172.7	76.7	30.8	65.2	133.3	16.3	117.1
Mar	557.0	419.7	245.9	173.8	173.8	75.8	30.6	67.4	137.3	15.2	122.0
Apr	564.6	424.2	248.0	179.3	176.2	77.8	30.3	68.2	140.4	14.7	125.7
May	558.5	418.1	247.5	178.2	170.6	75.8	27.3	67.5	140.4	15.0	125.4
June	563.1	423.1	246.9	177.7	176.2	80.4	28.8	67.0	140.0	15.0	125.0
July	559.3	419.3	244.9	175.6	174.4	78.9	28.8	66.7	140.0	14.5	125.5
Aug	564.7	426.7	246.0	176.5	180.7	83.9	27.1	69.7	138.0	13.5	124.5
Sept	572.3	428.4	246.4	176.2	182.0	82.7	29.7	69.6	143.9	14.6	129.3
Oct p	581.0	434.3	244.6	175.6	189.7	86.5	33.0	70.2	146.7	16.2	130.5
Nov p	592.0	441.6	247.6	176.3	194.1	88.9	30.9	74.2	150.3	14.8	135.6

[1] Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.
[2] Includes residential improvements, not shown separately. Prior to 1964, also includes nonhousekeeping units (hotels, motels, etc.).
[3] Office buildings, warehouses, stores, restaurants, garages, etc., and, beginning 1964, hotels and motels; prior to 1964 hotels and motels are included in total residential.
[4] Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities (telecommunications, gas, electric, railroad, and petroleum pipelines), 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–54.—*New housing units started and authorized, 1959–96*

[Thousands of units]

Year or month	New housing units started: Private and public[1]: Total (farm and nonfarm)	Private and public[1]: Nonfarm	Private (farm and nonfarm)[1]: Total	Private: Type of structure: 1 unit	Private: Type of structure: 2 to 4 units	Private: Type of structure: 5 units or more	New private housing units authorized[2]: Total	Type of structure: 1 unit	Type of structure: 2 to 4 units	Type of structure: 5 units or more
1959	1,553.7	1,531.3	1,517.0	1,234.0	282.9		1,208.3	938.3	77.1	192.9
1960	1,296.1	1,274.0	1,252.2	994.7	257.5		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	590.7		1,334.7	750.2	118.9	465.6
1964	1,561.0	1,534.0	1,528.8	970.5	108.4	450.0	1,285.8	720.1	100.8	464.9
1965	1,509.7	1,487.5	1,472.8	963.7	86.6	422.5	1,239.8	709.9	84.8	445.1
1966	1,195.8	1,172.8	1,164.9	778.6	61.1	325.1	971.9	563.2	61.0	347.7
1967	1,321.9	1,298.8	1,291.6	843.9	71.6	376.1	1,141.0	650.6	73.0	417.5
1968	1,545.4	1,521.4	1,507.6	899.4	80.9	527.3	1,353.4	694.7	84.3	574.4
1969	1,499.5	1,482.3	1,466.8	810.6	85.0	571.2	1,323.7	625.9	85.2	612.7
1970	1,469.0	(3)	1,433.6	812.9	84.8	535.9	1,351.5	646.8	88.1	616.7
1971	2,084.5	(3)	2,052.2	1,151.0	120.3	780.9	1,924.6	906.1	132.9	885.7
1972	2,378.5	(3)	2,356.6	1,309.2	141.3	906.2	2,218.9	1,033.1	148.6	1,037.2
1973	2,057.5	(3)	2,045.3	1,132.0	118.3	795.0	1,819.5	882.1	117.0	820.5
1974	1,352.5	(3)	1,337.7	888.1	68.1	381.6	1,074.4	643.8	64.3	366.2
1975	1,171.4	(3)	1,160.4	892.2	64.0	204.3	939.2	675.5	63.9	199.8
1976	1,547.6	(3)	1,537.5	1,162.4	85.9	289.2	1,296.2	893.6	93.1	309.5
1977	2,001.7	(3)	1,987.1	1,450.9	121.7	414.4	1,690.0	1,126.1	121.3	442.7
1978	2,036.1	(3)	2,020.3	1,433.3	125.0	462.0	1,800.5	1,182.6	130.6	487.3
1979	1,760.0	(3)	1,745.1	1,194.1	122.0	429.0	1,551.8	981.5	125.4	444.8
1980	1,312.6	(3)	1,292.2	852.2	109.5	330.5	1,190.6	710.4	114.5	365.7
1981	1,100.3	(3)	1,084.2	705.4	91.1	287.7	985.5	564.3	101.8	319.4
1982	1,072.1	(3)	1,062.2	662.6	80.0	319.6	1,000.5	546.4	88.3	365.8
1983	1,712.5	(3)	1,703.0	1,067.6	113.5	522.0	1,605.2	901.5	133.6	570.1
1984	1,755.8	(3)	1,749.5	1,084.2	121.4	544.0	1,681.8	922.4	142.6	616.8
1985	1,745.0	(3)	1,741.8	1,072.4	93.4	576.1	1,733.3	956.6	120.1	656.6
1986	1,807.1	(3)	1,805.4	1,179.4	84.0	542.0	1,769.4	1,077.6	108.4	583.5
1987	1,622.7	(3)	1,620.5	1,146.4	65.3	408.7	1,534.8	1,024.4	89.3	421.1
1988	(4)	(3)	1,488.1	1,081.3	58.8	348.0	1,455.6	993.8	75.7	386.1
1989	(4)	(3)	1,376.1	1,003.3	55.2	317.6	1,338.4	931.7	67.0	339.8
1990	(4)	(3)	1,192.7	894.8	37.5	260.4	1,110.8	793.9	54.3	262.6
1991	(4)	(3)	1,013.9	840.4	35.6	137.9	948.8	753.5	43.1	152.1
1992	(4)	(3)	1,199.7	1,029.9	30.7	139.0	1,094.9	910.7	45.8	138.4
1993	(4)	(3)	1,287.6	1,125.7	29.4	132.6	1,199.1	986.5	52.3	160.2
1994	(4)	(3)	1,457.0	1,198.4	35.0	223.5	1,371.6	1,068.5	62.2	241.0
1995	(4)	(3)	1,354.1	1,076.2	33.7	244.1	1,332.5	997.3	63.7	271.5
1996 p	(4)	(3)	1,473.7	1,160.2	44.7	268.8	1,430.9	1,073.1	65.9	291.8
			Seasonally adjusted annual rates							
1995: Jan	(4)	(3)	1,370	1,062	38	270	1,295	992	62	241
Feb	(4)	(3)	1,322	1,051	44	227	1,264	927	54	283
Mar	(4)	(3)	1,241	992	35	214	1,221	904	65	252
Apr	(4)	(3)	1,278	1,017	25	236	1,245	913	61	271
May	(4)	(3)	1,300	1,005	36	259	1,258	946	62	250
June	(4)	(3)	1,301	1,036	35	230	1,290	970	64	256
July	(4)	(3)	1,450	1,125	39	286	1,358	1,017	62	279
Aug	(4)	(3)	1,401	1,135	28	238	1,379	1,046	62	271
Sept	(4)	(3)	1,401	1,130	39	232	1,427	1,079	69	279
Oct	(4)	(3)	1,351	1,109	31	211	1,393	1,050	68	275
Nov	(4)	(3)	1,458	1,129	32	297	1,450	1,073	71	306
Dec	(4)	(3)	1,425	1,150	29	246	1,487	1,123	60	304
1996: Jan	(4)	(3)	1,453	1,146	20	287	1,378	1,056	65	257
Feb	(4)	(3)	1,514	1,183	33	298	1,417	1,087	60	270
Mar	(4)	(3)	1,439	1,163	25	251	1,423	1,097	61	265
Apr	(4)	(3)	1,511	1,209	53	249	1,459	1,115	75	269
May	(4)	(3)	1,478	1,144	49	285	1,452	1,098	62	292
June	(4)	(3)	1,490	1,209	46	235	1,415	1,085	62	268
July	(4)	(3)	1,470	1,150	43	277	1,457	1,073	68	316
Aug	(4)	(3)	1,533	1,239	38	256	1,423	1,078	60	285
Sept	(4)	(3)	1,461	1,138	44	279	1,399	1,040	73	286
Oct	(4)	(3)	1,385	1,088	55	242	1,362	1,011	69	282
Nov p	(4)	(3)	1,514	1,161	61	292	1,418	1,025	67	326
Dec p	(4)	(3)	1,329	1,024	40	265	1,410	1,016	64	330

[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 19,000 permit-issuing places beginning 1994; in 17,000 places for 1984–93; in 16,000 places for 1978–83; 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.

[4] Series discontinued December 1988.

Source: Department of Commerce, Bureau of the Census.

TABLE B–55.—*Manufacturing and trade sales and inventories, 1954–96*

[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]
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	87,055	1.61	27,248	50,203	1.84	10,257	12,739	1.24	16,696	24,113	1.44
1959	59,729	92,097	1.54	30,286	52,913	1.75	11,491	13,879	1.21	17,951	25,305	1.41
1960	60,827	94,719	1.56	30,878	53,786	1.74	11,656	14,120	1.21	18,294	26,813	1.47
1961	61,159	95,580	1.56	30,922	54,871	1.77	11,988	14,488	1.21	18,249	26,221	1.44
1962	65,662	101,049	1.54	33,358	58,172	1.74	12,674	14,936	1.18	19,630	27,941	1.42
1963	68,995	105,463	1.53	35,058	60,029	1.71	13,382	16,048	1.20	20,556	29,386	1.43
1964	73,682	111,504	1.51	37,331	63,410	1.70	14,529	17,000	1.17	21,823	31,094	1.42
1965	80,283	120,929	1.51	40,995	68,207	1.66	15,611	18,317	1.17	23,677	34,405	1.45
1966	87,187	136,824	1.57	44,870	77,986	1.74	16,987	20,765	1.22	25,330	38,073	1.50
1967	90,820	145,681	1.60	46,486	84,646	1.82	19,576	25,786	1.32	24,757	35,249	1.42
1968	98,685	156,611	1.59	50,229	90,560	1.80	21,012	27,166	1.29	27,445	38,885	1.42
1969	105,690	170,400	1.61	53,501	98,145	1.83	22,818	29,800	1.31	29,371	42,455	1.45
1970	108,221	178,594	1.65	52,805	101,599	1.92	24,167	33,354	1.38	31,249	43,641	1.40
1971	116,895	188,991	1.62	55,906	102,567	1.83	26,492	36,568	1.38	34,497	49,856	1.45
1972	131,081	203,227	1.55	63,027	108,121	1.72	29,866	40,297	1.35	38,189	54,809	1.44
1973	153,677	234,406	1.53	72,931	124,499	1.71	38,115	46,918	1.23	42,631	62,989	1.48
1974	177,912	287,144	1.61	84,790	157,625	1.86	47,982	58,667	1.22	45,141	70,852	1.57
1975	182,198	288,992	1.59	86,589	159,708	1.84	46,634	57,774	1.24	48,975	71,510	1.46
1976	204,150	318,345	1.56	98,797	174,636	1.77	50,698	64,622	1.27	54,655	79,087	1.45
1977	229,513	350,706	1.53	113,201	188,378	1.66	56,136	73,179	1.30	60,176	89,149	1.48
1978	260,320	400,931	1.54	126,905	211,691	1.67	66,413	86,934	1.31	67,002	102,306	1.53
1979	297,701	452,640	1.52	143,936	242,157	1.68	79,051	99,679	1.26	74,713	110,804	1.48
1980	327,233	508,924	1.56	154,391	265,215	1.72	93,099	122,631	1.32	79,743	121,078	1.52
1981	355,822	545,786	1.53	168,129	283,413	1.69	101,180	129,654	1.28	86,514	132,719	1.53
1982	347,625	573,908	1.67	163,351	311,852	1.95	95,211	127,428	1.36	89,062	134,628	1.49
1983	369,286	590,287	1.56	172,547	312,379	1.78	99,225	130,075	1.28	97,514	147,833	1.44
1984	410,124	649,780	1.53	190,682	339,516	1.73	112,199	142,452	1.23	107,243	167,812	1.49
1985	422,583	664,039	1.56	194,538	334,749	1.73	113,459	147,409	1.28	114,586	181,881	1.52
1986	430,419	662,738	1.55	194,657	322,654	1.68	114,960	153,574	1.32	120,803	186,510	1.56
1987	457,735	709,846	1.50	206,326	338,107	1.59	122,968	163,903	1.29	128,442	207,836	1.55
1988	497,157	767,226	1.49	224,619	369,378	1.58	134,521	178,801	1.30	138,017	219,047	1.54
1989	527,039	815,486	1.52	236,698	391,243	1.63	143,760	187,009	1.28	146,581	237,234	1.58
1990	545,909	840,428	1.52	242,686	405,105	1.65	149,506	195,550	1.29	153,718	239,773	1.55
1991	542,815	834,281	1.53	239,847	390,944	1.65	148,306	200,062	1.33	154,661	243,275	1.54
1992	567,176	842,137	1.48	250,394	382,480	1.54	154,150	207,663	1.32	162,632	251,994	1.52
1993	595,240	874,515	1.45	260,635	390,721	1.49	161,681	215,878	1.31	172,924	267,916	1.51
1994	637,561	931,702	1.41	278,652	406,207	1.43	172,973	234,893	1.30	185,936	290,602	1.50
1995	679,700	989,839	1.43	297,244	432,344	1.43	187,387	254,616	1.32	195,068	302,879	1.54
1995: Jan	670,780	942,318	1.40	294,398	410,341	1.39	183,285	237,628	1.30	193,097	294,349	1.52
Feb	670,696	948,860	1.41	294,205	413,574	1.41	185,456	239,785	1.29	191,035	295,501	1.55
Mar	671,939	957,242	1.42	295,537	416,681	1.41	183,828	243,169	1.32	192,574	297,392	1.54
Apr	670,826	965,376	1.44	293,156	419,978	1.43	185,298	245,596	1.33	192,372	299,802	1.56
May	676,690	969,908	1.43	295,251	422,807	1.43	186,946	246,823	1.32	194,493	300,278	1.54
June	681,343	973,914	1.43	296,877	424,293	1.43	188,359	249,252	1.32	196,107	300,369	1.53
July	677,107	977,485	1.44	293,901	426,722	1.45	187,591	251,179	1.34	195,615	299,584	1.53
Aug	685,051	981,703	1.43	299,808	427,245	1.43	188,162	252,078	1.34	197,081	302,380	1.53
Sept	686,522	985,988	1.44	300,754	429,959	1.43	189,171	253,245	1.34	196,597	302,784	1.54
Oct	685,638	991,142	1.45	299,824	431,303	1.44	189,589	254,563	1.34	196,225	305,276	1.56
Nov	690,263	993,148	1.44	300,755	431,652	1.44	191,349	254,686	1.33	198,159	306,810	1.55
Dec	695,490	989,839	1.42	301,284	432,344	1.44	194,901	254,616	1.31	199,305	302,879	1.52
1996: Jan	690,692	995,352	1.44	298,685	434,724	1.46	192,878	256,258	1.33	199,129	304,370	1.53
Feb	699,208	996,008	1.42	301,763	435,615	1.44	194,053	255,569	1.32	203,392	304,824	1.50
Mar	700,253	994,010	1.42	300,646	435,413	1.45	195,379	256,444	1.31	204,228	302,153	1.48
Apr	709,541	998,430	1.41	308,003	435,441	1.41	197,507	259,592	1.31	204,031	303,397	1.49
May	715,130	996,984	1.39	311,203	434,220	1.40	198,258	258,834	1.31	205,669	303,930	1.48
June	711,760	997,322	1.40	308,851	433,868	1.40	198,543	259,262	1.31	204,366	304,192	1.49
July	719,176	1,002,404	1.39	312,400	434,446	1.39	202,057	259,100	1.28	204,719	308,858	1.51
Aug	717,532	1,005,435	1.40	312,847	435,687	1.39	200,086	258,822	1.29	204,599	310,926	1.52
Sept	722,691	1,006,430	1.39	315,160	436,700	1.39	201,404	256,959	1.28	206,127	312,771	1.52
Oct *p*	725,787	1,011,261	1.39	315,510	438,134	1.39	202,790	257,770	1.27	207,487	315,357	1.52
Nov *p*	729,830	1,011,955	1.39	318,280	439,889	1.38	204,578	258,015	1.26	206,972	314,051	1.52

[1] Annual data are averages of monthly not seasonally adjusted figures.
[2] Seasonally adjusted, end of period. Inventories beginning January 1982 for manufacturing and December 1980 for wholesale and retail trade are not comparable with earlier periods.
[3] Inventory/sales ratio. Annual data are: beginning 1982, averages of monthly ratios; for 1958–81, ratio of December inventories to monthly average sales for the year; and for earlier years, weighted averages. Monthly data are 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.

Source: Department of Commerce, Bureau of the Census.

TABLE B–56.—*Manufacturers' shipments and inventories, 1954–96*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Shipments[1]			Inventories[2]								
					Durable goods industries				Nondurable goods industries			
	Total	Durable goods industries	Nondurable goods industries	Total	Total	Materials and supplies	Work in process	Finished goods	Total	Materials and supplies	Work in process	Finished goods
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	27,248	13,553	13,695	50,203	30,194	9,970	12,408	7,816	20,009	8,676	2,827	8,506
1959	30,286	15,597	14,689	52,913	32,012	10,709	13,086	8,217	20,901	9,094	2,942	8,865
1960	30,878	15,870	15,008	53,786	32,337	10,306	12,809	9,222	21,449	9,097	2,947	9,405
1961	30,922	15,601	15,321	54,871	32,496	10,246	13,211	9,039	22,375	9,505	3,108	9,762
1962	33,358	17,247	16,111	58,172	34,565	10,794	14,124	9,647	23,607	9,836	3,304	10,467
1963	35,058	18,255	16,803	60,029	35,776	11,053	14,835	9,888	24,253	10,009	3,420	10,824
1964	37,331	19,611	17,720	63,410	38,421	11,946	16,158	10,317	24,989	10,167	3,531	11,291
1965	40,995	22,193	18,802	68,207	42,189	13,298	18,055	10,836	26,018	10,487	3,825	11,706
1966	44,870	24,617	20,253	77,986	49,852	15,464	21,908	12,480	28,134	11,197	4,226	12,711
1967	46,486	25,233	21,253	84,646	54,896	16,423	24,933	13,540	29,750	11,760	4,431	13,559
1968	50,229	27,624	22,605	90,560	58,732	17,344	27,213	14,175	31,828	12,328	4,852	14,648
1969	53,501	29,403	24,098	98,145	64,598	18,636	30,282	15,680	33,547	12,753	5,120	15,674
1970	52,805	28,156	24,649	101,599	66,651	19,149	29,745	17,757	34,948	13,168	5,271	16,509
1971	55,906	29,924	25,982	102,567	66,136	19,679	28,550	17,907	36,431	13,686	5,678	17,067
1972	63,027	33,987	29,040	108,121	70,067	20,807	30,713	18,547	38,054	14,677	5,998	17,379
1973	72,931	39,635	33,296	124,499	81,192	25,944	35,490	19,758	43,307	18,147	6,729	18,431
1974	84,790	44,173	40,617	157,625	101,493	35,070	42,530	23,893	56,132	23,744	8,189	24,199
1975	86,589	43,598	42,991	159,708	102,590	33,903	43,227	25,460	57,118	23,565	8,834	24,719
1976	98,797	50,623	48,174	174,636	111,988	37,457	46,074	28,457	62,648	25,847	9,929	26,872
1977	113,201	59,168	54,033	188,378	120,877	40,186	50,226	30,465	67,501	27,387	10,961	29,153
1978	126,905	67,731	59,174	211,691	138,181	45,198	58,848	34,135	73,510	29,619	12,085	31,806
1979	143,936	75,927	68,009	242,157	160,734	52,670	69,325	38,739	81,423	32,814	13,910	34,699
1980	154,391	77,419	76,972	265,215	174,788	55,173	76,945	42,670	90,427	36,606	15,884	37,937
1981	168,129	83,727	84,402	283,413	186,443	57,998	80,998	47,447	96,970	38,165	16,194	42,611
1982	163,351	79,212	84,139	311,852	200,444	59,136	86,707	54,601	111,408	44,039	18,612	48,757
1983	172,547	85,481	87,066	312,379	199,854	60,325	86,899	52,630	112,525	44,816	18,691	49,018
1984	190,682	97,940	92,742	339,516	221,330	66,031	98,251	57,048	118,186	45,692	19,328	53,166
1985	194,538	101,279	93,259	334,749	218,193	63,904	98,162	56,127	116,556	44,106	19,442	53,008
1986	194,657	103,238	91,419	322,654	211,997	61,331	97,000	53,666	110,657	42,335	18,124	50,198
1987	206,326	108,128	98,198	338,107	220,778	63,546	102,392	54,840	117,329	45,326	19,274	52,729
1988	224,619	118,458	106,161	369,378	242,450	69,590	112,961	59,899	126,928	49,404	20,563	56,961
1989	236,698	123,158	113,540	391,243	257,513	72,418	122,273	62,822	133,730	50,683	21,658	61,389
1990	242,686	123,776	118,910	405,105	263,213	73,541	124,154	65,518	141,892	52,651	22,819	66,422
1991	239,847	121,000	118,847	390,944	250,006	70,811	114,981	64,214	140,938	53,007	22,805	65,126
1992	250,394	128,489	121,905	382,480	238,096	69,383	104,549	64,164	144,384	53,983	23,510	66,891
1993	260,635	135,886	124,749	390,721	243,476	72,872	105,793	64,811	147,245	55,504	23,836	67,905
1994	278,652	148,916	129,736	406,207	254,798	78,278	108,478	68,042	151,409	57,975	24,642	68,792
1995	297,244	159,215	138,029	432,344	270,356	83,251	115,154	71,951	161,988	62,041	25,655	74,292
1995: Jan	294,398	158,022	136,376	410,341	257,042	78,286	110,767	67,989	153,299	58,556	24,816	69,927
Feb	294,205	157,154	137,051	413,574	258,570	79,199	110,927	68,444	155,004	59,222	25,036	70,746
Mar	295,537	158,816	136,721	416,681	260,259	79,455	111,190	69,614	156,422	60,481	25,030	70,911
Apr	293,156	156,190	136,966	419,978	262,231	80,291	112,018	69,922	157,747	60,876	25,084	71,787
May	295,251	157,307	137,944	422,807	263,922	80,776	112,883	70,263	158,885	61,338	25,327	72,220
June	296,877	158,768	138,109	424,293	264,343	81,145	112,254	70,944	159,950	61,918	25,475	72,557
July	293,901	156,108	137,793	426,722	266,482	81,879	113,294	71,309	160,240	61,968	25,594	72,678
Aug	299,808	160,625	139,183	427,245	266,987	82,472	113,345	71,170	160,258	62,057	25,554	72,647
Sept	300,754	162,281	138,473	429,959	268,267	82,546	113,907	71,814	161,692	62,367	25,722	73,603
Oct	299,824	160,706	139,118	431,303	269,971	83,762	114,032	72,177	161,332	62,043	25,623	73,666
Nov	300,755	161,360	139,395	431,652	270,389	83,614	114,820	71,955	161,263	62,285	25,610	73,368
Dec	301,284	161,976	139,308	432,344	270,356	83,251	115,154	71,951	161,988	62,041	25,655	74,292
1996: Jan	298,685	159,125	139,560	434,724	272,657	83,998	115,988	72,671	162,067	62,150	25,899	74,018
Feb	301,763	161,918	139,845	435,615	273,400	84,364	116,269	72,767	162,215	62,116	25,867	74,232
Mar	300,646	160,377	140,269	435,413	273,535	84,272	116,828	72,435	161,878	61,523	25,827	74,528
Apr	308,003	164,615	143,388	435,441	273,870	84,285	117,388	72,197	161,571	61,384	25,909	74,278
May	311,203	167,487	143,716	434,220	273,857	83,810	117,640	72,407	160,363	60,788	25,900	73,675
June	308,851	166,902	141,949	433,868	273,649	82,817	118,206	72,626	160,219	60,372	25,928	73,919
July	312,400	167,774	144,626	434,446	274,807	83,567	118,383	72,857	159,639	60,246	25,814	73,579
Aug	312,847	168,471	144,376	435,687	275,926	83,250	118,867	73,809	159,761	60,128	26,100	73,533
Sept	315,160	170,705	144,455	436,700	276,347	83,373	118,830	74,144	160,353	60,224	25,980	74,149
Oct p	315,510	168,824	146,686	438,134	277,328	82,585	120,156	74,587	160,806	60,567	26,097	74,142
Nov p	318,280	170,846	147,434	439,889	278,368	82,580	121,285	74,503	161,521	60,493	26,249	74,779

[1] Annual data are averages of monthly not seasonally adjusted figures.
[2] Seasonally adjusted, end of period. Data beginning 1982 are not comparable with data for prior periods.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

Table B–57.—*Manufacturers' new and unfilled orders, 1954–96*

[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: Total	Durable goods industries: Capital goods industries, nondefense	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries
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	27,193	13,387	....	13,805	46,609	43,807	2,802	3.02	3.62	.85
1959	30,711	15,979	....	14,732	51,717	48,369	3,348	2.94	3.47	.92
1960	30,232	15,288	....	14,944	44,213	41,650	2,563	2.71	3.29	.71
1961	31,112	15,753	....	15,359	46,624	43,582	3,042	2.58	3.08	.78
1962	33,440	17,363	....	16,078	47,798	45,170	2,628	2.64	3.18	.68
1963	35,511	18,671	....	16,840	53,417	50,346	3,071	2.74	3.31	.72
1964	38,240	20,507	....	17,732	64,518	61,315	3,203	2.99	3.59	.71
1965	42,137	23,286	....	18,851	78,249	74,459	3,790	3.25	3.86	.79
1966	46,420	26,163	....	20,258	96,846	93,002	3,844	3.74	4.48	.75
1967	47,067	25,803	....	21,265	103,711	99,735	3,976	3.66	4.37	.73
1968	50,657	28,051	6,314	22,606	108,377	104,393	3,984	3.79	4.58	.69
1969	53,990	29,876	7,046	24,114	114,341	110,161	4,180	3.71	4.45	.69
1970	52,022	27,340	6,072	24,682	105,008	100,412	4,596	3.61	4.36	.76
1971	55,921	29,905	6,682	26,016	105,247	100,225	5,022	3.32	4.00	.76
1972	64,182	35,038	7,745	29,144	119,349	113,034	6,315	3.26	3.85	.86
1973	76,003	42,627	9,926	33,376	156,561	149,204	7,357	3.80	4.51	.91
1974	87,327	46,862	11,594	40,465	187,043	181,519	5,524	4.09	4.93	.62
1975	85,139	41,957	9,886	43,181	169,546	161,664	7,882	3.69	4.45	.82
1976	99,513	51,307	11,490	48,206	178,128	169,857	8,271	3.24	3.88	.74
1977	115,109	61,035	13,681	54,073	202,024	193,323	8,701	3.24	3.85	.71
1978	131,629	72,278	17,588	59,351	259,169	248,281	10,888	3.57	4.20	.81
1979	147,604	79,483	21,154	68,121	303,593	291,321	12,272	3.89	4.62	.82
1980	156,359	79,392	21,135	76,967	327,416	315,202	12,214	3.85	4.58	.75
1981	168,025	83,654	21,806	84,371	326,547	314,707	11,840	3.87	4.68	.69
1982	162,140	78,064	19,213	84,077	311,887	300,798	11,089	3.84	4.74	.62
1983	175,451	88,140	19,624	87,311	347,273	333,114	14,159	3.53	4.29	.69
1984	192,879	100,164	23,669	92,715	373,529	359,651	13,878	3.60	4.37	.64
1985	195,706	102,356	24,545	93,351	387,196	372,097	15,099	3.67	4.47	.68
1986	195,204	103,647	23,982	91,557	393,515	376,699	16,816	3.59	4.41	.70
1987	209,389	110,809	26,094	98,579	430,468	408,732	21,736	3.64	4.43	.83
1988	228,270	122,076	31,108	106,194	474,192	452,192	22,000	3.64	4.46	.76
1989	239,572	126,055	32,988	113,516	508,853	487,104	21,749	3.96	4.86	.77
1990	244,507	125,583	33,331	118,924	531,115	509,106	22,009	4.15	5.15	.76
1991	238,805	119,849	30,471	118,957	519,143	495,735	23,408	4.08	5.07	.79
1992	248,212	126,308	31,525	121,905	493,104	469,542	23,562	3.51	4.30	.75
1993	257,698	133,081	31,693	124,617	458,161	436,286	21,875	3.15	3.80	.71
1994	279,560	149,505	35,847	130,055	469,450	443,610	25,840	2.96	3.56	.76
1995	298,092	160,214	41,302	137,877	480,128	456,048	24,080	2.84	3.43	.67
1995: Jan	297,252	160,467	39,549	136,785	472,304	446,055	26,249	2.91	3.50	.75
Feb	296,723	159,332	39,753	137,391	474,822	448,233	26,589	2.93	3.53	.76
Mar	296,210	159,598	40,244	136,612	475,495	449,015	26,480	2.91	3.51	.75
Apr	291,333	154,156	38,143	137,177	473,672	446,981	26,691	2.92	3.53	.75
May	295,891	157,854	41,412	138,037	474,312	447,528	26,784	2.89	3.49	.74
June	294,233	156,300	40,246	137,933	471,668	445,060	26,608	2.84	3.44	.73
July	293,595	155,476	37,976	138,119	471,362	444,428	26,934	2.89	3.50	.75
Aug	298,670	160,400	39,532	138,270	470,224	444,203	26,021	2.82	3.41	.71
Sept	302,744	165,364	44,880	137,380	472,214	447,286	24,928	2.82	3.41	.69
Oct	301,467	162,792	41,310	138,675	473,857	449,372	24,485	2.85	3.44	.68
Nov	302,155	162,492	44,279	139,663	475,257	450,504	24,753	2.83	3.42	.69
Dec	306,155	167,520	47,586	138,635	480,128	456,048	24,080	2.84	3.43	.67
1996: Jan	307,151	167,355	46,163	139,796	488,594	464,278	24,316	2.95	3.57	.68
Feb	302,648	163,146	44,555	139,502	498,479	465,506	23,973	2.91	3.52	.67
Mar	305,091	165,519	46,613	139,572	493,924	470,648	23,276	2.95	3.57	.65
Apr	307,001	163,472	40,487	143,529	492,922	469,505	23,417	2.91	3.51	.65
May	314,194	170,287	44,979	143,907	495,913	472,305	23,608	2.89	3.47	.66
June	312,139	169,994	42,921	142,145	499,201	475,397	23,804	2.91	3.51	.66
July	317,304	172,402	45,935	144,902	504,105	480,025	24,080	2.94	3.54	.67
Aug	310,575	166,267	41,172	144,308	501,833	477,821	24,012	2.91	3.51	.67
Sept	318,515	173,811	47,515	144,704	505,188	480,927	24,261	2.91	3.50	.68
Oct p	321,887	174,900	47,482	146,987	511,565	487,003	24,562	2.97	3.56	.69
Nov p	320,490	172,319	43,917	148,171	513,775	488,476	25,299	2.94	3.51	.70

[1] Annual data are averages of monthly not seasonally adjusted figures.
[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.

TABLE B–58.—*Consumer price indexes for major expenditure classes, 1954–96*

[For all urban consumers; 1982–84=100]

Year or month	All items (CPI–U)	Food and beverages		Housing				Apparel and upkeep	Transportation	Medical care	Entertainment	Other goods and services	Energy[2]
		Total[1]	Food	Total	Shelter	Fuel and other utilities	Household furnishings and operation						
1954	26.9	....	28.2	....	22.5	22.6	....	43.1	26.1	17.8	....	....	....
1955	26.8	....	27.8	....	22.7	23.0	....	42.9	25.8	18.2	....	....	....
1956	27.2	....	28.0	....	23.1	23.6	....	43.7	26.2	18.9	....	....	....
1957	28.1	....	28.9	....	24.0	24.3	....	44.5	27.7	19.7	....	....	21.5
1958	28.9	....	30.2	....	24.5	24.8	....	44.6	28.6	20.6	....	....	21.5
1959	29.1	....	29.7	....	24.7	25.4	....	45.0	29.8	21.5	....	....	21.9
1960	29.6	....	30.0	....	25.2	26.0	....	45.7	29.8	22.3	....	....	22.4
1961	29.9	....	30.4	....	25.4	26.3	....	46.1	30.1	22.9	....	....	22.5
1962	30.2	....	30.6	....	25.8	26.3	....	46.3	30.8	23.5	....	....	22.6
1963	30.6	....	31.1	....	26.1	26.6	....	46.9	30.9	24.1	....	....	22.6
1964	31.0	....	31.5	....	26.5	26.6	....	47.3	31.4	24.6	....	....	22.5
1965	31.5	....	32.2	....	27.0	26.6	....	47.8	31.9	25.2	....	....	22.9
1966	32.4	....	33.8	....	27.8	26.7	....	49.0	32.3	26.3	....	....	23.3
1967	33.4	35.0	34.1	30.8	28.8	27.1	42.0	51.0	33.3	28.2	40.7	35.1	23.8
1968	34.8	36.2	35.3	32.0	30.1	27.4	43.6	53.7	34.3	29.9	43.0	36.9	24.2
1969	36.7	38.1	37.1	34.0	32.6	28.0	45.2	56.8	35.7	31.9	45.2	38.7	24.8
1970	38.8	40.1	39.2	36.4	35.5	29.1	46.8	59.2	37.5	34.0	47.5	40.9	25.5
1971	40.5	41.4	40.4	38.0	37.0	31.1	48.6	61.1	39.5	36.1	50.0	42.9	26.5
1972	41.8	43.1	42.1	39.4	38.7	32.5	49.7	62.3	39.9	37.3	51.5	44.7	27.2
1973	44.4	48.8	48.2	41.2	40.5	34.3	51.1	64.6	41.2	38.8	52.9	46.4	29.4
1974	49.3	55.5	55.1	45.8	44.4	40.7	56.8	69.4	45.8	42.4	56.9	49.8	38.1
1975	53.8	60.2	59.8	50.7	48.8	45.4	63.4	72.5	50.1	47.5	62.0	53.9	42.1
1976	56.9	62.1	61.6	53.8	51.5	49.4	67.3	75.2	55.1	52.0	65.1	57.0	45.1
1977	60.6	65.8	65.5	57.4	54.9	54.7	70.4	78.6	59.0	57.0	68.3	60.4	49.4
1978	65.2	72.2	72.0	62.4	60.5	58.5	74.7	81.4	61.7	61.8	71.9	64.3	52.5
1979	72.6	79.9	79.9	70.1	68.9	64.8	79.9	84.9	70.5	67.5	76.7	68.9	65.7
1980	82.4	86.7	86.8	81.1	81.0	75.4	86.3	90.9	83.1	74.9	83.6	75.2	86.0
1981	90.9	93.5	93.6	90.4	90.5	86.4	93.0	95.3	93.2	82.9	90.1	82.6	97.7
1982	96.5	97.3	97.4	96.9	96.9	94.9	98.0	97.8	97.0	92.5	96.0	91.1	99.2
1983	99.6	99.5	99.4	99.5	99.1	100.2	100.2	100.2	99.3	100.6	100.1	101.1	99.9
1984	103.9	103.2	103.2	103.6	104.0	104.8	101.9	102.1	103.7	106.8	103.8	107.9	100.9
1985	107.6	105.6	105.6	107.7	109.8	106.5	103.8	105.0	106.4	113.5	107.9	114.5	101.6
1986	109.6	109.1	109.0	110.9	115.8	104.1	105.2	105.9	102.3	122.0	111.6	121.4	88.2
1987	113.6	113.5	113.5	114.2	121.3	103.0	107.1	110.6	105.4	130.1	115.3	128.5	88.6
1988	118.3	118.2	118.2	118.5	127.1	104.4	109.4	115.4	108.7	138.6	120.3	137.0	89.3
1989	124.0	124.9	125.1	123.0	132.8	107.8	111.2	118.6	114.1	149.3	126.5	147.7	94.3
1990	130.7	132.1	132.4	128.5	140.0	111.6	113.3	124.1	120.5	162.8	132.4	159.0	102.1
1991	136.2	136.8	136.3	133.6	146.3	115.3	116.0	128.7	123.8	177.0	138.4	171.6	102.5
1992	140.3	138.7	137.9	137.5	151.2	117.8	118.0	131.9	126.5	190.1	142.3	183.3	103.0
1993	144.5	141.6	140.9	141.2	155.7	121.3	119.3	133.7	130.4	201.4	145.8	192.9	104.2
1994	148.2	144.9	144.3	144.8	160.5	122.8	121.0	133.4	134.3	211.0	150.1	198.5	104.6
1995	152.4	148.9	148.4	148.5	165.7	123.7	123.0	132.0	139.1	220.5	153.9	206.9	105.2
1996	156.9	153.7	153.3	152.8	171.0	127.5	124.7	131.7	143.0	228.2	159.1	215.4	110.1
1995: Jan	150.3	147.9	147.5	146.4	162.9	122.9	121.8	129.4	137.3	216.6	152.1	203.0	104.2
Feb	150.9	147.8	147.4	147.0	163.8	122.6	122.4	131.1	137.5	217.9	152.5	204.1	103.7
Mar	151.4	147.9	147.4	147.4	164.5	122.3	122.6	134.4	138.0	218.4	152.6	204.0	103.2
Apr	151.9	148.9	148.4	147.4	164.7	122.1	122.6	134.8	139.1	218.9	153.3	204.3	103.9
May	152.2	148.7	148.3	147.6	164.8	122.5	122.7	133.4	140.3	219.3	153.6	204.9	106.3
June	152.5	148.4	147.9	148.5	165.5	125.0	122.5	130.5	141.1	219.8	153.2	205.3	109.3
July	152.5	148.6	148.1	149.2	166.4	125.1	123.0	128.3	140.1	220.8	153.6	205.7	108.1
Aug	152.9	148.9	148.4	149.6	166.8	125.7	123.4	130.1	139.2	221.6	154.1	207.7	107.4
Sept	153.2	149.4	148.9	149.5	166.8	124.9	123.8	132.7	138.8	222.1	154.9	210.2	106.2
Oct	153.7	149.8	149.4	149.7	167.3	123.9	123.9	134.5	139.4	222.9	155.2	210.7	104.5
Nov	153.6	149.8	149.4	149.4	167.3	123.1	123.6	133.7	139.4	223.5	156.0	211.2	102.8
Dec	153.5	150.3	149.9	149.7	167.4	123.7	123.8	130.6	139.1	223.8	156.2	211.1	103.3
1996: Jan	154.4	151.4	151.0	150.6	168.6	124.7	124.1	130.0	139.9	225.2	157.0	212.0	105.0
Feb	154.9	151.3	150.8	151.2	169.4	125.0	124.3	131.2	140.4	226.2	158.3	212.6	104.9
Mar	155.7	152.1	151.6	151.7	170.1	125.2	124.6	134.8	141.2	226.6	158.4	213.0	106.1
Apr	156.3	152.7	152.3	151.8	170.1	125.4	124.8	134.9	143.1	227.0	158.6	213.3	110.0
May	156.6	152.5	152.0	152.0	170.1	126.7	124.4	133.7	144.4	227.4	158.8	214.1	112.9
June	156.7	153.1	152.6	152.7	170.7	128.4	124.5	130.8	144.0	227.8	159.0	214.0	113.1
July	157.0	153.6	153.2	153.6	171.9	129.0	124.7	128.3	143.5	228.7	159.0	214.6	112.5
Aug	157.3	154.2	153.7	154.0	172.3	129.4	124.8	128.1	142.8	229.2	159.2	216.3	111.6
Sept	157.8	155.0	154.6	153.9	172.0	129.8	125.1	131.5	143.2	229.4	159.8	218.3	111.7
Oct	158.3	155.8	155.4	154.0	172.5	128.7	125.0	133.4	143.9	230.1	160.1	218.8	110.5
Nov	158.6	156.2	155.9	153.9	172.4	128.4	124.8	133.4	144.8	230.5	160.7	219.2	111.1
Dec	158.6	156.6	156.3	154.0	172.3	129.4	125.0	130.3	145.2	230.6	160.8	218.7	112.2

[1] Includes alcoholic beverages, not shown separately.

[2] Household fuels—gas (piped), electricity, fuel oil, etc.—and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note.—Data beginning 1983 incorporate a rental equivalence measure for homeowners' costs.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–59.—*Consumer price indexes for selected expenditure classes, 1954–96*

[For all urban consumers; 1982–84=100, except as noted]

Year or month	Food and beverages: Total [1]	Food: Total	Food: At home	Food: Away from home	Shelter: Total	Renters' costs: Total [2]	Renters' costs: Rent, residential	Homeowners' costs [2]	Maintenance and repairs	Fuel and other utilities: Total	Fuels: Total	Fuels: Fuel oil and other household fuel commodities	Fuels: Gas (piped) and electricity (energy services)	Other utilities and public services
1954	....	28.2	30.1	21.9	22.5	....	35.1	....	20.9	22.6	....	12.6	20.2	....
1955	....	27.8	29.5	22.1	22.7	....	35.6	....	21.4	23.0	....	12.7	20.7	....
1956	....	28.0	29.6	22.6	23.1	....	36.3	....	22.3	23.6	....	13.3	20.9	....
1957	....	28.9	30.6	23.4	24.0	....	37.0	....	23.2	24.3	....	14.0	21.1	....
1958	....	30.2	32.0	24.1	24.5	....	37.6	....	23.6	24.8	....	13.7	21.9	....
1959	....	29.7	31.2	24.8	24.7	....	38.2	....	24.0	25.4	....	13.9	22.4	....
1960	....	30.0	31.5	25.4	25.2	....	38.7	....	24.4	26.0	....	13.8	23.3	....
1961	....	30.4	31.8	26.0	25.4	....	39.2	....	24.8	26.3	....	14.1	23.5	....
1962	....	30.6	32.0	26.7	25.8	....	39.7	....	25.0	26.3	....	14.2	23.5	....
1963	....	31.1	32.4	27.3	26.1	....	40.1	....	25.3	26.6	....	14.4	23.5	....
1964	....	31.5	32.7	27.8	26.5	....	40.5	....	25.8	26.6	....	14.4	23.5	....
1965	....	32.2	33.5	28.4	27.0	....	40.9	....	26.3	26.6	....	14.6	23.5	....
1966	....	33.8	35.2	29.7	27.8	....	41.5	....	27.5	26.7	....	15.0	23.6	....
1967	35.0	34.1	35.1	31.3	28.8	....	42.2	....	28.9	27.1	21.4	15.5	23.7	46.6
1968	36.2	35.3	36.3	32.9	30.1	....	43.3	....	30.6	27.4	21.7	16.0	23.9	47.1
1969	38.1	37.1	38.0	34.9	32.6	....	44.7	....	33.2	28.0	22.1	16.3	24.3	48.4
1970	40.1	39.2	39.9	37.5	35.5	....	46.5	....	35.8	29.1	23.1	17.0	25.4	50.0
1971	41.4	40.4	40.9	39.4	37.0	....	48.7	....	38.6	31.1	24.7	18.2	27.1	53.4
1972	43.1	42.1	42.7	41.0	38.7	....	50.4	....	40.6	32.5	25.7	18.3	28.5	56.2
1973	48.8	48.2	49.7	44.2	40.5	....	52.5	....	43.6	34.3	27.5	21.1	29.9	57.8
1974	55.5	55.1	57.1	49.8	44.4	....	55.2	....	49.5	40.7	34.4	33.2	34.5	60.7
1975	60.2	59.8	61.8	54.5	48.8	....	58.0	....	54.1	45.4	39.4	36.4	40.1	63.9
1976	62.1	61.6	63.1	58.2	51.5	....	61.1	....	57.6	49.4	43.3	38.8	44.7	67.7
1977	65.8	65.5	66.8	62.6	54.9	....	64.8	....	62.0	54.7	49.0	43.9	50.5	70.8
1978	72.2	72.0	73.8	68.3	60.5	....	69.3	....	67.2	58.5	53.0	46.2	55.0	73.7
1979	79.9	79.9	81.8	75.9	68.9	....	74.3	....	74.0	64.8	61.3	62.4	61.0	74.3
1980	86.7	86.8	88.4	83.4	81.0	....	80.9	....	82.4	75.4	74.8	86.1	71.4	77.0
1981	93.5	93.6	94.8	90.9	90.5	....	87.9	....	90.7	86.4	87.2	104.6	81.9	84.3
1982	97.3	97.4	98.1	95.8	96.9	....	94.6	....	96.4	94.9	95.6	103.4	93.2	93.3
1983	99.5	99.4	99.1	100.0	99.1	103.0	100.1	102.5	99.9	100.2	100.5	97.2	101.5	99.5
1984	103.2	103.2	102.8	104.2	104.0	108.6	105.3	107.3	103.7	104.8	104.0	99.4	105.4	107.2
1985	105.6	105.6	104.3	108.3	109.8	115.4	111.8	113.1	106.5	106.5	104.5	95.9	107.1	112.1
1986	109.1	109.0	107.3	112.5	115.8	121.9	118.3	119.4	107.9	104.1	99.2	77.6	105.7	117.9
1987	113.5	113.5	111.9	117.0	121.3	128.1	123.1	124.8	111.8	103.0	97.3	77.9	103.8	120.1
1988	118.2	118.2	116.6	121.8	127.1	133.6	127.8	131.1	114.7	104.4	98.0	78.1	104.6	122.9
1989	124.9	125.1	124.2	127.4	132.8	138.9	132.8	137.3	118.0	107.8	100.9	81.7	107.5	127.1
1990	132.1	132.4	132.3	133.4	140.0	146.7	138.4	144.6	122.2	111.6	104.5	99.3	109.3	131.7
1991	136.8	136.3	135.8	137.9	146.3	155.6	143.3	150.2	126.3	115.3	106.7	94.6	112.6	137.9
1992	138.7	137.9	136.8	140.7	151.2	160.9	146.9	155.3	128.6	117.8	108.1	90.7	114.8	142.5
1993	141.6	140.9	140.1	143.2	155.7	165.0	150.3	160.2	130.6	121.3	111.2	90.3	118.5	147.0
1994	144.9	144.3	144.1	145.7	160.5	169.4	154.0	165.5	130.8	122.8	111.7	88.8	119.2	150.2
1995	148.9	148.4	148.8	149.0	165.7	174.3	157.8	171.0	135.0	123.7	111.5	88.1	119.2	152.8
1996	153.7	153.3	154.3	152.7	171.0	180.2	162.0	176.5	139.0	127.5	115.2	99.2	122.1	157.2
1995: Jan	147.9	147.5	148.2	147.4	162.9	170.7	156.1	168.4	133.1	122.9	110.7	89.4	118.0	152.1
Feb	147.8	147.4	147.9	147.6	163.8	172.9	156.4	168.9	133.8	122.6	110.4	89.6	117.6	151.8
Mar	147.9	147.4	147.6	148.1	164.5	174.6	156.7	169.2	134.2	122.3	109.8	89.0	117.1	151.9
Apr	148.9	148.4	149.2	148.3	164.7	174.1	157.0	169.6	134.2	122.1	109.3	88.4	116.6	152.2
May	148.7	148.3	148.7	148.6	164.8	173.7	157.2	170.0	134.6	122.5	109.8	88.3	117.2	152.3
June	148.4	147.9	148.1	148.8	165.5	174.7	157.5	170.6	135.0	125.0	113.8	87.9	121.9	152.7
July	148.6	148.1	148.2	149.1	166.4	176.7	157.9	171.2	135.1	125.1	113.7	87.1	121.9	153.0
Aug	148.9	148.4	148.4	149.4	166.8	176.9	158.2	171.6	135.4	125.7	114.6	86.6	123.0	153.1
Sept	149.4	148.9	149.2	149.6	166.8	175.1	158.5	172.4	135.4	124.9	113.4	86.6	121.6	153.2
Oct	149.8	149.4	149.7	150.0	167.3	175.3	158.9	173.0	136.3	123.9	111.5	86.9	119.3	153.5
Nov	149.8	149.4	149.5	150.2	167.3	173.8	159.3	173.5	136.2	123.1	110.1	87.7	117.6	153.6
Dec	150.3	149.9	150.3	150.4	167.4	173.2	159.6	174.0	136.6	123.7	110.9	89.6	118.3	153.9
1996: Jan	151.4	151.0	151.9	150.6	168.6	176.6	160.0	174.3	136.3	124.7	112.2	97.6	118.7	154.4
Feb	151.3	150.8	151.4	150.9	169.4	178.8	160.4	174.6	137.0	125.0	112.5	97.7	119.1	154.9
Mar	152.1	151.6	152.5	151.2	170.1	180.4	160.6	175.0	137.5	125.2	111.9	99.3	118.2	156.4
Apr	152.7	152.3	153.3	151.6	170.1	179.7	160.9	175.3	138.0	125.4	112.9	102.1	118.9	155.4
May	152.5	152.0	152.6	152.0	170.1	178.9	161.2	175.6	138.8	126.7	114.0	99.6	120.6	156.9
June	153.1	152.6	153.4	152.3	170.7	180.0	161.7	176.0	138.8	128.4	116.5	94.6	124.1	157.6
July	153.6	153.2	154.1	152.8	171.9	183.0	162.2	176.6	139.4	129.0	117.4	92.3	125.6	157.5
Aug	154.2	153.7	154.8	153.1	172.3	183.4	162.5	177.0	139.7	129.4	117.9	92.2	126.1	158.0
Sept	155.0	154.6	155.9	153.5	172.0	180.9	162.9	177.5	139.9	129.8	118.4	95.6	126.2	158.3
Oct	155.8	155.4	156.8	154.2	172.5	181.3	163.3	178.1	140.2	128.7	116.2	102.9	122.7	158.6
Nov	156.2	155.9	157.2	154.7	172.4	179.9	163.7	178.6	141.1	128.4	115.7	105.9	121.7	158.9
Dec	156.6	156.3	157.7	155.0	172.3	179.1	164.0	178.8	141.5	129.4	117.1	110.3	122.8	159.1

[1] Includes alcoholic beverages, not shown separately.
[2] December 1982=100.

See next page for continuation of table.

Table B–59.—*Consumer price indexes for selected expenditure classes, 1954–96*—Continued

[For all urban consumers; 1982–84=100, except as noted]

Year or month	Transportation								Medical care		
	Total	Private transportation						Public transportation	Total	Medical care commodities	Medical care services
		Total [3]	New cars	Used cars	Motor fuel [4]	Automobile maintenance and repair	Other				
1954	26.1	27.1	46.5	22.7	21.8	22.7	....	18.0	17.8	42.0	15.3
1955	25.8	26.7	44.8	21.5	22.1	23.2	....	18.5	18.2	42.5	15.7
1956	26.2	27.1	46.1	20.7	22.8	24.2	....	19.2	18.9	43.4	16.3
1957	27.7	28.6	48.5	23.2	23.8	25.0	....	19.9	19.7	44.6	17.0
1958	28.6	29.5	50.0	24.0	23.4	25.4	....	20.9	20.6	46.1	17.9
1959	29.8	30.8	52.2	26.8	23.7	26.0	....	21.5	21.5	46.8	18.7
1960	29.8	30.6	51.5	25.0	24.4	26.5	....	22.2	22.3	46.9	19.5
1961	30.1	30.8	51.5	26.0	24.1	27.1	....	23.2	22.9	46.3	20.2
1962	30.8	31.4	51.3	28.4	24.3	27.5	....	24.0	23.5	45.6	20.9
1963	30.9	31.6	51.0	28.7	24.2	27.8	....	24.3	24.1	45.2	21.5
1964	31.4	32.0	50.9	30.0	24.1	28.2	....	24.7	24.6	45.1	22.0
1965	31.9	32.5	49.7	29.8	25.1	28.7	....	25.2	25.2	45.0	22.7
1966	32.3	32.9	48.8	29.0	25.6	29.2	....	26.1	26.3	45.1	23.9
1967	33.3	33.8	49.3	29.9	26.4	30.4	37.9	27.4	28.2	44.9	26.0
1968	34.3	34.8	50.7	....	26.8	32.1	39.2	28.7	29.9	45.0	27.9
1969	35.7	36.0	51.5	30.9	27.6	34.1	41.6	30.9	31.9	45.4	30.2
1970	37.5	37.5	53.0	31.2	27.9	36.6	45.2	35.2	34.0	46.5	32.3
1971	39.5	39.4	55.2	33.0	28.1	39.3	48.6	37.8	36.1	47.3	34.7
1972	39.9	39.7	54.7	33.1	28.4	41.1	48.9	39.3	37.3	47.4	35.9
1973	41.2	41.0	54.8	35.2	31.2	43.2	48.4	39.7	38.8	47.5	37.5
1974	45.8	46.2	57.9	36.7	42.2	47.6	50.2	40.6	42.4	49.2	41.4
1975	50.1	50.6	62.9	43.8	45.1	53.7	53.5	43.5	47.5	53.3	46.6
1976	55.1	55.6	66.9	50.3	47.0	57.6	61.8	47.8	52.0	56.5	51.3
1977	59.0	59.7	70.4	54.7	49.7	61.9	67.2	50.0	57.0	60.2	56.4
1978	61.7	62.5	75.8	55.8	51.8	67.0	69.9	51.5	61.8	64.4	61.2
1979	70.5	71.7	81.8	60.2	70.1	73.7	75.2	54.9	67.5	69.0	67.2
1980	83.1	84.2	88.4	62.3	97.4	81.5	84.3	69.0	74.9	75.4	74.8
1981	93.2	93.8	93.7	76.9	108.5	89.2	91.4	85.6	82.9	83.7	82.8
1982	97.0	97.1	97.4	88.8	102.8	96.0	97.7	94.9	92.5	92.3	92.6
1983	99.3	99.3	99.9	98.7	99.4	100.3	98.8	99.5	100.6	100.2	100.7
1984	103.7	103.6	102.8	112.5	97.9	103.8	103.5	105.7	106.8	107.5	106.7
1985	106.4	106.2	106.1	113.7	98.7	106.8	109.0	110.5	113.5	115.2	113.2
1986	102.3	101.2	110.6	108.8	77.1	110.3	115.1	117.0	122.0	122.8	121.9
1987	105.4	104.2	114.6	113.1	80.2	114.8	120.8	121.1	130.1	131.0	130.0
1988	108.7	107.6	116.9	118.0	80.9	119.7	127.9	123.3	138.6	139.9	138.3
1989	114.1	112.9	119.2	120.4	88.5	124.9	135.8	129.5	149.3	150.8	148.9
1990	120.5	118.8	121.0	117.6	101.2	130.1	142.5	142.6	162.8	163.4	162.7
1991	123.8	121.9	125.3	118.1	99.4	136.0	149.1	148.9	177.0	176.8	177.1
1992	126.5	124.6	128.4	123.2	99.0	141.3	153.2	151.4	190.1	188.1	190.5
1993	130.4	127.5	131.5	133.9	98.0	145.9	156.8	167.0	201.4	195.0	202.9
1994	134.3	131.4	136.0	141.7	98.5	150.2	162.1	172.0	211.0	200.7	213.4
1995	139.1	136.3	139.0	156.5	100.0	154.0	170.6	175.9	220.5	204.5	224.2
1996	143.0	140.0	141.4	157.0	106.3	158.4	173.9	181.9	228.2	210.4	232.4
1995: Jan	137.3	134.9	139.0	152.4	98.7	152.0	168.8	168.4	216.6	203.1	219.8
Feb	137.5	135.0	139.1	153.3	98.0	152.5	169.4	169.9	217.9	203.5	221.3
Mar	138.0	135.2	139.0	154.8	97.5	152.7	170.2	174.5	218.4	203.7	221.8
Apr	139.1	136.2	139.3	156.7	99.5	153.2	170.9	176.6	218.9	203.6	222.4
May	140.3	137.5	139.3	157.7	104.2	153.8	170.5	176.7	219.3	203.4	223.0
June	141.1	137.9	139.1	158.3	106.1	153.6	169.9	182.5	219.8	203.8	223.5
July	140.1	136.9	138.3	157.5	103.6	154.0	169.6	181.8	220.8	204.4	224.6
Aug	139.2	136.3	137.9	157.0	101.1	154.5	170.3	177.1	221.6	204.7	225.6
Sept	138.8	135.9	137.8	156.5	99.8	155.1	170.1	176.1	222.1	204.8	226.1
Oct	139.4	136.3	138.6	157.2	98.3	155.4	172.0	178.7	222.9	205.7	226.9
Nov	139.4	136.5	140.1	157.8	96.4	155.7	172.7	177.5	223.5	206.3	227.4
Dec	139.1	136.6	140.7	158.2	96.4	155.7	172.4	170.7	223.8	206.6	227.8
1996: Jan	139.9	137.4	141.1	157.9	98.6	156.2	172.7	171.6	225.2	207.7	229.3
Feb	140.4	137.5	141.3	157.5	98.2	156.6	173.2	177.4	226.2	208.5	230.3
Mar	141.2	138.3	141.5	157.3	101.4	156.9	172.5	178.9	226.6	208.9	230.7
Apr	143.1	140.3	141.3	157.4	108.6	157.2	173.0	179.3	227.0	209.6	231.1
May	144.4	141.7	141.2	157.6	113.6	157.5	173.1	180.2	227.4	209.7	231.6
June	144.0	141.0	141.3	157.2	111.2	157.7	173.1	182.2	227.8	210.5	231.9
July	143.5	140.5	141.0	156.9	108.9	158.1	173.5	182.7	228.7	211.0	232.9
Aug	142.8	139.5	140.7	156.6	106.4	158.6	174.1	181.4	229.2	211.1	233.4
Sept	143.2	140.0	141.0	157.0	106.2	160.0	174.1	184.6	229.4	211.2	233.6
Oct	143.9	140.5	141.5	157.0	105.9	160.5	175.4	187.2	230.1	212.4	234.2
Nov	144.8	141.5	142.3	156.5	107.8	160.5	176.2	187.3	230.5	211.9	234.9
Dec	145.2	141.7	143.0	155.6	108.6	160.6	176.0	189.9	230.6	212.0	235.0

[3] Includes other new vehicles, not shown separately. Includes direct pricing of new trucks and motorcycles beginning 1982.
[4] Includes direct pricing of diesel fuel and gasohol beginning 1981.

Note.—See Note, Table B-58.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–60.—*Consumer price indexes for commodities, services, and special groups, 1954–96*

[For all urban consumers; 1982–84=100, except as noted]

Year or month	All items (CPI–U)	Commodities: All commodities	Commodities: Food	Commodities: Commodities less food	Services: All services	Services: Medical care services	Services: Services less medical care services	Special indexes: All items less food	Special indexes: All items less energy	Special indexes: All items less food and energy	Special indexes: All items less medical care	Special indexes: CPI–U–X1 (all items) (Dec. 1982 =97.6)[1]
1954	26.9	31.6	28.2	33.8	20.0	15.3	....	26.6	....	....	....	29.2
1955	26.8	31.3	27.8	33.6	20.4	15.7	....	26.6	....	....	....	29.1
1956	27.2	31.6	28.0	33.9	20.9	16.3	....	27.1	....	....	....	29.6
1957	28.1	32.6	28.9	34.9	21.8	17.0	22.8	28.0	28.9	28.9	28.7	30.5
1958	28.9	33.3	30.2	35.3	22.6	17.9	23.6	28.6	29.7	29.6	29.5	31.4
1959	29.1	33.3	29.7	35.8	23.3	18.7	24.2	29.2	29.9	30.2	29.8	31.6
1960	29.6	33.6	30.0	36.0	24.1	19.5	25.0	29.7	30.4	30.6	30.2	32.2
1961	29.9	33.8	30.4	36.1	24.5	20.2	25.4	30.0	30.7	31.0	30.5	32.5
1962	30.2	34.1	30.6	36.3	25.0	20.9	25.9	30.3	31.1	31.4	30.8	32.8
1963	30.6	34.4	31.1	36.6	25.5	21.5	26.3	30.7	31.5	31.8	31.1	33.3
1964	31.0	34.8	31.5	36.9	26.0	22.0	26.8	31.1	32.0	32.3	31.5	33.7
1965	31.5	35.2	32.2	37.2	26.6	22.7	27.4	31.6	32.5	32.7	32.0	34.2
1966	32.4	36.1	33.8	37.7	27.6	23.9	28.3	32.3	33.5	33.5	33.0	35.2
1967	33.4	36.8	34.1	38.6	28.8	26.0	29.3	33.4	34.4	34.7	33.7	36.3
1968	34.8	38.1	35.3	40.0	30.3	27.9	30.8	34.9	35.9	36.3	35.1	37.7
1969	36.7	39.9	37.1	41.7	32.4	30.2	32.9	36.8	38.0	38.4	37.0	39.4
1970	38.8	41.7	39.2	43.4	35.0	32.3	35.6	39.0	40.3	40.8	39.2	41.3
1971	40.5	43.2	40.4	45.1	37.0	34.7	37.5	40.8	42.0	42.7	40.8	43.1
1972	41.8	44.5	42.1	46.1	38.4	35.9	38.9	42.0	43.4	44.0	42.1	44.4
1973	44.4	47.8	48.2	47.7	40.1	37.5	40.6	43.7	46.1	45.6	44.8	47.2
1974	49.3	53.5	55.1	52.8	43.8	41.4	44.3	48.0	50.6	49.4	49.8	51.9
1975	53.8	58.2	59.8	57.6	48.0	46.6	48.3	52.5	55.1	53.9	54.3	56.2
1976	56.9	60.7	61.6	60.5	52.0	51.3	52.2	56.0	58.2	57.4	57.2	59.4
1977	60.6	64.2	65.5	63.8	56.0	56.4	55.9	59.6	61.9	61.0	60.8	63.2
1978	65.2	68.8	72.0	67.5	60.8	61.2	60.7	63.9	66.7	65.5	65.4	67.5
1979	72.6	76.6	79.9	75.3	67.5	67.2	67.5	71.2	73.4	71.9	72.9	74.0
1980	82.4	86.0	86.8	85.7	77.9	74.8	78.2	81.5	81.9	80.8	82.8	82.3
1981	90.9	93.2	93.6	93.1	88.1	82.8	88.7	90.4	90.1	89.2	91.4	90.1
1982	96.5	97.0	97.4	96.9	96.0	92.6	96.4	96.3	96.1	95.8	96.8	95.6
1983	99.6	99.8	99.4	100.0	99.4	100.7	99.2	99.7	99.6	99.6	99.6	99.6
1984	103.9	103.2	103.2	103.1	104.6	106.7	104.4	104.0	104.3	104.6	103.7	103.9
1985	107.6	105.4	105.6	105.2	109.9	113.2	109.6	108.0	108.4	109.1	107.2	107.6
1986	109.6	104.4	109.0	101.7	115.4	121.9	114.6	109.8	112.6	113.5	108.8	109.6
1987	113.6	107.7	113.5	104.3	120.2	130.0	119.1	113.6	117.2	118.2	112.6	113.6
1988	118.3	111.5	118.2	107.7	125.7	138.3	124.3	118.3	122.3	123.4	117.0	118.3
1989	124.0	116.7	125.1	112.0	131.9	148.9	130.1	123.7	128.1	129.0	122.4	124.0
1990	130.7	122.8	132.4	117.4	139.2	162.7	136.8	130.3	134.7	135.5	128.8	130.7
1991	136.2	126.6	136.3	121.3	146.3	177.1	143.3	136.1	140.9	142.1	133.8	136.2
1992	140.3	129.1	137.9	124.2	152.0	190.5	148.4	140.8	145.4	147.3	137.5	140.3
1993	144.5	131.5	140.9	126.3	157.9	202.9	153.6	145.1	150.0	152.2	141.2	144.5
1994	148.2	133.8	144.3	127.9	163.1	213.4	158.4	149.0	154.1	156.5	144.7	148.2
1995	152.4	136.4	148.4	129.8	168.7	224.2	163.5	153.1	158.7	161.2	148.6	152.4
1996	156.9	139.9	153.3	132.6	174.1	232.4	168.7	157.5	163.1	165.6	152.8	156.9
1995: Jan	150.3	135.1	147.5	128.3	165.9	219.8	160.9	150.8	156.5	158.7	146.6	150.3
Feb	150.9	135.4	147.4	128.8	166.7	221.3	161.6	151.5	157.2	159.6	147.1	150.9
Mar	151.4	135.9	147.4	129.5	167.3	221.8	162.2	152.1	157.8	160.4	147.6	151.4
Apr	151.9	136.6	148.4	130.1	167.5	222.4	162.4	152.5	158.3	160.7	148.1	151.9
May	152.2	136.9	148.3	130.6	167.7	223.0	162.6	152.9	158.3	160.8	148.4	152.2
June	152.5	136.6	147.9	130.4	168.6	223.5	163.5	153.3	158.3	160.9	148.7	152.5
July	152.5	136.2	148.1	129.5	169.2	224.6	164.1	153.4	158.5	161.1	148.7	152.5
Aug	152.9	136.3	148.4	129.7	169.8	225.6	164.6	153.7	159.0	161.6	149.0	152.9
Sept	153.2	136.8	148.9	130.1	170.0	226.1	164.7	154.0	159.5	162.1	149.4	153.2
Oct	153.7	137.2	149.4	130.5	170.4	226.9	165.1	154.4	160.2	162.8	149.8	153.7
Nov	153.6	137.2	149.4	130.4	170.3	227.4	165.0	154.4	160.3	163.0	149.7	153.6
Dec	153.5	137.0	149.9	129.9	170.4	227.8	165.0	154.2	160.2	162.7	149.6	153.5
1996: Jan	154.4	137.8	151.0	130.6	171.3	229.3	165.9	155.0	161.0	163.4	150.4	154.4
Feb	154.9	138.0	150.8	131.0	172.2	230.3	166.8	155.7	161.6	164.2	150.9	154.9
Mar	155.7	139.2	151.6	132.4	172.6	230.7	167.2	156.5	162.3	164.9	151.7	155.7
Apr	156.3	140.2	152.3	133.5	172.7	231.1	167.3	157.0	162.5	165.0	152.3	156.3
May	156.6	140.4	152.0	134.0	173.1	231.6	167.7	157.4	162.5	165.1	152.6	156.6
June	156.7	139.9	152.6	133.0	173.9	231.9	168.5	157.5	162.7	165.2	152.7	156.7
July	157.0	139.5	153.2	132.0	174.8	232.9	169.4	157.7	163.1	165.5	153.0	157.0
Aug	157.3	139.5	153.7	131.7	175.3	233.4	169.9	157.9	163.4	165.8	153.2	157.3
Sept	157.8	140.3	154.6	132.5	175.6	233.6	170.2	158.4	164.0	166.4	153.8	157.8
Oct	158.3	141.0	155.4	133.2	175.8	234.2	170.4	158.8	164.7	167.0	154.2	158.3
Nov	158.6	141.5	155.9	133.7	175.9	234.9	170.4	159.0	164.9	167.2	154.5	158.6
Dec	158.6	141.4	156.3	133.3	176.1	235.0	170.6	159.0	164.8	167.0	154.5	158.6

[1] CPI–U–X1 is a rental equivalence approach to homeowners' costs for the consumer price index for years prior to 1983, the first year for which the official index (CPI–U) incorporates such a measure. CPI–U–X1 is rebased to the December 1982 value of the CPI–U (1982–84=100); thus it is identical with CPI–U data for December 1982 and all subsequent periods. Data prior to 1967 estimated by moving the series at the same rate as the CPI–U for each year.

Note.—See Note, Table B–58.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–61.—*Changes in special consumer price indexes, 1958–96*

[For all urban consumers; percent change]

Year or month	All items (CPI–U)		All items less food		All items less energy		All items less food and energy		All items less medical care	
	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	2.8	1.8	2.1	2.1	2.8	1.7	2.4	1.7	2.8
1959	1.7	.7	2.1	2.1	1.3	.7	2.0	2.0	1.4	1.0
1960	1.4	1.7	1.0	1.7	1.3	1.7	1.0	1.3	1.3	1.3
1961	.7	1.0	1.3	1.0	.7	1.0	1.3	1.3	.3	1.0
1962	1.3	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.0
1963	1.6	1.3	1.6	1.3	1.9	1.3	1.6	1.3	1.6	1.0
1964	1.0	1.3	1.0	1.3	1.3	1.6	1.2	1.6	1.0	1.3
1965	1.9	1.6	1.6	1.6	1.9	1.6	1.5	1.2	1.9	1.6
1966	3.5	2.9	3.5	2.2	3.4	3.1	3.3	2.4	3.4	3.1
1967	3.0	3.1	3.3	3.4	3.2	2.7	3.8	3.6	2.7	2.1
1968	4.7	4.2	5.0	4.5	4.9	4.4	5.1	4.6	4.7	4.2
1969	6.2	5.5	5.6	5.4	6.5	5.8	6.2	5.8	6.1	5.4
1970	5.6	5.7	6.6	6.0	5.4	6.1	6.6	6.3	5.2	5.9
1971	3.3	4.4	3.0	4.6	3.4	4.2	3.1	4.7	3.2	4.1
1972	3.4	3.2	2.9	2.9	3.5	3.3	3.0	3.0	3.4	3.2
1973	8.7	6.2	5.6	4.0	8.2	6.2	4.7	3.6	9.1	6.4
1974	12.3	11.0	12.2	9.8	11.7	9.8	11.1	8.3	12.2	11.2
1975	6.9	9.1	7.3	9.4	6.6	8.9	6.7	9.1	6.7	9.0
1976	4.9	5.8	6.1	6.7	4.8	5.6	6.1	6.5	4.5	5.3
1977	6.7	6.5	6.4	6.4	6.7	6.4	6.5	6.3	6.7	6.3
1978	9.0	7.6	8.3	7.2	9.1	7.8	8.5	7.4	9.1	7.6
1979	13.3	11.3	14.0	11.4	11.1	10.0	11.3	9.8	13.4	11.5
1980	12.5	13.5	13.0	14.5	11.7	11.6	12.2	12.4	12.5	13.6
1981	8.9	10.3	9.8	10.9	8.5	10.0	9.5	10.4	8.8	10.4
1982	3.8	6.2	4.1	6.5	4.2	6.7	4.5	7.4	3.6	5.9
1983	3.8	3.2	4.1	3.5	4.5	3.6	4.8	4.0	3.6	2.9
1984	3.9	4.3	3.9	4.3	4.4	4.7	4.7	5.0	3.9	4.1
1985	3.8	3.6	4.1	3.8	4.0	3.9	4.3	4.3	3.5	3.4
1986	1.1	1.9	.5	1.7	3.8	3.9	3.8	4.0	.7	1.5
1987	4.4	3.6	4.6	3.5	4.1	4.1	4.2	4.1	4.3	3.5
1988	4.4	4.1	4.2	4.1	4.7	4.4	4.7	4.4	4.2	3.9
1989	4.6	4.8	4.5	4.6	4.6	4.7	4.4	4.5	4.5	4.6
1990	6.1	5.4	6.3	5.3	5.2	5.2	5.2	5.0	5.9	5.2
1991	3.1	4.2	3.3	4.5	3.9	4.6	4.4	4.9	2.7	3.9
1992	2.9	3.0	3.2	3.5	3.0	3.2	3.3	3.7	2.7	2.8
1993	2.7	3.0	2.7	3.1	3.1	3.2	3.2	3.3	2.6	2.7
1994	2.7	2.6	2.6	2.7	2.6	2.7	2.6	2.8	2.5	2.5
1995	2.5	2.8	2.7	2.8	2.9	3.0	3.0	3.0	2.5	2.7
1996	3.3	3.0	3.1	2.9	2.9	2.8	2.6	2.7	3.3	2.8
	Percent change from preceding period									
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1995: Jan	0.4	0.3	0.4	0.3	0.5	0.3	0.5	0.3	0.4	0.2
Feb	.4	.2	.5	.3	.4	.3	.6	.3	.3	.2
Mar	.3	.3	.4	.3	.4	.3	.5	.4	.3	.3
Apr	.3	.3	.3	.3	.3	.4	.2	.3	.3	.3
May	.2	.3	.3	.3	0	.2	.1	.2	.2	.3
June	.2	.3	.3	.3	0	.3	.1	.2	.2	.2
July	0	.1	.1	.1	.1	.2	.1	.2	0	.1
Aug	.3	.2	.2	.2	.3	.2	.3	.2	.2	.1
Sept	.2	.1	.2	.1	.3	.3	.3	.2	.3	.1
Oct	.3	.3	.3	.3	.4	.3	.4	.3	.3	.3
Nov	–.1	.1	0	.1	.1	.1	.1	.1	–.1	.1
Dec	–.1	.2	–.1	.2	–.1	.1	–.2	.1	–.1	.2
1996: Jan	.6	.4	.5	.5	.5	.3	.4	.3	.5	.4
Feb	.3	.2	.5	.3	.4	.2	.5	.2	.3	.2
Mar	.5	.4	.5	.4	.4	.3	.4	.3	.5	.4
Apr	.4	.4	.3	.4	.1	.2	.1	.1	.4	.4
May	.2	.3	.3	.3	0	.2	.1	.2	.2	.3
June	.1	.1	.1	0	.1	.2	.1	.2	.1	.1
July	.2	.3	.1	.2	.2	.3	.2	.3	.2	.3
Aug	.2	.1	.1	.1	.2	.1	.2	.1	.1	.1
Sept	.3	.3	.3	.2	.4	.3	.4	.3	.4	.3
Oct	.3	.3	.3	.3	.4	.3	.4	.2	.3	.3
Nov	.2	.3	.1	.3	.1	.2	.1	.2	.2	.3
Dec	0	.3	0	.3	–.1	.1	–.1	.1	0	.2

[1] Changes from December to December are based on unadjusted indexes.

Note.—See Note, Table B–58.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–62.—*Changes in consumer price indexes for commodities and services, 1929–96*

[For all urban consumers; percent change]

Year	All items (CPI–U)		Commodities				Services				Medical care [2]		Energy [3]	
			Total		Food		Total		Medical care					
	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	Dec. to Dec.[1]	Year to year
1929	0.6	0	....	....	2.5	1.2	....	....	....	....	....	....	....	....
1933	.8	–5.1	....	....	6.9	–2.8	....	....	....	....	....	....	....	....
1939	0	–1.4	–0.7	–2.0	–2.5	–2.5	0	0	1.2	1.2	1.0	0	....	....
1940	.7	.7	1.4	.7	2.5	1.7	.8	.8	0	0	0	1.0	....	....
1941	9.9	5.0	13.3	6.7	15.7	9.2	2.4	.8	1.2	0	1.0	0	....	....
1942	9.0	10.9	12.9	14.5	17.9	17.6	2.3	3.1	3.5	3.5	3.8	2.9	....	....
1943	3.0	6.1	4.2	9.3	3.0	11.0	2.3	2.3	5.6	4.5	4.6	4.7	....	....
1944	2.3	1.7	2.0	1.0	0	–1.2	2.2	2.2	3.2	4.3	2.6	3.6	....	....
1945	2.2	2.3	2.9	3.0	3.5	2.4	.7	1.5	3.1	3.1	2.6	2.6	....	....
1946	18.1	8.3	24.8	10.6	31.3	14.5	3.6	1.4	9.0	5.1	8.3	5.0	....	....
1947	8.8	14.4	10.3	20.5	11.3	21.7	5.6	4.3	6.4	8.7	6.9	8.0	....	....
1948	3.0	8.1	1.7	7.2	–.8	8.3	5.9	6.1	6.9	7.1	5.8	6.7	....	....
1949	–2.1	–1.2	–4.1	–2.7	–3.9	–4.2	3.7	5.1	1.6	3.3	1.4	2.8	....	....
1950	5.9	1.3	7.8	.7	9.8	1.6	3.6	3.0	4.0	2.4	3.4	2.0	....	....
1951	6.0	7.9	5.9	9.0	7.1	11.0	5.2	5.3	5.3	4.7	5.8	5.3	....	....
1952	.8	1.9	–.9	1.3	–1.0	1.8	4.4	4.5	5.8	6.7	4.3	5.0	....	....
1953	.7	.8	–.3	–.3	–1.1	–1.4	4.2	4.3	3.4	3.5	3.5	3.6	....	....
1954	–.7	.7	–1.6	–.9	–1.8	–.4	2.0	3.1	2.6	3.4	2.3	2.9	....	....
1955	.4	–.4	–.3	–.9	–.7	–1.4	2.0	2.0	3.2	2.6	3.3	2.2	....	....
1956	3.0	1.5	2.6	1.0	2.9	.7	3.4	2.5	3.8	3.8	3.2	3.8	....	....
1957	2.9	3.3	2.8	3.2	2.8	3.2	4.2	4.3	4.8	4.3	4.7	4.2	....	....
1958	1.8	2.8	1.2	2.1	2.4	4.5	2.7	3.7	4.6	5.3	4.5	4.6	–0.9	0
1959	1.7	.7	.6	0	–1.0	–1.7	3.9	3.1	4.9	4.5	3.8	4.4	4.7	1.9
1960	1.4	1.7	1.2	.9	3.1	1.0	2.5	3.4	3.7	4.3	3.2	3.7	1.3	2.3
1961	.7	1.0	0	.6	–.7	1.3	2.1	1.7	3.5	3.6	3.1	2.7	–1.3	.4
1962	1.3	1.0	.9	.9	1.3	.7	1.6	2.0	2.9	3.5	2.2	2.6	2.2	.4
1963	1.6	1.3	1.5	.9	2.0	1.6	2.4	2.0	2.8	2.9	2.5	2.6	–.9	0
1964	1.0	1.3	.9	1.2	1.3	1.3	1.6	2.0	2.3	2.3	2.1	2.1	0	–.4
1965	1.9	1.6	1.4	1.1	3.5	2.2	2.7	2.3	3.6	3.2	2.8	2.4	1.8	1.8
1966	3.5	2.9	2.5	2.6	4.0	5.0	4.8	3.8	8.3	5.3	6.7	4.4	1.7	1.7
1967	3.0	3.1	2.5	1.9	1.2	.9	4.3	4.3	8.0	8.8	6.3	7.2	1.7	2.1
1968	4.7	4.2	4.0	3.5	4.4	3.5	5.8	5.2	7.1	7.3	6.2	6.0	1.7	1.7
1969	6.2	5.5	5.4	4.7	7.0	5.1	7.7	6.9	7.3	8.2	6.2	6.7	2.9	2.5
1970	5.6	5.7	3.9	4.5	2.3	5.7	8.1	8.0	8.1	7.0	7.4	6.6	4.8	2.8
1971	3.3	4.4	2.8	3.6	4.3	3.1	4.1	5.7	5.4	7.4	4.6	6.2	3.1	3.9
1972	3.4	3.2	3.4	3.0	4.6	4.2	3.4	3.8	3.7	3.5	3.3	3.3	2.6	2.6
1973	8.7	6.2	10.4	7.4	20.3	14.5	6.2	4.4	6.0	4.5	5.3	4.0	17.0	8.1
1974	12.3	11.0	12.8	11.9	12.0	14.3	11.4	9.2	13.2	10.4	12.6	9.3	21.6	29.6
1975	6.9	9.1	6.2	8.8	6.6	8.5	8.2	9.6	10.3	12.6	9.8	12.0	11.4	10.5
1976	4.9	5.8	3.3	4.3	.5	3.0	7.2	8.3	10.8	10.1	10.0	9.5	7.1	7.1
1977	6.7	6.5	6.1	5.8	8.1	6.3	8.0	7.7	9.0	9.9	8.9	9.6	7.2	9.5
1978	9.0	7.6	8.8	7.2	11.8	9.9	9.3	8.6	9.3	8.5	8.8	8.4	7.9	6.3
1979	13.3	11.3	13.0	11.3	10.2	11.0	13.6	11.0	10.5	9.8	10.1	9.2	37.5	25.1
1980	12.5	13.5	11.0	12.3	10.2	8.6	14.2	15.4	10.1	11.3	9.9	11.0	18.0	30.9
1981	8.9	10.3	6.0	8.4	4.3	7.8	13.0	13.1	12.6	10.7	12.5	10.7	11.9	13.6
1982	3.8	6.2	3.6	4.1	3.1	4.1	4.3	9.0	11.2	11.8	11.0	11.6	1.3	1.5
1983	3.8	3.2	2.9	2.9	2.7	2.1	4.8	3.5	6.2	8.7	6.4	8.8	–.5	.7
1984	3.9	4.3	2.7	3.4	3.8	3.8	5.4	5.2	5.8	6.0	6.1	6.2	.2	1.0
1985	3.8	3.6	2.5	2.1	2.6	2.3	5.1	5.1	6.8	6.1	6.8	6.3	1.8	.7
1986	1.1	1.9	–2.0	–.9	3.8	3.2	4.5	5.0	7.9	7.7	7.7	7.5	–19.7	–13.2
1987	4.4	3.6	4.6	3.2	3.5	4.1	4.3	4.2	5.6	6.6	5.8	6.6	8.2	.5
1988	4.4	4.1	3.8	3.5	5.2	4.1	4.8	4.6	6.9	6.4	6.9	6.5	.5	.8
1989	4.6	4.8	4.1	4.7	5.6	5.8	5.1	4.9	8.6	7.7	8.5	7.7	5.1	5.6
1990	6.1	5.4	6.6	5.2	5.3	5.8	5.7	5.5	9.9	9.3	9.6	9.0	18.1	8.3
1991	3.1	4.2	1.2	3.1	1.9	2.9	4.6	5.1	8.0	8.9	7.9	8.7	–7.4	.4
1992	2.9	3.0	2.0	2.0	1.5	1.2	3.6	3.9	7.0	7.6	6.6	7.4	2.0	.5
1993	2.7	3.0	1.5	1.9	2.9	2.2	3.8	3.9	5.9	6.5	5.4	5.9	–1.4	1.2
1994	2.7	2.6	2.3	1.7	2.9	2.4	2.9	3.3	5.4	5.2	4.9	4.8	2.2	.4
1995	2.5	2.8	1.4	1.9	2.1	2.8	3.5	3.4	4.4	5.1	3.9	4.5	–1.3	.6
1996	3.3	3.0	3.2	2.6	4.3	3.3	3.3	3.2	3.2	3.7	3.0	3.5	8.6	4.7

[1] Changes from December to December are based on unadjusted indexes.
[2] Commodities and services.
[3] Household fuels—gas (piped), electricity, fuel oil, etc.—and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note.—See Note, Table B–58.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–63.—*Producer price indexes by stage of processing, 1954–96*

[1982=100]

Year or month	Finished goods									
	Total finished goods	Consumer foods			Finished goods excluding consumer foods					Total finished consumer goods
		Total	Crude	Processed	Total	Consumer goods			Capital equipment	
						Total	Durable	Nondurable		
1954	30.4	34.2	37.5	34.0	....	31.1	39.8	26.7	26.7	31.7
1955	30.5	33.4	39.1	32.7	....	31.3	40.2	26.8	27.4	31.5
1956	31.3	33.3	39.1	32.7	....	32.1	41.6	27.3	29.5	32.0
1957	32.5	34.4	38.5	34.1	....	32.9	42.8	27.9	31.3	32.9
1958	33.2	36.5	41.0	36.1	....	32.9	43.4	27.8	32.1	33.6
1959	33.1	34.8	37.3	34.7	....	33.3	43.9	28.2	32.7	33.3
1960	33.4	35.5	39.8	35.2	....	33.5	43.8	28.4	32.8	33.6
1961	33.4	35.4	38.0	35.3	....	33.4	43.6	28.4	32.9	33.6
1962	33.5	35.7	38.4	35.6	....	33.4	43.4	28.4	33.0	33.7
1963	33.4	35.3	37.8	35.2	....	33.4	43.1	28.5	33.1	33.5
1964	33.5	35.4	38.9	35.2	....	33.3	43.3	28.4	33.4	33.6
1965	34.1	36.8	39.0	36.8	....	33.6	43.2	28.8	33.8	34.2
1966	35.2	39.2	41.5	39.2	....	34.1	43.4	29.3	34.6	35.4
1967	35.6	38.5	39.6	38.8	35.0	34.7	44.1	30.0	35.8	35.6
1968	36.6	40.0	42.5	40.0	35.9	35.5	45.1	30.6	37.0	36.5
1969	38.0	42.4	45.9	42.3	36.9	36.3	45.9	31.5	38.3	37.9
1970	39.3	43.8	46.0	43.9	38.2	37.4	47.2	32.5	40.1	39.1
1971	40.5	44.5	45.8	44.7	39.6	38.7	48.9	33.5	41.7	40.2
1972	41.8	46.9	48.0	47.2	40.4	39.4	50.0	34.1	42.8	41.5
1973	45.6	56.5	63.6	55.8	42.0	41.2	50.9	36.1	44.2	46.0
1974	52.6	64.4	71.6	63.9	48.8	48.2	55.5	44.0	50.5	53.1
1975	58.2	69.8	71.7	70.3	54.7	53.2	61.0	48.9	58.2	58.2
1976	60.8	69.6	76.7	69.0	58.1	56.5	63.7	52.4	62.1	60.4
1977	64.7	73.3	79.5	72.7	62.2	60.6	67.4	56.8	66.1	64.3
1978	69.8	79.9	85.8	79.4	66.7	64.9	73.6	60.0	71.3	69.4
1979	77.6	87.3	92.3	86.8	74.6	73.5	80.8	69.3	77.5	77.5
1980	88.0	92.4	93.9	92.3	86.7	87.1	91.0	85.1	85.8	88.6
1981	96.1	97.8	104.4	97.2	95.6	96.1	96.4	95.8	94.6	96.6
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	101.6	101.0	102.4	100.9	101.8	101.2	102.8	100.5	102.8	101.3
1984	103.7	105.4	111.4	104.9	103.2	102.2	104.5	101.1	105.2	103.3
1985	104.7	104.6	102.9	104.8	104.6	103.3	106.5	101.7	107.5	103.8
1986	103.2	107.3	105.6	107.4	101.9	98.5	108.9	93.3	109.7	101.4
1987	105.4	109.5	107.1	109.6	104.0	100.7	111.5	94.9	111.7	103.6
1988	108.0	112.6	109.8	112.7	106.5	103.1	113.8	97.3	114.3	106.2
1989	113.6	118.7	119.6	118.6	111.8	108.9	117.6	103.8	118.8	112.1
1990	119.2	124.4	123.0	124.4	117.4	115.3	120.4	111.5	122.9	118.2
1991	121.7	124.1	119.3	124.4	120.9	118.7	123.9	115.0	126.7	120.5
1992	123.2	123.3	107.6	124.4	123.1	120.8	125.7	117.3	129.1	121.7
1993	124.7	125.7	114.4	126.5	124.4	121.7	128.0	117.6	131.4	123.0
1994	125.5	126.8	111.3	127.9	125.1	121.6	130.9	116.2	134.1	123.3
1995	127.9	129.0	118.8	129.8	127.5	124.0	132.7	118.8	136.7	125.6
1996	131.3	133.5	128.9	133.8	130.5	127.6	134.2	123.2	138.3	129.5
1995: Jan	126.6	127.9	120.1	128.5	126.2	122.4	132.6	116.7	135.9	124.2
Feb	126.9	128.4	117.2	129.2	126.4	122.6	132.7	116.9	136.1	124.5
Mar	127.1	128.7	118.6	129.4	126.6	122.9	132.4	117.3	136.2	124.7
Apr	127.6	128.7	130.8	128.5	127.2	123.6	132.4	118.4	136.4	125.2
May	128.1	128.0	122.7	128.4	128.0	124.7	132.3	120.1	136.5	125.9
June	128.2	127.4	111.0	128.6	128.3	125.1	132.0	120.8	136.4	126.0
July	128.2	128.5	110.2	129.8	128.0	124.7	132.1	120.1	136.6	126.0
Aug	128.1	128.8	108.2	130.3	127.8	124.4	131.9	119.8	136.6	125.9
Sept	127.9	130.1	123.3	130.6	127.2	123.9	130.0	119.9	135.7	125.9
Oct	128.7	129.9	113.0	131.1	128.3	124.5	134.1	119.0	138.0	126.3
Nov	128.7	131.1	126.2	131.4	127.9	123.9	134.7	117.8	138.3	126.2
Dec	129.1	131.0	124.2	131.5	128.4	124.6	134.7	118.9	138.1	126.7
1996: Jan	129.4	130.7	125.0	131.1	129.0	125.4	134.2	120.1	138.3	127.1
Feb	129.4	130.7	121.9	131.3	128.9	125.3	134.3	119.9	138.4	127.0
Mar	130.1	132.0	145.3	131.0	129.5	126.1	134.3	121.2	138.3	128.0
Apr	130.6	131.2	131.7	131.1	130.4	127.4	134.0	123.1	138.3	128.7
May	131.1	131.5	117.3	132.5	130.9	128.2	134.2	124.1	138.2	129.3
June	131.7	133.6	128.8	133.9	131.0	128.3	134.4	124.2	138.2	130.0
July	131.5	133.9	123.7	134.6	130.8	128.0	133.8	124.0	138.1	129.9
Aug [1]	131.9	135.3	121.5	136.3	130.9	128.1	133.7	124.2	138.2	130.4
Sept	131.6	135.6	127.4	136.1	130.3	127.8	132.4	124.2	137.2	130.2
Oct	132.5	136.4	135.7	136.4	131.3	128.6	135.1	124.2	138.6	131.0
Nov	132.5	135.9	135.1	135.9	131.4	128.7	135.1	124.5	138.7	131.0
Dec	132.7	135.5	133.8	135.5	131.8	129.2	135.0	125.1	138.8	131.2

[1] Data have been revised through August 1996 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

See next page for continuation of table.

Table B–63.—*Producer price indexes by stage of processing, 1954–96*—Continued

[1982=100]

Year or month	Intermediate materials, supplies, and components: Total	Foods and feeds [2]	Other	Materials and components: For manufacturing	Materials and components: For construction	Processed fuels and lubricants	Containers	Supplies	Crude materials for further processing: Total	Foodstuffs and feedstuffs	Other: Total	Other: Fuel	Other: Other
1954	27.9	....	27.2	29.8	29.1	15.8	28.5	31.7	31.6	42.3	....	8.9	26.1
1955	28.4	....	28.0	30.5	30.3	15.8	28.9	31.2	30.4	38.4	....	8.9	27.5
1956	29.6	....	29.3	32.0	31.8	16.3	31.0	32.0	30.6	37.6	....	9.5	28.6
1957	30.3	....	30.1	32.7	32.0	17.2	32.4	32.3	31.2	39.2	....	10.1	28.2
1958	30.4	....	30.1	32.8	32.0	16.2	33.2	33.1	31.9	41.6	....	10.2	27.1
1959	30.8	....	30.5	33.3	32.9	16.2	33.0	33.5	31.1	38.8	....	10.4	28.1
1960	30.8	....	30.7	33.3	32.7	16.6	33.4	33.3	30.4	38.4	....	10.5	26.9
1961	30.6	....	30.3	32.9	32.2	16.8	33.2	33.7	30.2	37.9	....	10.5	27.2
1962	30.6	....	30.2	32.7	32.1	16.7	33.6	34.5	30.5	38.6	....	10.4	27.1
1963	30.7	....	30.1	32.7	32.2	16.6	33.2	35.0	29.9	37.5	....	10.5	26.7
1964	30.8	....	30.3	33.1	32.5	16.2	32.9	34.7	29.6	36.6	....	10.5	27.2
1965	31.2	....	30.7	33.6	32.8	16.5	33.5	35.0	31.1	39.2	....	10.6	27.7
1966	32.0	....	31.3	34.3	33.6	16.8	34.5	36.5	33.1	42.7	....	10.9	28.3
1967	32.2	41.8	31.7	34.5	34.0	16.9	35.0	36.8	31.3	40.3	21.1	11.3	26.5
1968	33.0	41.5	32.5	35.3	35.7	16.5	35.9	37.1	31.8	40.9	21.6	11.5	27.1
1969	34.1	42.9	33.6	36.5	37.7	16.6	37.2	37.8	33.9	44.1	22.5	12.0	28.4
1970	35.4	45.6	34.8	38.0	38.3	17.7	39.0	39.7	35.2	45.2	23.8	13.8	29.1
1971	36.8	46.7	36.2	38.9	40.8	19.5	40.8	40.8	36.0	46.1	24.7	15.7	29.4
1972	38.2	49.5	37.7	40.4	43.0	20.1	42.7	42.5	39.9	51.5	27.0	16.8	32.3
1973	42.4	70.3	40.6	44.1	46.5	22.2	45.2	51.7	54.5	72.6	34.3	18.6	42.9
1974	52.5	83.6	50.5	56.0	55.0	33.6	53.3	56.8	61.4	76.4	44.1	24.8	54.5
1975	58.0	81.6	56.6	61.7	60.1	39.4	60.0	61.8	61.6	77.4	43.7	30.6	50.0
1976	60.9	77.4	60.0	64.0	64.1	42.3	63.1	65.8	63.4	76.8	48.2	34.5	54.9
1977	64.9	79.6	64.1	67.4	69.3	47.7	65.9	69.3	65.5	77.5	51.7	42.0	56.3
1978	69.5	84.8	68.6	72.0	76.5	49.9	71.0	72.9	73.4	87.3	57.5	48.2	61.9
1979	78.4	94.5	77.4	80.9	84.2	61.6	79.4	80.2	85.9	100.0	69.6	57.3	75.5
1980	90.3	105.5	89.4	91.7	91.3	85.0	89.1	89.9	95.3	104.6	84.6	69.4	91.8
1981	98.6	104.6	98.2	98.7	97.9	100.6	96.7	96.9	103.0	103.9	101.8	84.8	109.8
1982	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
1983	100.6	103.6	100.5	101.2	102.8	95.4	100.4	101.8	101.3	101.8	100.7	105.1	98.8
1984	103.1	105.7	103.0	104.1	105.6	95.7	105.9	104.1	103.5	104.7	102.2	105.1	101.0
1985	102.7	97.3	103.0	103.3	107.3	92.8	109.0	104.4	95.8	94.8	96.9	102.7	94.3
1986	99.1	96.2	99.3	102.2	108.1	72.7	110.3	105.6	87.7	93.2	81.6	92.2	76.0
1987	101.5	99.2	101.7	105.3	109.8	73.3	114.5	107.7	93.7	96.2	87.9	84.1	88.5
1988	107.1	109.5	106.9	113.2	116.1	71.2	120.1	113.7	96.0	106.1	85.5	82.1	85.9
1989	112.0	113.8	111.9	118.1	121.3	76.4	125.4	118.1	103.1	111.2	93.4	85.3	95.8
1990	114.5	113.3	114.5	118.7	122.9	85.9	127.7	119.4	108.9	113.1	101.5	84.8	107.3
1991	114.4	111.1	114.6	118.1	124.5	85.3	128.1	121.4	101.2	105.5	94.6	82.9	97.5
1992	114.7	110.7	114.9	117.9	126.5	84.5	127.7	122.7	100.4	105.1	93.5	84.0	94.2
1993	116.2	112.7	116.4	118.9	132.0	84.7	126.4	125.0	102.4	108.4	94.7	87.1	94.1
1994	118.5	114.8	118.7	122.1	136.6	83.1	129.7	127.0	101.8	106.5	94.8	82.4	97.0
1995	124.9	114.8	125.5	130.4	142.1	84.2	148.8	132.1	102.7	105.8	96.8	72.1	105.8
1996	125.7	128.4	125.6	128.6	143.5	89.9	141.2	135.9	113.5	121.5	104.0	91.3	105.7
1995: Jan	122.5	111.8	123.0	128.1	140.5	82.3	139.9	129.5	101.5	102.2	97.2	77.1	103.6
Feb	123.4	111.8	124.0	129.3	141.0	82.5	144.6	130.0	102.6	104.1	97.7	72.3	107.0
Mar	124.0	112.6	124.5	129.9	141.7	82.7	145.9	130.6	102.3	103.2	97.8	71.0	107.9
Apr	124.7	111.7	125.4	130.7	142.2	83.5	146.9	131.2	103.6	101.8	100.7	71.9	111.8
May	125.3	110.7	126.0	130.9	142.2	85.4	149.0	131.4	102.8	99.6	100.9	72.6	111.6
June	125.8	111.6	126.6	131.0	142.0	87.4	151.4	131.9	103.4	102.1	100.1	74.1	109.7
July	126.0	113.6	126.6	131.3	142.6	86.3	152.0	132.4	102.1	104.6	96.6	72.9	105.1
Aug	126.0	114.8	126.6	131.3	142.9	86.0	152.0	132.7	100.5	104.8	93.8	66.5	104.4
Sept	125.9	115.9	126.4	131.2	143.1	85.3	151.7	133.1	102.5	108.8	94.5	67.4	104.9
Oct	125.4	118.7	125.8	130.9	142.7	83.4	151.3	133.6	101.7	109.6	92.8	69.7	101.1
Nov	125.1	121.2	125.3	130.5	142.3	82.3	151.1	134.3	103.8	114.2	93.2	72.5	100.1
Dec	125.1	123.0	125.2	130.0	142.1	83.2	150.4	134.7	106.0	114.7	96.4	77.6	102.0
1996: Jan	125.2	123.0	125.4	129.5	141.9	85.2	148.2	135.3	108.8	114.7	100.8	86.1	103.9
Feb	124.7	123.0	124.8	129.0	142.0	84.0	146.1	135.3	111.1	115.0	104.4	97.1	102.8
Mar	124.9	123.4	125.0	128.6	142.2	85.8	144.6	135.4	110.0	116.2	102.0	88.2	104.4
Apr	125.4	125.3	125.4	128.3	142.5	89.3	143.0	135.7	114.4	119.6	106.7	93.9	108.3
May	126.2	130.3	126.0	128.8	143.5	91.4	141.6	136.2	115.9	127.7	103.8	90.1	106.1
June	126.2	131.2	125.9	128.8	144.0	91.3	140.1	136.1	113.3	129.0	98.7	82.3	102.9
July	125.9	131.9	125.6	128.3	143.7	91.1	139.6	136.4	115.6	130.9	101.2	89.2	102.6
Aug [1]	126.1	132.7	125.7	128.3	144.1	91.9	138.4	136.4	116.0	129.5	102.8	90.2	104.6
Sept	126.5	133.8	126.1	128.6	144.7	93.0	138.4	136.7	113.0	124.7	101.1	81.6	107.0
Oct	126.0	130.7	125.8	128.3	144.2	92.2	137.9	135.9	111.3	119.4	101.9	79.4	109.4
Nov	125.9	127.7	125.8	128.3	144.8	91.6	138.2	135.5	113.6	117.9	106.6	95.1	107.5
Dec	126.1	127.6	126.1	128.5	144.8	92.5	138.3	135.5	118.9	113.7	118.0	121.9	109.2

[2] Intermediate materials for food manufacturing and feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–64.—*Producer price indexes by stage of processing, special groups, 1974–96*

[1982=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	Foodstuffs and feedstuffs	Energy	Other
				Total	Capital equipment	Consumer goods excluding foods and energy								
1974	52.6	64.4	26.2	53.6	50.5	55.5	52.5	83.6	33.1	54.0	61.4	76.4	27.8	83.3
1975	58.2	69.8	30.7	59.7	58.2	60.6	58.0	81.6	38.7	60.2	61.6	77.4	33.3	69.3
1976	60.8	69.6	34.3	63.1	62.1	63.7	60.9	77.4	41.5	63.8	63.4	76.8	35.3	80.2
1977	64.7	73.3	39.7	66.9	66.1	67.3	64.9	79.6	46.8	67.6	65.5	77.5	40.4	79.8
1978	69.8	79.9	42.3	71.9	71.3	72.2	69.5	84.8	49.1	72.5	73.4	87.3	45.2	87.8
1979	77.6	87.3	57.1	78.3	77.5	78.8	78.4	94.5	61.1	80.7	85.9	100.0	54.9	106.2
1980	88.0	92.4	85.2	87.1	85.8	87.8	90.3	105.5	84.9	90.3	95.3	104.6	73.1	113.1
1981	96.1	97.8	101.5	94.6	94.6	94.6	98.6	104.6	100.5	97.7	103.0	103.9	97.7	111.7
1982	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
1983	101.6	101.0	95.2	103.0	102.8	103.1	100.6	103.6	95.3	101.6	101.3	101.8	98.7	105.3
1984	103.7	105.4	91.2	105.5	105.2	105.7	103.1	105.7	95.5	104.7	103.5	104.7	98.0	111.7
1985	104.7	104.6	87.6	108.1	107.5	108.4	102.7	97.3	92.6	105.2	95.8	94.8	93.3	104.9
1986	103.2	107.3	63.0	110.6	109.7	111.1	99.1	96.2	72.6	104.9	87.7	93.2	71.8	103.1
1987	105.4	109.5	61.8	113.3	111.7	114.2	101.5	99.2	73.0	107.8	93.7	96.2	75.0	115.7
1988	108.0	112.6	59.8	117.0	114.3	118.5	107.1	109.5	70.9	115.2	96.0	106.1	67.7	133.0
1989	113.6	118.7	65.7	122.1	118.8	124.0	112.0	113.8	76.1	120.2	103.1	111.2	75.9	137.9
1990	119.2	124.4	75.0	126.6	122.9	128.8	114.5	113.3	85.5	120.9	108.9	113.1	85.9	136.3
1991	121.7	124.1	78.1	131.1	126.7	133.7	114.4	111.1	85.1	121.4	101.2	105.5	80.4	128.2
1992	123.2	123.3	77.8	134.2	129.1	137.3	114.7	110.7	84.3	122.0	100.4	105.1	78.8	128.4
1993	124.7	125.7	78.0	135.8	131.4	138.5	116.2	112.7	84.6	123.8	102.4	108.4	76.7	140.2
1994	125.5	126.8	77.0	137.1	134.1	139.0	118.5	114.8	83.0	127.1	101.8	106.5	72.1	156.2
1995	127.9	129.0	78.1	140.0	136.7	141.9	124.9	114.8	84.1	135.2	102.7	105.8	69.4	173.6
1996	131.3	133.5	83.1	142.0	138.3	144.3	125.7	128.4	89.7	134.0	113.5	121.5	84.4	155.8
1995: Jan	126.6	127.9	76.6	138.7	135.9	140.5	122.5	111.8	82.2	132.6	101.5	102.2	69.8	174.1
Feb	126.9	128.4	76.6	139.0	136.1	140.8	123.4	111.8	82.4	133.8	102.6	104.1	69.6	177.0
Mar	127.1	128.7	76.8	139.2	136.2	141.1	124.0	112.6	82.6	134.4	102.3	103.2	69.1	179.1
Apr	127.6	128.7	78.2	139.4	136.4	141.3	124.7	111.7	83.5	135.2	103.6	101.8	72.0	181.4
May	128.1	128.0	80.4	139.7	136.5	141.7	125.3	110.7	85.2	135.6	102.8	99.6	72.4	180.5
June	128.2	127.4	81.4	139.7	136.4	141.7	125.8	111.6	87.3	135.7	103.4	102.1	71.5	180.6
July	128.2	128.5	79.9	139.9	136.6	142.0	126.0	113.6	86.2	136.1	102.1	104.6	68.2	177.0
Aug	128.1	128.8	79.4	139.8	136.6	141.9	126.0	114.8	85.9	136.1	100.5	104.8	65.6	174.0
Sept	127.9	130.1	79.0	139.1	135.7	141.3	125.9	115.9	85.2	136.1	102.5	108.8	67.4	170.7
Oct	128.7	129.9	77.2	141.3	138.0	143.4	125.4	118.7	83.3	135.8	101.7	109.6	66.9	165.5
Nov	128.7	131.1	75.2	141.6	138.3	143.7	125.1	121.2	82.2	135.4	103.8	114.2	68.3	162.2
Dec	129.1	131.0	76.7	141.7	138.1	143.9	125.1	123.0	83.1	135.1	106.0	114.7	72.5	161.4
1996: Jan	129.4	130.7	78.5	141.8	138.3	143.9	125.2	123.0	85.0	134.8	108.8	114.7	78.1	162.1
Feb	129.4	130.7	77.8	141.9	138.4	144.1	124.7	123.0	83.8	134.4	111.1	115.0	82.7	162.3
Mar	130.1	132.0	80.1	141.8	138.3	144.0	124.9	123.4	85.7	134.1	110.0	116.2	80.6	159.2
Apr	130.6	131.2	83.3	141.7	138.3	143.8	125.4	125.3	89.1	133.9	114.4	119.6	87.3	157.6
May	131.1	131.5	84.6	142.0	138.2	144.3	126.2	130.3	91.2	134.1	115.9	127.7	83.3	158.1
June	131.7	133.6	84.7	142.0	138.2	144.4	126.2	131.2	91.1	134.0	113.3	129.0	77.6	155.3
July	131.5	133.9	84.2	141.9	138.1	144.3	125.9	131.9	90.9	133.6	115.6	130.9	81.8	152.4
Aug[2]	131.9	135.3	84.6	141.9	138.2	144.2	126.1	132.7	91.7	133.6	116.0	129.5	83.8	152.9
Sept	131.6	135.6	84.6	141.1	137.2	143.5	126.5	133.8	92.8	133.9	113.0	124.7	81.5	153.1
Oct	132.5	136.4	84.5	142.5	138.6	144.9	126.0	130.7	91.9	133.6	111.3	119.4	82.7	152.6
Nov	132.5	135.9	84.9	142.5	138.7	144.9	125.9	127.7	91.4	133.8	113.6	117.9	89.1	151.6
Dec	132.7	135.5	85.9	142.6	138.8	144.9	126.1	127.6	92.1	133.9	118.9	113.7	103.8	152.4

[1] Intermediate materials for food manufacturing and feeds.

[2] Data have been revised through August 1996 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–65.—*Producer price indexes for major commodity groups, 1954–96*

[1982=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]
1954	38.5	43.2	35.4	27.2	48.2	29.5	13.2	33.8
1955	36.6	40.5	33.8	27.8	48.2	29.4	13.2	33.7
1956	36.4	40.0	33.8	29.1	48.2	31.2	13.6	33.9
1957	37.7	41.1	34.8	29.9	48.3	31.2	14.3	34.6
1958	39.4	42.9	36.5	30.0	47.4	31.6	13.7	34.9
1959	37.6	40.2	35.6	30.5	48.1	35.9	13.7	34.8
1960	37.7	40.1	35.6	30.5	48.6	34.6	13.9	34.8
1961	37.7	39.7	36.2	30.4	47.8	34.9	14.0	34.5
1962	38.1	40.4	36.5	30.4	48.2	35.3	14.0	33.9
1963	37.7	39.6	36.8	30.3	48.2	34.3	13.9	33.5
1964	37.5	39.0	36.7	30.5	48.5	34.4	13.5	33.6
1965	39.0	40.7	38.0	30.9	48.8	35.9	13.8	33.9
1966	41.6	43.7	40.2	31.5	48.9	39.4	14.1	34.0
1967	40.2	41.3	39.8	32.0	48.9	38.1	14.4	34.2
1968	41.1	42.3	40.6	32.8	50.7	39.3	14.3	34.1
1969	43.4	45.0	42.7	33.9	51.8	41.5	14.6	34.2
1970	44.9	45.8	44.6	35.2	52.4	42.0	15.3	35.0
1971	45.8	46.6	45.5	36.5	53.3	43.4	16.6	35.6
1972	49.2	51.6	48.0	37.8	55.5	50.0	17.1	35.6
1973	63.9	72.7	58.9	40.3	60.5	54.5	19.4	37.6
1974	71.3	77.4	68.0	49.2	68.0	55.2	30.1	50.2
1975	74.0	77.0	72.6	54.9	67.4	56.5	35.4	62.0
1976	73.6	78.8	70.8	58.4	72.4	63.9	38.3	64.0
1977	75.9	79.4	74.0	62.5	75.3	68.3	43.6	65.9
1978	83.0	87.7	80.6	67.0	78.1	76.1	46.5	68.0
1979	92.3	99.6	88.5	75.7	82.5	96.1	58.9	76.0
1980	98.3	102.9	95.9	88.0	89.7	94.7	82.8	89.0
1981	101.1	105.2	98.9	97.4	97.6	99.3	100.2	98.4
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	102.0	102.4	101.8	101.1	100.3	103.2	95.9	100.3
1984	105.5	105.5	105.4	103.3	102.7	109.0	94.8	102.9
1985	100.7	95.1	103.5	103.7	102.9	108.9	91.4	103.7
1986	101.2	92.9	105.4	100.0	103.2	113.0	69.8	102.6
1987	103.7	95.5	107.9	102.6	105.1	120.4	70.2	106.4
1988	110.0	104.9	112.7	106.3	109.2	131.4	66.7	116.3
1989	115.4	110.9	117.8	111.6	112.3	136.3	72.9	123.0
1990	118.6	112.2	121.9	115.8	115.0	141.7	82.3	123.6
1991	116.4	105.7	121.9	116.5	116.3	138.9	81.2	125.6
1992	115.9	103.6	122.1	117.4	117.8	140.4	80.4	125.9
1993	118.4	107.1	124.0	119.0	118.0	143.7	80.0	128.2
1994	119.1	106.3	125.5	120.7	118.3	148.5	77.8	132.1
1995	120.5	107.4	127.0	125.5	120.8	153.7	78.0	142.5
1996	129.7	122.3	133.4	127.2	122.4	150.3	85.6	142.1
1995: Jan	118.0	103.6	125.2	123.7	119.4	154.1	76.8	140.4
Feb	118.9	104.9	125.9	124.4	119.9	155.2	76.8	141.8
Mar	119.2	105.1	126.2	124.7	120.1	156.2	76.8	142.5
Apr	118.7	104.8	125.6	125.6	120.4	156.1	78.5	144.1
May	117.5	102.6	125.0	126.3	120.8	157.8	80.0	144.4
June	118.3	104.2	125.3	126.6	120.8	155.0	81.0	143.8
July	119.9	106.2	126.7	126.2	121.0	154.9	79.2	143.6
Aug	120.0	105.1	127.5	126.0	121.1	153.2	78.3	142.9
Sept	122.1	110.7	127.8	125.8	121.5	152.0	78.3	142.6
Oct	122.7	110.2	128.9	125.7	121.6	150.6	76.8	141.8
Nov	125.2	115.4	130.0	125.4	121.3	149.5	75.9	141.0
Dec	125.6	116.5	130.2	125.8	121.3	149.5	77.9	140.7
1996: Jan	125.5	116.4	130.0	126.4	121.8	149.0	80.6	140.8
Feb	125.8	116.6	130.3	126.3	121.9	149.3	80.9	140.9
Mar	126.7	119.5	130.3	126.4	122.0	149.7	82.0	141.1
Apr	127.9	121.7	130.9	127.3	122.0	148.4	86.2	141.4
May	131.2	128.1	132.7	127.5	122.3	149.2	86.6	142.2
June	132.5	129.6	134.0	127.1	122.3	149.2	85.2	142.2
July	133.2	129.9	134.8	127.0	122.6	149.4	85.9	142.0
Aug[2]	133.6	128.6	136.1	127.3	122.5	150.3	86.8	142.5
Sept	132.4	124.8	136.2	127.2	123.0	150.4	86.7	142.7
Oct	130.6	119.8	135.9	127.4	122.9	152.0	86.7	142.9
Nov	129.3	118.0	134.9	127.8	122.7	153.6	88.1	143.2
Dec	128.0	114.7	134.6	128.9	122.8	153.7	92.0	143.6

[1] Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month.

[2] Data have been revised through August 1996 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

See next page for continuation of table.

TABLE B–65.—*Producer price indexes for major commodity groups, 1954–96*—Continued

[1982=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		Miscel-laneous prod-ucts
								Total	Motor vehicles and equip-ment	
1954	37.5	32.5	29.6	25.5	26.3	44.9	26.6	....	33.4	31.3
1955	42.4	34.1	30.4	27.2	27.2	45.1	27.3	....	34.3	31.3
1956	43.0	34.6	32.4	29.6	29.3	46.3	28.5	....	36.3	31.7
1957	42.8	32.8	33.0	30.2	31.4	47.5	29.6	....	37.9	32.6
1958	42.8	32.5	33.4	30.0	32.1	47.9	29.9	....	39.0	33.3
1959	42.6	34.7	33.7	30.6	32.8	48.0	30.3	....	39.9	33.4
1960	42.7	33.5	34.0	30.6	33.0	47.8	30.4	....	39.3	33.6
1961	41.1	32.0	33.0	30.5	33.0	47.5	30.5	....	39.2	33.7
1962	39.9	32.2	33.4	30.2	33.0	47.2	30.5	....	39.2	33.9
1963	40.1	32.8	33.1	30.3	33.1	46.9	30.3	....	38.9	34.2
1964	39.6	33.5	33.0	31.1	33.3	47.1	30.4	....	39.1	34.4
1965	39.7	33.7	33.3	32.0	33.7	46.8	30.4	....	39.2	34.7
1966	40.5	35.2	34.2	32.8	34.7	47.4	30.7	....	39.2	35.3
1967	41.4	35.1	34.6	33.2	35.9	48.3	31.2	....	39.8	36.2
1968	42.8	39.8	35.0	34.0	37.0	49.7	32.4	....	40.9	37.0
1969	43.6	44.0	36.0	36.0	38.2	50.7	33.6	40.4	41.7	38.1
1970	44.9	39.9	37.5	38.7	40.0	51.9	35.3	41.9	43.3	39.8
1971	45.2	44.7	38.1	39.4	41.4	53.1	38.2	44.2	45.7	40.8
1972	45.3	50.7	39.3	40.9	42.3	53.8	39.4	45.5	47.0	41.5
1973	46.6	62.2	42.3	44.0	43.7	55.7	40.7	46.1	47.4	43.3
1974	56.4	64.5	52.5	57.0	50.0	61.8	47.8	50.3	51.4	48.1
1975	62.2	62.1	59.0	61.5	57.9	67.5	54.4	56.7	57.6	53.4
1976	66.0	72.2	62.1	65.0	61.3	70.3	58.2	60.5	61.2	55.6
1977	69.4	83.0	64.6	69.3	65.2	73.2	62.6	64.6	65.2	59.4
1978	72.4	96.9	67.7	75.3	70.3	77.5	69.6	69.5	70.0	66.7
1979	80.5	105.5	75.9	86.0	76.7	82.8	77.6	75.3	75.8	75.5
1980	90.1	101.5	86.3	95.0	86.0	90.7	88.4	82.9	83.1	93.6
1981	96.4	102.8	94.8	99.6	94.4	95.9	96.7	94.3	94.6	96.1
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	100.8	107.9	103.3	101.8	102.7	103.4	101.6	102.8	102.2	104.8
1984	102.3	108.0	110.3	104.8	105.1	105.7	105.4	105.2	104.1	107.0
1985	101.9	106.6	113.3	104.4	107.2	107.1	108.6	107.9	106.4	109.4
1986	101.9	107.2	116.1	103.2	108.8	108.2	110.0	110.5	109.1	111.6
1987	103.0	112.8	121.8	107.1	110.4	109.9	110.0	112.5	111.7	114.9
1988	109.3	118.9	130.4	118.7	113.2	113.1	111.2	114.3	113.1	120.2
1989	112.6	126.7	137.8	124.1	117.4	116.9	112.6	117.7	116.2	126.5
1990	113.6	129.7	141.2	122.9	120.7	119.2	114.7	121.5	118.2	134.2
1991	115.1	132.1	142.9	120.2	123.0	121.2	117.2	126.4	122.1	140.8
1992	115.1	146.6	145.2	119.2	123.4	122.2	117.3	130.4	124.9	145.3
1993	116.0	174.0	147.3	119.2	124.0	123.7	120.0	133.7	128.0	145.4
1994	117.6	180.0	152.5	124.8	125.1	126.1	124.2	137.2	131.4	141.9
1995	124.3	178.1	172.2	134.5	126.6	128.2	129.0	139.7	133.0	145.4
1996	123.8	176.1	168.6	131.0	126.5	130.3	131.0	141.7	134.1	147.7
1995: Jan	122.1	179.6	163.2	133.4	125.9	127.2	126.9	139.6	133.4	143.0
Feb	122.7	179.5	165.9	134.6	126.2	127.5	127.5	139.6	133.3	143.6
Mar	123.4	180.6	168.1	134.7	126.2	127.5	128.2	139.4	133.1	143.8
Apr	124.1	180.4	170.6	135.2	126.4	127.8	129.3	139.3	132.9	144.3
May	124.7	179.7	172.7	134.7	126.5	128.0	129.4	139.3	132.7	145.2
June	125.1	178.0	174.5	134.8	126.5	128.1	129.3	139.0	132.2	145.3
July	125.2	178.2	175.4	135.2	126.6	128.2	129.3	139.0	132.2	145.7
Aug	125.3	177.8	175.6	135.5	126.5	128.4	129.4	138.9	131.9	146.6
Sept	125.3	178.9	175.4	135.0	126.7	128.5	129.6	137.1	129.1	146.6
Oct	125.1	177.2	175.4	134.1	127.0	128.9	129.5	141.1	134.8	147.0
Nov	124.7	174.2	175.2	133.7	127.2	129.3	129.8	141.7	135.5	147.0
Dec	124.3	173.5	174.7	133.4	127.0	129.3	129.7	141.7	135.4	146.9
1996: Jan	123.9	172.9	174.1	132.8	127.3	129.6	130.0	141.7	134.5	147.7
Feb	123.7	173.0	173.2	131.8	127.3	129.9	130.2	141.7	134.5	146.6
Mar	123.6	172.8	171.1	131.8	127.0	129.9	130.2	141.8	134.5	146.4
Apr	123.4	171.9	169.2	132.0	126.6	130.0	130.5	141.6	134.1	146.4
May	123.7	175.8	168.0	132.4	126.4	130.3	130.8	141.6	134.1	147.8
June	123.8	176.8	167.5	131.9	126.2	130.2	130.9	141.7	134.2	147.8
July	123.9	175.0	167.0	130.4	126.3	130.6	131.2	141.3	133.5	148.3
Aug [2]	124.2	177.0	166.6	130.0	126.4	130.5	131.2	141.4	133.3	148.1
Sept	124.2	180.1	166.8	130.1	126.3	130.6	131.7	139.7	131.0	148.2
Oct	123.9	177.9	166.8	129.6	126.2	130.8	131.7	142.5	135.0	148.1
Nov	123.8	180.5	166.6	129.5	126.1	130.8	132.1	142.5	135.0	148.2
Dec	123.6	179.6	166.9	130.0	126.1	130.5	132.1	142.5	134.9	148.4

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–66.—*Changes in producer price indexes for finished goods, 1958–96*

[Percent change]

Year or month	Total finished goods: Dec. to Dec.[1]	Total finished goods: Year to year	Finished consumer foods: Dec. to Dec.[1]	Finished consumer foods: Year to year	Finished goods excluding consumer foods, Total: Dec. to Dec.[1]	Finished goods excluding consumer foods, Total: Year to year	Finished goods excluding consumer foods, Consumer goods: Dec. to Dec.[1]	Finished goods excluding consumer foods, Consumer goods: Year to year	Finished goods excluding consumer foods, Capital equipment: Dec. to Dec.[1]	Finished goods excluding consumer foods, Capital equipment: Year to year	Finished energy goods: Dec. to Dec.[1]	Finished energy goods: Year to year	Finished goods excluding foods and energy: Dec. to Dec.[1]	Finished goods excluding foods and energy: Year to year
1958	0.3	2.2	0.6	6.1	...	...	0.3	0	1.2	2.6	...	...	...	...
1959	–.3	–.3	–3.7	–4.7	...	...	.9	1.2	.9	1.9	...	...	...	...
1960	1.8	.9	5.3	2.0	...	...	.3	.6	.3	.3	...	...	...	...
1961	–.6	0	–1.9	–.3	...	...	–.3	–.3	0	.3	...	...	...	...
1962	.3	.3	.6	.8	...	...	0	0	.3	.3	...	...	...	...
1963	–.3	–.3	–1.4	–1.1	...	...	0	0	.6	.3	...	...	...	...
1964	.6	.3	.6	.3	...	...	.3	–.3	.9	.9	...	...	...	...
1965	3.3	1.8	9.1	4.0	...	...	.9	.9	1.5	1.2	...	...	...	...
1966	2.0	3.2	1.3	6.5	...	...	1.8	1.5	3.8	2.4	...	...	...	...
1967	1.7	1.1	–.3	–1.8	...	...	2.0	1.8	3.1	3.5	...	...	...	...
1968	3.1	2.8	4.6	3.9	2.5	2.6	2.0	2.3	3.0	3.4	...	...	...	...
1969	4.9	3.8	8.1	6.0	3.3	2.8	2.8	2.3	4.8	3.5	...	...	...	...
1970	2.1	3.4	–2.3	3.3	4.3	3.5	3.8	3.0	4.8	4.7	...	...	...	...
1971	3.3	3.1	5.8	1.6	2.0	3.7	2.1	3.5	2.4	4.0	...	...	...	...
1972	3.9	3.2	7.9	5.4	2.3	2.0	2.1	1.8	2.1	2.6	...	...	...	...
1973	11.7	9.1	22.7	20.5	6.6	4.0	7.5	4.6	5.1	3.3	...	...	...	...
1974	18.3	15.4	12.8	14.0	21.1	16.2	20.3	17.0	22.7	14.3	...	...	17.7	11.4
1975	6.6	10.6	5.6	8.4	7.2	12.1	6.8	10.4	8.1	15.2	16.3	17.2	6.0	11.4
1976	3.8	4.5	–2.5	–.3	6.2	6.2	6.0	6.2	6.5	6.7	11.6	11.7	5.7	5.7
1977	6.7	6.4	6.9	5.3	6.8	7.1	6.7	7.3	7.2	6.4	12.0	15.7	6.2	6.0
1978	9.3	7.9	11.7	9.0	8.3	7.2	8.5	7.1	8.0	7.9	8.5	6.5	8.4	7.5
1979	12.8	11.2	7.4	9.3	14.8	11.8	17.6	13.3	8.8	8.7	58.1	35.0	9.4	8.9
1980	11.8	13.4	7.5	5.8	13.4	16.2	14.1	18.5	11.4	10.7	27.9	49.2	10.8	11.2
1981	7.1	9.2	1.5	5.8	8.7	10.3	8.6	10.3	9.2	10.3	14.1	19.1	7.7	8.6
1982	3.6	4.1	2.0	2.2	4.2	4.6	4.2	4.1	3.9	5.7	–.1	–1.5	4.9	5.7
1983	.6	1.6	2.3	1.0	0	1.8	–.9	1.2	2.0	2.8	–9.2	–4.8	1.9	3.0
1984	1.7	2.1	3.5	4.4	1.1	1.4	.8	1.0	1.8	2.3	–4.2	–4.2	2.0	2.4
1985	1.8	1.0	.6	–.8	2.2	1.4	2.1	1.1	2.7	2.2	–.2	–3.9	2.7	2.5
1986	–2.3	–1.4	2.8	2.6	–4.0	–2.6	–6.6	–4.6	2.1	2.0	–38.1	–28.1	2.7	2.3
1987	2.2	2.1	–.2	2.1	3.2	2.1	4.1	2.2	1.3	1.8	11.2	–1.9	2.1	2.4
1988	4.0	2.5	5.7	2.8	3.2	2.4	3.1	2.4	3.6	2.3	–3.6	–3.2	4.3	3.3
1989	4.9	5.2	5.2	5.4	4.8	5.0	5.3	5.6	3.8	3.9	9.5	9.9	4.2	4.4
1990	5.7	4.9	2.6	4.8	6.9	5.0	8.7	5.9	3.4	3.5	30.7	14.2	3.5	3.7
1991	–.1	2.1	–1.5	–.2	.3	3.0	–.7	2.9	2.5	3.1	–9.6	4.1	3.1	3.6
1992	1.6	1.2	1.6	–.6	1.6	1.8	1.6	1.8	1.7	1.9	–.3	–.4	2.0	2.4
1993	.2	1.2	2.4	1.9	–.4	1.1	–1.4	.7	1.8	1.8	–4.1	.3	.4	1.2
1994	1.7	.6	1.1	.9	1.9	.6	2.0	–.1	2.0	2.1	3.5	–1.3	1.6	1.0
1995	2.3	1.9	1.9	1.7	2.3	1.9	2.3	2.0	2.2	1.9	1.1	1.4	2.6	2.1
1996	2.8	2.7	3.4	3.5	2.6	2.4	3.7	2.9	.5	1.2	12.0	6.4	.6	1.4
	Percent change from preceding month													
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1995: Jan	0.3	0.2	–0.5	–0.7	0.6	0.5	0.5	0.5	0.6	0.4	0.9	1.2	0.4	0.3
Feb	.2	.2	.4	.1	.2	.2	.2	.2	.1	.2	0	–.1	.2	.2
Mar	.2	.1	.2	0	.2	.1	.2	.2	.1	.1	.3	–.1	.1	.2
Apr	.4	.2	0	.2	.5	.3	.6	.2	.1	.2	1.8	.5	.1	.2
May	.4	.2	–.5	–.5	.6	.4	.9	.6	.1	.1	2.8	1.0	.2	.2
June	.1	–.2	–.5	–.3	.2	–.2	.3	–.2	–.1	.1	1.2	–1.1	0	.1
July	0	0	.9	.9	–.2	–.2	–.3	–.3	.1	.1	–1.8	–1.9	.1	.2
Aug	–.1	.1	.2	.1	–.2	0	–.2	0	0	.1	–.6	–.3	–.1	.1
Sept	–.2	.3	1.0	1.2	–.5	.2	–.4	.1	–.7	.1	–.5	–.5	–.5	.2
Oct	.6	.2	–.2	–.1	.9	.2	.5	.2	1.7	.3	–2.3	–.1	1.6	.3
Nov	0	.3	.9	1.1	–.3	.1	–.5	0	.2	.4	–2.6	–1.0	.2	.4
Dec	.3	.6	–.1	.1	.4	.8	.6	1.0	–.1	0	2.0	3.8	.1	.1
1996: Jan	.2	.2	–.2	–.4	.5	.3	.6	.6	.1	–.1	2.3	2.4	.1	–.1
Feb	0	–.1	0	–.2	–.1	–.1	–.1	–.2	.1	0	–.9	–.9	.1	.1
Mar	.5	.5	1.0	.8	.5	.5	.6	.7	–.1	.1	3.0	2.6	–.1	–.1
Apr	.4	.2	–.6	–.5	.7	.5	1.0	.6	0	0	4.0	2.7	–.1	0
May	.4	.2	.2	.2	.4	.2	.6	.2	–.1	0	1.6	–.4	.2	.3
June	.5	.2	1.6	1.8	.1	–.3	.1	–.5	0	.1	.1	–2.4	0	.1
July	–.2	–.1	.2	.1	–.2	–.2	–.2	–.2	–.1	0	–.6	–.6	–.1	0
Aug[2]	.3	.4	1.0	.8	.1	.2	.1	.3	.1	.1	.5	.7	0	.1
Sept	–.2	.2	.2	.3	–.5	.2	–.2	.2	–.7	.1	0	.1	–.6	.2
Oct	.7	.4	.6	.8	.8	.2	.6	.4	1.0	–.4	–.1	1.9	1.0	–.3
Nov	0	.4	–.4	–.1	.1	.6	.1	.7	.1	.3	.5	2.3	0	.1
Dec	.2	.5	–.3	–.1	.3	.7	.4	.9	.1	.1	1.2	3.1	.1	.1

[1] Changes from December to December are based on unadjusted indexes.
[2] Data have been revised through August 1996 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–67.—*Money stock, liquid assets, and debt measures, 1959–96*

[Averages of daily figures, except debt; billions of dollars, seasonally adjusted]

Year and month	M1	M2	M3	L	Debt[1]	Percent change from year or 6 months earlier[2]			
	Sum of currency, demand deposits, travelers checks, and other checkable deposits (OCDs)	M1 plus retail MMMF balances, savings deposits (including MMDAs), and small time deposits	M2 plus large time deposits, RPs, Euro-dollars, and institution-only MMMF balances	M3 plus other liquid assets	Debt of domestic nonfinancial sectors (monthly average of adjacent month-end levels)	M1	M2	M3	Debt
December:									
1959	140.0	297.8	299.7	388.6	687.6	....	....	....	7.6
1960	140.7	312.4	315.2	403.5	723.0	0.5	4.9	5.2	5.1
1961	145.2	335.5	340.8	430.6	765.7	3.2	7.4	8.1	5.9
1962	147.8	362.7	371.3	465.9	818.4	1.8	8.1	8.9	6.9
1963	153.3	393.3	405.9	503.6	873.3	3.7	8.4	9.3	6.7
1964	160.3	424.8	442.4	540.3	936.8	4.6	8.0	9.0	7.3
1965	167.9	459.2	482.1	584.4	1,003.7	4.7	8.1	9.0	7.1
1966	172.0	480.2	505.4	615.1	1,070.9	2.4	4.6	4.8	6.7
1967	183.3	524.8	557.9	667.3	1,145.2	6.6	9.3	10.4	6.9
1968	197.4	566.9	607.2	729.9	1,236.8	7.7	8.0	8.8	8.0
1969	203.9	587.9	615.9	764.4	1,326.7	3.3	3.7	1.4	7.3
1970	214.4	626.6	677.2	816.0	1,416.1	5.1	6.6	10.0	6.7
1971	228.3	710.3	776.0	902.9	1,549.6	6.5	13.4	14.6	9.4
1972	249.2	802.3	886.0	1,022.9	1,705.7	9.2	13.0	14.2	10.1
1973	262.8	855.5	985.0	1,142.5	1,890.8	5.5	6.6	11.2	10.9
1974	274.3	902.5	1,070.1	1,250.0	2,063.5	4.4	5.5	8.6	9.1
1975	287.5	1,017.0	1,172.1	1,366.8	2,251.2	4.8	12.7	9.5	9.1
1976	306.3	1,152.7	1,311.9	1,516.8	2,495.5	6.5	13.3	11.9	10.9
1977	331.3	1,271.5	1,472.5	1,705.4	2,811.5	8.2	10.3	12.2	12.7
1978	358.4	1,368.0	1,646.8	1,911.1	3,201.6	8.2	7.6	11.8	13.9
1979	382.8	1,475.7	1,806.5	2,119.8	3,591.2	6.8	7.9	9.7	12.2
1980	408.8	1,601.0	1,992.2	2,329.2	3,933.7	6.8	8.5	10.3	9.5
1981	436.5	1,756.0	2,240.7	2,603.2	4,330.8	6.8	9.7	12.5	10.1
1982	474.5	1,910.9	2,442.3	2,851.3	4,760.0	8.7	8.8	9.0	9.9
1983	521.1	2,127.9	2,685.0	3,147.5	5,327.9	9.8	11.4	9.9	11.9
1984	552.1	2,312.4	2,979.7	3,522.0	6,112.7	5.9	8.7	11.0	14.7
1985	619.8	2,497.8	3,198.0	3,825.3	7,025.3	12.3	8.0	7.3	14.9
1986	724.4	2,734.6	3,486.4	4,122.4	7,906.3	16.9	9.5	9.0	12.5
1987	749.8	2,834.4	3,673.2	4,328.5	8,664.1	3.5	3.6	5.4	9.6
1988	786.9	2,997.9	3,912.4	4,664.2	9,441.6	4.9	5.8	6.5	9.0
1989	794.2	3,164.0	4,065.5	4,894.2	10,171.6	.9	5.5	3.9	7.7
1990	825.8	3,282.2	4,124.1	4,975.8	10,852.6	4.0	3.7	1.4	6.7
1991	897.2	3,383.7	4,178.4	5,004.4	11,337.1	8.6	3.1	1.3	4.5
1992	1,024.4	3,438.7	4,187.1	5,075.6	11,880.7	14.2	1.6	.2	4.8
1993	1,128.6	3,494.0	4,249.5	5,164.4	12,506.5	10.2	1.6	1.5	5.3
1994	1,148.7	3,509.2	4,319.2	5,302.9	13,148.4	1.8	.4	1.6	5.1
1995	1,124.9	3,657.4	4,572.1	5,681.5	13,866.9	–2.1	4.2	5.9	5.5
1996 p	1,076.9	3,825.6	4,894.4	....	....	–4.3	4.6	7.0	....
1995: Jan	1,149.2	3,513.9	4,341.8	5,329.1	13,201.7	–.4	.3	3.0	5.3
Feb	1,147.7	3,513.8	4,351.9	5,360.6	13,277.3	–.4	.6	3.5	5.6
Mar	1,148.7	3,518.8	4,369.2	5,395.4	13,345.2	–.3	.9	3.9	5.6
Apr	1,151.2	3,528.4	4,390.8	5,427.7	13,405.5	.4	1.4	4.5	5.7
May	1,146.1	3,540.8	4,417.0	5,453.0	13,482.6	–.5	2.0	5.2	5.8
June	1,144.5	3,569.1	4,453.1	5,489.8	13,560.6	–.7	3.4	6.2	6.3
July	1,145.4	3,587.0	4,480.0	5,537.9	13,613.9	–.7	4.2	6.4	6.2
Aug	1,143.8	3,607.3	4,508.4	5,574.7	13,654.2	–.7	5.3	7.2	5.7
Sept	1,140.1	3,620.8	4,529.5	5,621.7	13,704.4	–1.5	5.8	7.3	5.4
Oct	1,131.8	3,628.4	4,545.4	5,649.1	13,764.1	–3.4	5.7	7.0	5.4
Nov	1,129.0	3,640.2	4,557.4	5,656.0	13,820.7	–3.0	5.6	6.4	5.0
Dec	1,124.9	3,657.4	4,572.1	5,681.5	13,866.9	–3.4	4.9	5.3	4.5
1996: Jan	1,119.2	3,671.6	4,600.3	5,700.2	13,917.5	–4.6	4.7	5.4	4.5
Feb	1,117.3	3,687.2	4,638.1	5,720.7	13,990.2	–4.6	4.4	5.8	4.9
Mar	1,126.7	3,722.1	4,680.1	5,779.8	14,066.3	–2.4	5.6	6.6	5.3
Apr	1,123.6	3,727.1	4,688.6	5,806.9	14,133.8	–1.4	5.4	6.3	5.4
May	1,117.0	3,720.6	4,701.6	5,804.3	14,189.9	–2.1	4.4	6.3	5.3
June	1,116.4	3,736.7	4,722.2	5,834.3	14,246.2	–1.5	4.3	6.6	5.5
July	1,107.9	3,741.7	4,733.7	5,850.5	14,317.0	–2.0	3.8	5.8	5.7
Aug	1,098.8	3,753.6	4,751.8	5,881.5	14,372.3	–3.3	3.6	4.9	5.5
Sept	1,090.9	3,764.0	4,780.7	5,922.9	14,418.4	–6.4	2.3	4.3	5.0
Oct	1,075.7	3,773.3	4,816.3	5,943.6	14,480.1	–8.5	2.5	5.4	4.9
Nov	1,075.8	3,797.8	4,845.5	....	14,545.2	–7.4	4.1	6.1	5.0
Dec p	1,076.9	3,825.6	4,894.4	....	....	–7.1	4.8	7.3	....

[1] Consists of outstanding credit market debt of the U.S. Government, State and local governments, and private nonfinancial sectors; data derived from flow of funds accounts.

[2] Annual changes are from December to December; monthly changes are from 6 months earlier at a simple annual rate.

Note.—See Table B–68 for components.

Source: Board of Governors of the Federal Reserve System.

TABLE B–68.—*Components of money stock measures and liquid assets, 1959–96*

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Year and month	Currency	Travelers checks	Demand deposits	Other checkable deposits (OCDs)	Small denomination time deposits [1]	Savings deposits, including money market deposit accounts (MMDAs) [2]	Money market mutual fund (MMMF) balances: Retail [3]	Money market mutual fund (MMMF) balances: Institution only [4]
December:								
1959	28.8	0.3	110.8	0.0	11.4	146.5	0.0	0.0
1960	28.7	.3	111.6	.0	12.5	159.1	.0	.0
1961	29.3	.4	115.5	.0	14.8	175.5	.0	.0
1962	30.3	.4	117.1	.0	20.1	194.7	.0	.0
1963	32.2	.4	120.6	.1	25.6	214.4	.0	.0
1964	33.9	.5	125.8	.1	29.2	235.3	.0	.0
1965	36.0	.5	131.3	.1	34.5	256.9	.0	.0
1966	38.0	.6	133.4	.1	55.0	253.2	.0	.0
1967	40.0	.6	142.5	.1	77.8	263.7	.0	.0
1968	43.0	.7	153.6	.1	100.6	268.9	.0	.0
1969	45.7	.8	157.3	.2	120.4	263.6	.0	.0
1970	48.6	.9	164.8	.1	151.2	260.9	.0	.0
1971	52.0	1.0	175.1	.2	189.8	292.2	.0	.0
1972	56.2	1.2	191.6	.2	231.7	321.4	.0	.0
1973	60.8	1.4	200.3	.3	265.8	326.7	.1	.0
1974	67.0	1.7	205.2	.4	287.9	338.6	1.7	.2
1975	72.8	2.1	211.6	.9	337.8	388.8	2.8	.5
1976	79.5	2.6	221.6	2.7	390.7	453.2	2.5	.6
1977	87.4	2.9	236.8	4.2	445.5	492.2	2.6	1.0
1978	96.0	3.3	250.6	8.4	520.9	481.9	6.7	3.4
1979	104.8	3.5	257.6	16.8	634.2	423.9	34.8	10.2
1980	115.4	3.9	261.5	28.0	728.5	400.3	63.4	15.9
1981	122.6	4.1	231.4	78.4	823.1	344.0	152.4	38.6
1982	132.5	4.1	234.0	103.9	850.9	400.2	185.3	49.5
1983	146.2	4.7	238.3	131.9	784.0	684.9	137.8	41.4
1984	156.1	5.0	243.7	147.4	888.8	704.7	166.8	61.8
1985	167.9	5.6	266.6	179.8	885.7	815.2	177.1	63.9
1986	180.7	6.1	302.1	235.6	859.0	940.8	210.3	84.5
1987	196.8	6.6	286.8	259.5	922.7	937.3	224.5	91.1
1988	212.3	7.0	286.8	280.9	1,038.6	926.3	246.0	90.3
1989	222.6	6.9	279.3	285.3	1,153.7	893.6	322.5	106.9
1990	246.9	7.8	277.4	293.9	1,174.5	923.8	358.1	133.5
1991	267.4	7.8	289.5	332.5	1,067.8	1,045.0	373.7	179.5
1992	292.9	8.1	339.1	384.2	871.2	1,187.1	356.0	199.8
1993	322.4	7.9	384.3	414.0	787.9	1,218.8	358.7	197.9
1994	354.9	8.5	382.4	402.9	823.5	1,148.9	388.1	183.7
1995	373.2	8.9	389.8	353.0	937.7	1,134.6	460.3	227.2
1996 p	395.7	8.6	400.7	271.8	948.6	1,271.3	528.9	273.9
1995: Jan	357.6	8.5	383.3	399.8	838.9	1,134.7	391.2	189.3
Feb	359.0	8.5	383.4	396.8	857.2	1,118.0	390.8	188.4
Mar	362.3	8.7	382.9	394.8	877.4	1,102.5	390.2	195.0
Apr	365.0	9.0	382.1	395.1	893.1	1,091.2	392.9	199.4
May	367.6	9.1	382.1	387.4	905.9	1,089.5	399.3	203.7
June	367.0	9.0	386.5	382.0	913.4	1,097.0	414.2	213.2
July	367.3	8.9	388.5	380.8	919.0	1,096.2	426.3	218.6
Aug	368.5	8.9	389.3	377.2	923.3	1,101.6	438.7	218.5
Sept	369.5	8.8	389.4	372.4	926.4	1,108.4	445.9	221.7
Oct	370.8	8.8	388.1	364.1	929.8	1,116.1	450.6	223.7
Nov	371.6	8.9	388.2	360.4	935.1	1,120.6	455.5	224.8
Dec	373.2	8.9	389.8	353.0	937.7	1,134.6	460.3	227.2
1996: Jan	373.6	8.9	393.5	343.2	937.5	1,151.8	463.2	230.6
Feb	373.3	8.9	397.4	337.8	937.0	1,164.5	468.4	243.9
Mar	375.2	8.9	407.1	335.4	932.3	1,183.0	480.1	248.3
Apr	376.0	8.9	406.3	332.4	930.1	1,193.2	480.3	245.6
May	377.1	8.7	409.5	321.8	927.8	1,197.5	478.3	243.5
June	379.4	8.6	413.4	315.0	927.0	1,207.0	486.3	249.4
July	382.6	8.5	410.1	306.7	928.7	1,213.6	491.6	252.9
Aug	385.0	8.4	407.0	298.4	932.8	1,224.3	497.7	257.2
Sept	387.5	8.4	405.0	290.0	936.8	1,231.4	504.9	262.7
Oct	390.4	8.5	395.9	280.9	941.8	1,244.8	511.0	264.3
Nov	392.7	8.6	400.4	274.2	946.7	1,258.0	517.3	267.2
Dec p	395.7	8.6	400.7	271.8	948.6	1,271.3	528.9	273.9

[1] Small denomination deposits are those issued in amounts of less than $100,000.
[2] Data prior to 1982 are savings deposits only; MMDA data begin December 1982.
[3] Balances in money funds with minimum initial investments of less than $50,000.
[4] Balances in money funds with minimum initial investments of $50,000 or more.

See next page for continuation of table.

TABLE B–68.—*Components of money stock measures and liquid assets, 1959–96*—Continued

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Year and month	Large denomination time deposits[5]	Overnight and term repurchase agreements (RPs) (net)	Overnight and term Eurodollars (net)	Savings bonds	Short-term Treasury securities	Bankers acceptances	Commercial paper
December:							
1959	1.2	0.0	0.7	46.1	38.6	0.6	3.6
1960	2.0	.0	.8	45.7	36.7	.9	5.1
1961	3.9	.0	1.5	46.5	37.0	1.1	5.2
1962	7.0	.0	1.6	46.9	39.8	1.1	6.8
1963	10.8	.0	1.9	48.1	40.7	1.2	7.7
1964	15.2	.0	2.4	49.0	38.5	1.3	9.1
1965	21.2	.0	1.8	49.6	40.7	1.6	10.2
1966	23.1	.0	2.2	50.2	43.2	1.8	14.4
1967	30.9	.0	2.2	51.2	38.7	1.8	17.8
1968	37.4	.0	2.9	51.8	46.1	2.3	22.5
1969	20.4	4.9	2.7	51.7	59.5	3.3	34.0
1970	45.1	3.0	2.4	52.0	48.8	3.5	34.5
1971	57.6	5.2	2.9	54.3	36.0	3.8	32.7
1972	73.3	6.6	3.9	57.6	40.7	3.5	35.2
1973	111.0	12.8	5.8	60.4	49.3	5.0	42.8
1974	144.7	14.2	8.5	63.3	52.8	12.6	51.2
1975	129.7	14.7	10.2	67.2	68.4	10.7	48.5
1976	118.1	25.1	15.4	71.8	69.8	10.8	52.5
1977	145.2	32.9	21.9	76.4	78.4	14.1	64.0
1978	195.6	44.6	35.1	80.3	81.4	22.0	80.7
1979	223.1	47.7	49.8	79.5	108.2	27.1	98.3
1980	260.2	57.4	57.7	72.3	133.9	32.0	98.8
1981	303.8	65.3	77.0	67.8	149.4	39.9	105.3
1982	324.8	67.4	89.8	68.0	182.9	44.5	113.6
1983	316.4	94.5	104.8	71.1	213.2	45.0	133.2
1984	403.2	105.4	96.9	74.2	261.9	45.4	160.7
1985	422.4	119.9	94.0	79.5	298.2	42.1	207.5
1986	420.2	143.3	103.9	91.8	275.8	37.1	231.3
1987	467.0	172.6	108.2	100.6	249.5	44.5	260.6
1988	518.3	189.0	117.0	109.4	266.8	40.2	335.4
1989	541.5	158.0	95.2	117.5	324.0	40.7	346.5
1990	480.9	138.8	88.7	126.0	334.2	36.1	355.3
1991	416.5	119.4	79.3	137.9	329.1	23.9	335.2
1992	353.6	128.1	66.9	156.6	345.9	20.9	365.0
1993	333.7	157.5	66.3	171.5	342.8	14.9	385.6
1994	363.1	180.9	82.3	180.3	386.9	14.2	402.4
1995	417.2	179.4	90.9	184.8	475.5	12.0	437.1
1996 p	494.3	191.1	109.6	....	....	....	....
1995: Jan	363.8	187.4	87.3	180.5	387.0	13.6	406.3
Feb	371.3	192.0	86.4	180.5	399.9	13.5	414.9
Mar	377.2	191.1	87.2	180.7	410.9	13.7	420.9
Apr	380.6	192.2	90.1	181.2	411.8	13.4	430.6
May	384.1	197.3	91.1	181.7	405.2	12.0	437.0
June	387.2	191.8	91.8	182.4	414.4	11.0	428.9
July	393.5	188.7	92.2	183.0	433.9	12.1	429.0
Aug	396.4	193.5	92.7	183.5	437.1	12.4	433.3
Sept	400.3	193.5	93.2	183.9	456.8	12.8	438.6
Oct	409.7	191.2	92.5	184.2	465.6	13.4	440.5
Nov	415.3	186.8	90.3	184.5	464.4	12.6	437.1
Dec	417.2	179.4	90.9	184.8	475.5	12.0	437.1
1996: Jan	416.1	186.6	95.4	185.0	466.0	11.8	437.2
Feb	421.6	188.7	96.6	185.0	445.0	10.3	442.3
Mar	428.5	186.8	94.4	185.2	459.6	9.8	445.1
Apr	431.3	187.6	97.0	185.6	461.4	10.3	461.0
May	437.5	203.0	97.1	186.0	432.6	10.8	473.4
June	444.2	194.3	97.6	186.4	443.4	11.4	470.9
July	449.8	192.5	96.8	186.8	445.5	11.4	473.1
Aug	452.5	191.6	96.9	187.2	452.6	11.3	478.6
Sept	459.6	194.7	99.7	187.3	460.9	11.5	482.4
Oct	475.9	196.9	105.8	187.3	449.4	11.6	479.1
Nov	481.6	194.9	103.9	....	....	....	....
Dec p	494.3	191.1	109.6	....	....	....	....

[5] Large denomination deposits are those issued in amounts of more than $100,000.

Note.—See also Table B–67.

Source: Board of Governors of the Federal Reserve System.

Table B–69.—*Aggregate reserves of depository institutions and monetary base, 1959–96*

[Averages of daily figures [1]; millions of dollars; seasonally adjusted, except as noted]

Year and month	Adjusted for changes in reserve requirements [2]					Borrowings of depository institutions from the Federal Reserve, NSA		
	Reserves of depository institutions				Monetary base			
	Total	Nonborrowed	Nonborrowed plus extended credit	Required		Total	Seasonal	Extended credit
December:								
1959	11,109	10,168	10,168	10,603	40,880	941	.....	.....
1960	11,247	11,172	11,172	10,503	40,977	74	.....	.....
1961	11,499	11,366	11,366	10,915	41,853	133	.....	.....
1962	11,604	11,344	11,344	11,033	42,957	260	.....	.....
1963	11,730	11,397	11,397	11,239	45,003	332	.....	.....
1964	12,011	11,747	11,747	11,605	47,161	264	.....	.....
1965	12,316	11,872	11,872	11,892	49,620	444	.....	.....
1966	12,223	11,690	11,690	11,884	51,565	532	.....	.....
1967	13,180	12,952	12,952	12,805	54,579	228	.....	.....
1968	13,767	13,021	13,021	13,341	58,357	746	.....	.....
1969	14,168	13,049	13,049	13,882	61,569	1,119	.....	.....
1970	14,558	14,225	14,225	14,309	65,013	332	.....	.....
1971	15,230	15,104	15,104	15,049	69,108	126	.....	.....
1972	16,645	15,595	15,595	16,361	75,167	1,050	.....	.....
1973	17,021	15,723	15,723	16,717	81,073	1,298	41	.....
1974	17,550	16,823	16,970	17,292	87,535	727	32	147
1975	17,822	17,692	17,704	17,556	93,887	130	14	12
1976	18,388	18,335	18,335	18,115	101,515	53	13	.....
1977	18,990	18,420	18,420	18,800	110,323	569	55	.....
1978	19,753	18,885	18,885	19,521	120,445	868	135	.....
1979	20,720	19,248	19,248	20,279	131,143	1,473	82	.....
1980	22,015	20,325	20,328	21,501	142,004	1,690	116	3
1981	22,443	21,807	21,956	22,124	149,021	636	54	148
1982	23,600	22,966	23,152	23,100	160,127	634	33	186
1983	25,367	24,593	24,595	24,806	175,467	774	96	2
1984	26,854	23,667	26,272	25,999	187,237	3,186	113	2,604
1985	31,460	30,141	30,641	30,423	203,529	1,318	56	499
1986	38,950	38,123	38,426	37,580	223,571	827	38	303
1987	38,866	38,089	38,572	37,820	239,784	777	93	483
1988	40,410	38,694	39,938	39,362	256,920	1,716	130	1,244
1989	40,508	40,242	40,262	39,585	267,723	265	84	20
1990	41,780	41,455	41,478	40,116	293,332	326	76	23
1991	45,547	45,355	45,356	44,569	317,502	192	38	1
1992	54,367	54,243	54,244	53,212	351,244	124	18	1
1993	60,519	60,437	60,437	59,456	386,877	82	31	0
1994	59,364	59,156	59,156	58,196	418,723	209	100	0
1995	56,364	56,106	56,106	55,086	435,006	257	40	0
1996 p	50,166	50,011	50,011	48,746	453,509	155	68	0
1995: Jan	59,145	59,009	59,013	57,806	421,032	136	46	4
Feb	58,857	58,798	58,798	57,911	422,421	59	33	0
Mar	58,500	58,431	58,431	57,706	425,165	69	51	0
Apr	57,988	57,877	57,877	57,235	427,551	111	82	0
May	57,801	57,651	57,651	56,921	430,112	150	137	0
June	57,383	57,110	57,110	56,418	429,308	272	172	0
July	57,680	57,309	57,309	56,590	429,822	371	231	0
Aug	57,499	57,217	57,217	56,512	430,807	282	258	0
Sept	57,344	57,066	57,066	56,394	431,685	278	252	0
Oct	56,839	56,593	56,593	55,758	432,737	245	199	0
Nov	56,333	56,129	56,129	55,390	433,206	204	73	0
Dec	56,364	56,106	56,106	55,086	435,006	257	40	0
1996: Jan	55,606	55,568	55,568	54,121	435,182	38	7	0
Feb	54,848	54,813	54,813	53,997	433,667	35	8	0
Mar	55,727	55,706	55,706	54,590	436,871	21	10	0
Apr	55,182	55,091	55,091	54,062	436,644	91	34	0
May	54,227	54,100	54,100	53,368	437,009	127	105	0
June	54,112	53,726	53,726	52,962	439,088	386	192	0
July	53,197	52,829	52,829	52,132	441,881	368	284	0
Aug	52,269	51,935	51,935	51,308	444,204	334	309	0
Sept	51,351	50,983	50,983	50,313	445,880	368	306	0
Oct	50,135	49,848	49,848	49,142	447,187	287	212	0
Nov	49,875	49,661	49,661	48,840	449,345	214	109	0
Dec p	50,166	50,011	50,011	48,746	453,509	155	68	0

[1] Data are prorated averages of biweekly (maintenance period) averages of daily figures.
[2] Aggregate reserves incorporate adjustments for discontinuities associated with regulatory changes to reserve requirements. For details on aggregate reserves series see *Federal Reserve Bulletin.*

Note.—NSA indicates data are not seasonally adjusted.

Source: Board of Governors of the Federal Reserve System.

TABLE B–70.—*Bank credit at all commercial banks, 1972–96*

[Monthly average; billions of dollars, seasonally adjusted [1]]

Year and month	Total bank credit	Securities in bank credit: Total securities	Securities in bank credit: U.S. Government securities	Securities in bank credit: Other securities	Loans and leases in bank credit: Total loans and leases [2]	Commercial and industrial	Real estate: Total	Real estate: Revolving home equity	Real estate: Other	Consumer	Security	Other
December:												
1972	572.5	182.4	89.0	93.4	390.1	137.1	98.1	....	....	86.3	15.6	53.0
1973	647.8	187.6	88.2	99.4	460.2	165.0	117.3	....	....	98.6	12.9	66.4
1974	713.7	193.8	86.3	107.5	519.9	196.6	130.1	....	....	102.4	12.7	78.1
1975	745.1	227.9	116.7	111.2	517.2	189.3	134.4	....	....	104.9	13.5	75.1
1976	804.6	249.8	136.3	113.5	554.8	190.9	148.8	....	....	116.3	17.7	81.1
1977	891.5	259.3	136.6	122.7	632.3	211.0	175.2	....	....	138.3	21.0	86.8
1978	1,013.9	266.8	137.6	129.2	747.1	246.2	210.5	....	....	164.7	19.7	106.0
1979	1,135.6	286.2	144.3	141.9	849.4	291.4	241.9	....	....	184.5	18.7	112.9
1980	1,238.6	325.0	170.6	154.4	913.5	325.7	262.6	....	....	179.2	18.0	128.0
1981	1,307.0	339.8	179.3	160.5	967.3	355.4	284.1	....	....	182.5	21.4	123.9
1982	1,400.4	366.5	201.7	164.8	1,033.9	392.5	299.9	....	....	188.2	25.3	128.0
1983	1,552.2	428.3	259.2	169.1	1,123.9	414.2	331.0	....	....	212.9	28.0	137.8
1984	1,722.9	400.7	259.8	140.9	1,322.2	473.2	376.3	....	....	254.2	35.0	183.5
1985	1,910.4	449.8	270.8	179.0	1,460.6	500.2	425.9	....	....	295.0	43.3	196.2
1986	2,093.7	504.0	310.1	193.9	1,589.7	536.7	494.1	....	....	315.4	40.3	203.2
1987	2,241.2	531.6	335.8	195.8	1,709.6	566.4	587.2	....	....	328.2	34.5	193.3
New series												
1988	2,435.7	562.0	366.8	195.2	1,873.8	608.0	675.0	39.9	635.1	357.7	40.7	192.4
1989	2,608.9	584.5	400.0	184.5	2,024.4	639.3	770.1	50.1	719.9	378.1	41.4	195.6
1990	2,751.5	633.7	455.6	178.1	2,117.8	640.9	855.1	62.1	793.1	383.2	45.0	193.5
1991	2,856.2	745.0	565.2	179.8	2,111.2	619.5	879.9	69.5	810.4	366.5	54.4	190.9
1992	2,957.7	843.5	666.8	176.7	2,113.3	596.2	901.2	73.4	827.8	358.9	64.1	192.8
1993	3,113.6	918.8	733.9	184.9	2,194.8	585.9	940.4	72.9	867.5	390.4	87.5	190.6
1994	3,326.2	952.3	732.1	220.2	2,373.9	645.1	1,002.4	75.2	927.2	451.2	76.2	199.0
1995	3,610.1	1,001.9	710.5	291.4	2,608.1	716.4	1,077.5	79.1	998.4	493.1	83.0	238.1
1996	3,767.7	993.6	704.3	289.3	2,774.0	786.0	1,124.7	85.2	1,039.6	518.7	76.2	268.4
1995: Jan	3,355.5	952.3	730.3	222.0	2,403.2	655.7	1,013.7	75.7	938.0	457.3	73.2	203.4
Feb	3,370.5	944.2	727.0	217.1	2,426.3	668.0	1,021.6	76.0	945.6	459.9	73.0	203.9
Mar	3,398.0	949.3	715.0	234.3	2,448.7	670.8	1,028.6	76.1	952.5	465.0	75.4	208.9
Apr	3,474.7	1,001.9	708.0	294.0	2,472.7	680.8	1,035.4	76.6	958.8	470.1	77.7	208.7
May	3,495.5	993.6	709.7	283.9	2,501.8	687.6	1,041.3	77.1	964.2	472.5	88.1	212.4
June	3,517.0	995.5	708.5	286.9	2,521.5	691.6	1,049.4	77.7	971.7	478.0	87.7	214.8
July	3,536.8	987.8	701.7	286.1	2,549.0	696.9	1,062.0	78.0	984.0	480.8	87.1	222.3
Aug	3,548.3	989.1	705.8	283.3	2,559.2	699.0	1,067.3	78.3	989.0	485.2	84.2	223.5
Sept	3,568.5	992.4	705.4	286.9	2,576.2	703.8	1,071.0	78.5	992.5	488.8	86.6	225.9
Oct	3,588.0	996.9	712.3	284.6	2,591.1	709.4	1,075.3	78.4	996.9	489.1	86.7	230.6
Nov	3,598.7	999.1	714.1	285.0	2,599.6	713.6	1,076.7	78.8	997.9	490.9	86.3	232.1
Dec	3,610.1	1,001.9	710.5	291.4	2,608.1	716.4	1,077.5	79.1	998.4	493.1	83.0	238.1
1996: Jan	3,640.3	999.6	701.6	298.0	2,640.7	722.6	1,085.9	79.5	1,006.4	499.7	85.1	247.2
Feb	3,650.4	1,005.0	713.3	291.7	2,645.4	725.6	1,089.0	79.7	1,009.2	499.4	85.9	245.5
Mar	3,642.8	989.4	702.6	286.7	2,653.5	723.4	1,094.1	79.7	1,014.3	502.6	85.1	248.3
Apr	3,669.5	990.7	704.5	286.2	2,678.8	732.6	1,097.6	80.0	1,017.6	507.1	85.3	256.1
May	3,674.0	996.6	713.2	283.4	2,677.4	735.4	1,100.1	79.6	1,020.5	504.6	82.0	255.3
June	3,680.7	989.7	708.5	281.3	2,691.0	738.5	1,103.3	79.3	1,024.1	510.0	81.5	257.6
July	3,685.3	983.7	707.6	276.1	2,701.6	743.1	1,103.8	79.9	1,023.9	513.0	79.1	262.6
Aug	3,675.5	972.3	701.3	271.0	2,703.3	744.5	1,110.0	80.6	1,029.5	514.3	72.7	261.7
Sept	3,690.0	966.5	702.2	264.3	2,723.5	759.1	1,111.8	81.2	1,030.6	517.9	73.4	261.4
Oct	3,717.9	968.5	700.9	267.6	2,749.4	770.3	1,114.2	82.4	1,031.8	517.5	78.6	268.8
Nov	3,745.4	986.5	705.7	280.8	2,759.0	774.9	1,117.6	83.4	1,034.2	518.1	78.7	269.6
Dec	3,767.7	993.6	704.3	289.3	2,774.0	786.0	1,124.7	85.2	1,039.6	518.7	76.2	268.4

[1] Data are Wednesday values or prorated averages of Wednesday values for domestically chartered commercial banks, branches and agencies of foreign banks, New York State investment companies (through September 1996), and Edge Act and agreement corporations. Beginning 1988, data are adjusted for breaks caused by reclassifications of assets.

[2] Excludes Federal funds sold to, reverse repurchase agreements (RPs) with, and loans to commercial banks in the United States.

Note.—Data are not strictly comparable because of breaks in the series.

Source: Board of Governors of the Federal Reserve System.

Table B–71.—*Bond yields and interest rates, 1929–96*

[Percent per annum]

Year and month	U.S. Treasury securities: Bills (new issues)[1]: 3-month	U.S. Treasury securities: Bills (new issues)[1]: 6-month	U.S. Treasury securities: Constant maturities[2]: 3-year	U.S. Treasury securities: Constant maturities[2]: 10-year	U.S. Treasury securities: Constant maturities[2]: 30-year	Corporate bonds (Moody's): Aaa	Corporate bonds (Moody's): Baa	High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields[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]
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	[7]1.00	....
1943	.373	....	....	....	....	2.73	3.91	2.06	....	.69	1.50	[7]1.00	....
1944	.375	....	....	....	....	2.72	3.61	1.86	....	.73	1.50	[7]1.00	....
1945	.375	....	....	....	....	2.62	3.29	1.67	....	.75	1.50	[7]1.00	....
1946	.375	....	....	....	....	2.53	3.05	1.64	....	.81	1.50	[7]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	5.83	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	7.81	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	7.75	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	8.49	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	9.28	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	11.27	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	13.45	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	12.76	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	11.18	12.04	13.55	9.47	12.57	8.89	10.79	8.50	9.09
1984	9.58	9.80	11.89	12.44	12.41	12.71	14.19	10.15	12.38	10.16	12.04	8.80	10.23
1985	7.48	7.66	9.64	10.62	10.79	11.37	12.72	9.18	11.55	8.01	9.93	7.69	8.10
1986	5.98	6.03	7.06	7.68	7.78	9.02	10.39	7.38	10.17	6.39	8.33	6.33	6.81
1987	5.82	6.05	7.68	8.39	8.59	9.38	10.58	7.73	9.31	6.85	8.21	5.66	6.66
1988	6.69	6.92	8.26	8.85	8.96	9.71	10.83	7.76	9.19	7.68	9.32	6.20	7.57
1989	8.12	8.04	8.55	8.49	8.45	9.26	10.18	7.24	10.13	8.80	10.87	6.93	9.21
1990	7.51	7.47	8.26	8.55	8.61	9.32	10.36	7.25	10.05	7.95	10.01	6.98	8.10
1991	5.42	5.49	6.82	7.86	8.14	8.77	9.80	6.89	9.32	5.85	8.46	5.45	5.69
1992	3.45	3.57	5.30	7.01	7.67	8.14	8.98	6.41	8.24	3.80	6.25	3.25	3.52
1993	3.02	3.14	4.44	5.87	6.59	7.22	7.93	5.63	7.20	3.30	6.00	3.00	3.02
1994	4.29	4.66	6.27	7.09	7.37	7.97	8.63	6.19	7.49	4.93	7.15	3.60	4.21
1995	5.51	5.59	6.25	6.57	6.88	7.59	8.20	5.95	7.87	5.93	8.83	5.21	5.83
1996	5.02	5.09	5.99	6.44	6.71	7.37	8.05	5.75	7.80	5.42	8.27	5.02	5.30

[1] Rate on new issues within period; bank-discount basis.
[2] Yields on the more actively traded issues adjusted to constant maturities by the Department of the Treasury.
[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.

See next page for continuation of table.

TABLE B–71.—*Bond yields and interest rates, 1929–96*—Continued

[Percent per annum]

Year and month	U.S. Treasury securities: Bills (new issues)[1]: 3-month	U.S. Treasury securities: Bills (new issues)[1]: 6-month	U.S. Treasury securities: Constant maturities[2]: 3-year	U.S. Treasury securities: Constant maturities[2]: 10-year	U.S. Treasury securities: Constant maturities[2]: 30-year	Corporate bonds (Moody's): Aaa	Corporate bonds (Moody's): Baa	High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields[3]	Commercial paper, 6 months[4]	Prime rate charged by banks[5] (High-low)	Discount rate, Federal Reserve Bank of New York[5] (High-low)	Federal funds rate[6]
1992:													
Jan	3.84	3.88	5.40	7.03	7.58	8.20	9.13	6.41	8.49	4.06	6.50–6.50	3.50–3.50	4.03
Feb	3.84	3.94	5.72	7.34	7.85	8.29	9.23	6.67	8.65	4.13	6.50–6.50	3.50–3.50	4.06
Mar	4.05	4.19	6.18	7.54	7.97	8.35	9.25	6.69	8.51	4.38	6.50–6.50	3.50–3.50	3.98
Apr	3.81	3.93	5.93	7.48	7.96	8.33	9.21	6.64	8.58	4.13	6.50–6.50	3.50–3.50	3.73
May	3.66	3.78	5.81	7.39	7.89	8.28	9.13	6.57	8.59	3.97	6.50–6.50	3.50–3.50	3.82
June	3.70	3.81	5.60	7.26	7.84	8.22	9.05	6.50	8.43	3.99	6.50–6.50	3.50–3.50	3.76
July	3.28	3.36	4.91	6.84	7.60	8.07	8.84	6.12	8.00	3.53	6.50–6.00	3.50–3.00	3.25
Aug	3.14	3.23	4.72	6.59	7.39	7.95	8.65	6.08	8.00	3.44	6.00–6.00	3.00–3.00	3.30
Sept	2.97	3.01	4.42	6.42	7.34	7.92	8.62	6.24	7.93	3.26	6.00–6.00	3.00–3.00	3.22
Oct	2.84	2.98	4.64	6.59	7.53	7.99	8.84	6.43	7.90	3.33	6.00–6.00	3.00–3.00	3.10
Nov	3.14	3.35	5.14	6.87	7.61	8.10	8.96	6.35	8.07	3.67	6.00–6.00	3.00–3.00	3.09
Dec	3.25	3.39	5.21	6.77	7.44	7.98	8.81	6.24	7.88	3.70	6.00–6.00	3.00–3.00	2.92
1993:													
Jan	3.06	3.17	4.93	6.60	7.34	7.91	8.67	6.18	7.82	3.35	6.00–6.00	3.00–3.00	3.02
Feb	2.95	3.08	4.58	6.26	7.09	7.71	8.39	5.87	7.77	3.27	6.00–6.00	3.00–3.00	3.03
Mar	2.97	3.08	4.40	5.98	6.82	7.58	8.15	5.65	7.46	3.24	6.00–6.00	3.00–3.00	3.07
Apr	2.89	3.00	4.30	5.97	6.85	7.46	8.14	5.78	7.46	3.19	6.00–6.00	3.00–3.00	2.96
May	2.96	3.07	4.40	6.04	6.92	7.43	8.21	5.81	7.37	3.20	6.00–6.00	3.00–3.00	3.00
June	3.10	3.23	4.53	5.96	6.81	7.33	8.07	5.73	7.23	3.38	6.00–6.00	3.00–3.00	3.04
July	3.05	3.15	4.43	5.81	6.63	7.17	7.93	5.60	7.20	3.35	6.00–6.00	3.00–3.00	3.06
Aug	3.05	3.17	4.36	5.68	6.32	6.85	7.60	5.50	7.05	3.33	6.00–6.00	3.00–3.00	3.03
Sept	2.96	3.06	4.17	5.36	6.00	6.66	7.34	5.31	6.95	3.25	6.00–6.00	3.00–3.00	3.09
Oct	3.04	3.13	4.18	5.33	5.94	6.67	7.31	5.29	6.80	3.27	6.00–6.00	3.00–3.00	2.99
Nov	3.12	3.27	4.50	5.72	6.21	6.93	7.66	5.47	6.80	3.43	6.00–6.00	3.00–3.00	3.02
Dec	3.08	3.25	4.54	5.77	6.25	6.93	7.69	5.35	6.92	3.40	6.00–6.00	3.00–3.00	2.96
1994:													
Jan	3.02	3.19	4.48	5.75	6.29	6.92	7.65	5.30	6.95	3.30	6.00–6.00	3.00–3.00	3.05
Feb	3.21	3.38	4.83	5.97	6.49	7.08	7.76	5.44	6.85	3.62	6.00–6.00	3.00–3.00	3.25
Mar	3.52	3.79	5.40	6.48	6.91	7.48	8.13	5.93	6.99	4.08	6.00–6.25	3.00–3.00	3.34
Apr	3.74	4.13	5.99	6.97	7.27	7.88	8.52	6.28	7.31	4.40	6.25–6.75	3.00–3.00	3.56
May	4.19	4.64	6.34	7.18	7.41	7.99	8.62	6.26	7.43	4.92	6.75–7.25	3.00–3.50	4.01
June	4.18	4.58	6.27	7.10	7.40	7.97	8.65	6.14	7.62	4.86	7.25–7.25	3.50–3.50	4.25
July	4.39	4.81	6.48	7.30	7.58	8.11	8.80	6.19	7.71	5.13	7.25–7.25	3.50–3.50	4.26
Aug	4.50	4.91	6.50	7.24	7.49	8.07	8.74	6.19	7.67	5.19	7.25–7.75	3.50–4.00	4.47
Sept	4.64	5.02	6.69	7.46	7.71	8.34	8.98	6.33	7.70	5.32	7.75–7.75	4.00–4.00	4.73
Oct	4.96	5.39	7.04	7.74	7.94	8.57	9.20	6.50	7.76	5.70	7.75–7.75	4.00–4.00	4.76
Nov	5.25	5.69	7.44	7.96	8.08	8.68	9.32	6.96	7.81	6.01	7.75–8.50	4.00–4.75	5.29
Dec	5.64	6.21	7.71	7.81	7.87	8.46	9.10	6.76	7.83	6.62	8.50–8.50	4.75–4.75	5.45
1995:													
Jan	5.81	6.31	7.66	7.78	7.85	8.46	9.08	6.53	8.18	6.63	8.50–8.50	4.75–4.75	5.53
Feb	5.80	6.10	7.25	7.47	7.61	8.26	8.85	6.24	8.28	6.38	8.50–9.00	4.75–5.25	5.92
Mar	5.73	5.91	6.89	7.20	7.45	8.12	8.70	6.10	8.21	6.30	9.00–9.00	5.25–5.25	5.98
Apr	5.67	5.80	6.68	7.06	7.36	8.03	8.60	6.01	8.15	6.19	9.00–9.00	5.25–5.25	6.05
May	5.70	5.73	6.27	6.63	6.95	7.65	8.20	5.90	7.99	6.07	9.00–9.00	5.25–5.25	6.01
June	5.50	5.46	5.80	6.17	6.57	7.30	7.90	5.83	7.73	5.79	9.00–9.00	5.25–5.25	6.00
July	5.47	5.41	5.89	6.28	6.72	7.41	8.04	5.98	7.78	5.68	9.00–8.75	5.25–5.25	5.85
Aug	5.41	5.40	6.10	6.49	6.86	7.57	8.19	6.07	7.75	5.75	8.75–8.75	5.25–5.25	5.74
Sept	5.26	5.28	5.89	6.20	6.55	7.32	7.93	5.88	7.69	5.66	8.75–8.75	5.25–5.25	5.80
Oct	5.30	5.34	5.77	6.04	6.37	7.12	7.75	5.77	7.58	5.71	8.75–8.75	5.25–5.25	5.76
Nov	5.35	5.29	5.57	5.93	6.26	7.02	7.68	5.61	7.46	5.59	8.75–8.75	5.25–5.25	5.80
Dec	5.16	5.15	5.39	5.71	6.06	6.82	7.49	5.42	7.40	5.43	8.75–8.50	5.25–5.25	5.60
1996:													
Jan	5.02	4.97	5.20	5.65	6.05	6.81	7.47	5.42	7.32	5.23	8.50–8.50	5.25–5.00	5.56
Feb	4.87	4.79	5.14	5.81	6.24	6.99	7.63	5.45	7.20	4.99	8.50–8.25	5.00–5.00	5.22
Mar	4.96	4.96	5.79	6.27	6.60	7.35	8.03	5.82	7.49	5.26	8.25–8.25	5.00–5.00	5.31
Apr	4.99	5.08	6.11	6.51	6.79	7.50	8.19	5.93	7.76	5.38	8.25–8.25	5.00–5.00	5.22
May	5.02	5.12	6.27	6.74	6.93	7.62	8.30	5.98	7.80	5.42	8.25–8.25	5.00–5.00	5.24
June	5.11	5.26	6.49	6.91	7.06	7.71	8.40	6.03	8.05	5.57	8.25–8.25	5.00–5.00	5.27
July	5.17	5.32	6.45	6.87	7.03	7.65	8.35	5.91	8.01	5.67	8.25–8.25	5.00–5.00	5.40
Aug	5.09	5.17	6.21	6.64	6.84	7.46	8.18	5.72	8.08	5.51	8.25–8.25	5.00–5.00	5.22
Sept	5.15	5.29	6.41	6.83	7.03	7.66	8.35	5.86	7.98	5.66	8.25–8.25	5.00–5.00	5.30
Oct	5.01	5.12	6.08	6.53	6.81	7.39	8.07	5.71	7.95	5.45	8.25–8.25	5.00–5.00	5.24
Nov	5.03	5.07	5.82	6.20	6.48	7.10	7.79	5.59	7.80	5.40	8.25–8.25	5.00–5.00	5.31
Dec	4.87	5.02	5.91	6.30	6.55	7.20	7.89	5.62	7.79	5.44	8.25–8.25	5.00–5.00	5.29

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Housing Finance Board, Moody's Investors Service, and Standard & Poor's Corporation.

TABLE B–72.—*Credit market borrowing, 1987–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	1987	1988	1989	1990	1991	1992	1993	1994	1995
NONFINANCIAL SECTORS									
DOMESTIC	734.0	776.5	719.1	669.8	481.7	543.0	627.0	621.2	720.4
FEDERAL GOVERNMENT	143.9	155.1	146.4	246.9	278.2	304.0	256.1	155.9	144.4
Treasury securities	142.4	137.7	144.7	238.7	292.0	303.8	248.3	155.7	142.9
Budget agency securities and mortgages	1.5	17.4	1.6	8.2	–13.8	.2	7.8	.2	1.5
NONFEDERAL, BY INSTRUMENT	590.1	621.4	572.7	422.9	203.5	239.0	370.9	465.4	576.0
Commercial paper	1.6	11.9	21.4	9.7	–18.4	8.6	10.0	21.4	18.1
Municipal securities and loans	91.6	59.3	52.9	49.3	87.8	30.5	74.8	–29.3	–44.2
Corporate bonds	78.8	103.1	73.8	47.1	78.8	67.6	75.2	23.3	73.3
Bank loans n.e.c.	10.8	33.9	27.8	.4	–40.9	–13.7	3.6	73.2	99.6
Other loans and advances	43.8	55.6	58.5	68.1	–48.5	10.1	–9.4	54.4	59.0
Mortgages	330.3	298.8	293.7	232.4	158.4	130.9	155.2	196.0	228.6
Home	247.6	229.3	235.2	226.3	173.6	187.6	185.8	203.9	196.9
Multifamily residential	16.9	17.7	10.6	1.5	–5.5	–10.4	–6.0	1.7	10.5
Commercial	73.3	56.5	50.3	6.1	–10.0	–47.8	–25.0	–11.3	19.5
Farm	–7.4	–4.8	–2.5	–1.6	.4	1.4	.5	1.8	1.6
Consumer credit	33.2	58.8	44.5	16.1	–13.7	5.0	61.5	126.3	141.6
NONFEDERAL, BY SECTOR	590.1	621.4	572.7	422.9	203.5	239.0	370.9	465.4	576.0
Household sector	306.8	267.9	268.2	264.1	183.8	198.3	255.9	372.4	383.1
Nonfinancial business	192.2	299.0	253.4	112.2	–61.9	19.5	52.7	136.4	241.5
Corporate	148.7	225.0	183.2	110.0	–53.0	34.1	46.5	121.7	205.1
Nonfarm noncorporate	55.2	84.2	69.6	1.1	–11.0	–16.0	4.2	11.9	34.8
Farm	–11.6	–10.2	.6	1.0	2.1	1.3	2.0	2.8	1.6
State and local governments	91.1	54.5	51.1	46.6	81.6	21.1	62.3	–43.4	–48.6
FOREIGN BORROWING IN THE UNITED STATES	6.3	7.5	10.2	23.9	14.8	23.7	70.4	–15.3	69.5
Commercial paper	3.8	8.7	13.1	12.3	6.4	5.2	–9.0	–27.3	13.6
Bonds	7.4	6.9	4.9	21.4	15.0	16.8	82.9	12.2	48.3
Bank loans n.e.c.	–3.6	–1.8	–.1	–2.9	3.1	2.3	.7	1.4	8.5
Other loans and advances	–1.4	–6.4	–7.6	–7.0	–9.8	–.6	–4.2	–1.6	–.8
NONFINANCIAL DOMESTIC AND FOREIGN BORROWING	740.2	784.0	729.2	693.7	496.5	566.7	697.4	606.0	789.9
FINANCIAL SECTORS									
BY INSTRUMENT	291.6	249.2	225.0	211.4	155.6	240.0	292.2	466.7	446.7
Federal Government related	168.3	119.8	149.5	167.4	145.7	155.8	165.3	287.5	205.1
Government-sponsored enterprises securities	30.2	44.9	25.2	17.1	9.2	40.3	80.6	176.9	106.9
Mortgage pool securities	138.8	74.9	124.3	150.3	136.6	115.6	84.7	115.4	98.2
U.S. Government loans	–.8	.0	.0	–.1	.0	.0	.0	–4.8	.0
Private financial sectors	123.3	129.5	75.5	44.0	9.8	84.2	126.9	179.2	241.6
Open market paper	26.9	54.8	31.3	8.6	–32.0	–.7	–6.2	41.6	42.6
Corporate bonds	78.6	52.2	40.8	54.0	69.9	82.7	120.1	117.5	184.7
Bank loans n.e.c.	–8.3	2.7	13.5	4.7	8.8	2.2	–13.0	–12.3	5.5
Other loans and advances	25.8	19.4	–10.5	–23.9	–37.3	–.6	22.4	22.6	3.4
Mortgages	.3	.3	.3	.6	.5	.6	3.6	9.8	5.3
BY SECTOR	291.6	249.2	225.0	211.4	155.6	240.0	292.2	466.7	446.7
Commercial banking	21.5	2.0	5.2	–26.8	–13.2	10.0	13.4	20.1	22.5
Savings institutions	28.7	21.6	–15.0	–30.9	–44.7	–7.0	11.3	12.8	2.6
Government-sponsored enterprises	29.5	44.9	25.2	17.0	9.1	40.2	80.6	172.1	106.9
Federally related mortgage pools	138.8	74.9	124.3	150.3	136.6	115.6	84.7	115.4	98.2
Asset-backed securities issuers	49.9	37.6	27.7	60.3	54.0	58.5	83.3	68.5	132.3
Finance companies	23.2	23.9	27.4	23.8	17.7	–1.6	.2	50.2	51.6
Funding corporations	9.7	38.0	12.5	15.4	–6.5	13.2	2.9	24.2	32.0
Other [1]	–9.7	6.3	17.7	2.3	2.5	11.1	15.9	3.3	.7
ALL SECTORS									
BY INSTRUMENT	1,031.8	1,033.2	954.3	905.1	652.1	806.6	989.6	1,072.7	1,236.5
Open market paper	32.3	75.4	65.9	30.7	–44.0	13.1	–5.1	35.7	74.3
U.S. Government securities	312.9	274.9	295.8	414.4	424.0	459.8	421.4	448.1	349.5
Municipal securities and loans	91.6	59.3	52.9	49.3	87.8	30.5	74.8	–29.3	–44.2
Corporate and foreign bonds	164.7	162.2	119.5	122.5	163.6	167.1	278.2	153.0	306.3
Bank loans n.e.c.	–1.1	34.8	41.2	2.2	–29.1	–9.3	–8.6	62.3	113.5
Other loans and advances	67.5	68.6	40.5	37.1	–95.6	8.9	8.7	70.7	61.6
Mortgages	330.6	299.1	294.0	233.0	158.9	131.5	158.8	205.8	233.9
Consumer credit	33.2	58.8	44.5	16.1	–13.7	5.0	61.5	126.3	141.6

[1] Credit unions, life insurance companies, mortgage companies, real estate investment trusts, and brokers and dealers.

See next page for continuation of table.

TABLE B–72.—*Credit market borrowing, 1987–96*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	1995				1996		
	I	II	III	IV	I	II	III
NONFINANCIAL SECTORS							
DOMESTIC	845.7	866.0	578.7	591.4	874.5	693.7	670.4
FEDERAL GOVERNMENT	247.8	184.7	86.0	59.3	239.9	62.4	161.3
Treasury securities	249.0	183.1	85.6	54.1	242.2	60.2	164.4
Budget agency securities and mortgages	−1.2	1.6	.4	5.1	−2.3	2.2	−3.1
NONFEDERAL, BY INSTRUMENT	597.9	681.3	492.7	532.1	634.6	631.3	509.1
Commercial paper	6.0	34.3	18.1	14.1	30.1	10.7	−16.5
Municipal securities and loans	−54.9	−2.2	−107.2	−12.6	−14.2	36.9	−76.2
Corporate bonds	53.0	98.4	59.8	82.0	60.9	71.5	73.8
Bank loans n.e.c.	145.5	99.1	75.3	78.5	29.8	78.8	132.9
Other loans and advances	82.5	57.3	35.2	61.0	32.9	26.9	56.9
Mortgages	228.2	239.5	255.0	191.7	363.6	318.7	268.0
Home	209.9	190.8	227.9	159.1	319.1	248.8	224.2
Multifamily residential	6.6	10.9	11.3	13.3	13.8	18.4	14.7
Commercial	10.0	36.1	13.7	18.2	28.4	46.1	26.0
Farm	1.7	1.7	2.2	1.1	2.4	5.3	3.2
Consumer credit	137.6	155.0	156.4	117.5	131.5	87.8	70.2
NONFEDERAL, BY SECTOR	597.9	681.3	492.7	532.1	634.6	631.3	509.1
Household sector	382.3	389.9	424.6	335.6	461.0	398.4	329.7
Nonfinancial business	269.8	300.4	178.4	217.4	186.2	202.7	255.9
Corporate	230.4	268.3	140.5	181.3	139.8	158.4	215.9
Nonfarm noncorporate	38.5	29.1	34.4	37.1	46.3	37.2	41.6
Farm	.8	3.0	3.5	−1.0	.1	7.1	−1.5
State and local governments	−54.2	−9.0	−110.3	−20.9	−12.5	30.1	−76.5
FOREIGN BORROWING IN THE UNITED STATES	67.1	45.5	88.3	76.9	49.2	36.6	105.8
Commercial paper	43.2	−8.7	23.7	−3.9	−8.4	9.6	38.6
Bonds	13.9	51.2	55.2	72.7	47.9	11.1	59.4
Bank loans n.e.c.	8.1	5.6	8.2	11.9	8.7	15.1	4.7
Other loans and advances	1.9	−2.6	1.3	−3.9	1.1	.7	3.1
NONFINANCIAL DOMESTIC AND FOREIGN BORROWING	912.8	911.4	667.0	668.3	923.7	730.3	776.3
FINANCIAL SECTORS							
BY INSTRUMENT	267.7	439.9	507.0	572.0	330.3	687.5	453.7
Federal Government related	86.7	196.5	227.7	309.5	143.8	302.0	244.4
Government-sponsored enterprises securities	62.9	127.2	101.5	136.1	37.4	132.9	84.0
Mortgage pool securities	23.8	69.3	126.2	173.4	106.5	169.1	160.4
U.S. Government loans	.0	.0	.0	.0	.0	.0	.0
Private financial sectors	181.0	243.4	279.3	262.5	186.5	385.5	209.3
Open market paper	37.6	33.9	43.7	55.1	17.8	105.7	85.2
Corporate bonds	167.6	182.3	217.6	171.6	143.8	201.8	74.7
Bank loans n.e.c.	−5.0	20.7	7.9	−1.8	24.9	23.6	9.6
Other loans and advances	−24.5	1.3	4.9	32.0	−5.5	48.6	33.9
Mortgages	5.2	5.2	5.2	5.6	5.5	5.8	5.8
BY SECTOR	267.7	439.9	507.0	572.0	330.3	687.5	453.7
Commercial banking	21.7	39.0	38.9	−9.7	−32.6	40.1	11.1
Savings institutions	−18.9	−7.2	5.1	31.5	11.0	42.1	31.2
Government-sponsored enterprises	62.9	127.2	101.5	136.1	37.4	132.9	84.0
Federally related mortgage pools	23.8	69.3	126.2	173.4	106.5	169.1	160.4
Asset-backed securities issuers	67.6	113.2	164.8	183.5	132.8	128.2	86.2
Finance companies	80.2	52.0	19.8	54.3	47.1	68.4	30.9
Funding corporations	62.5	26.4	39.4	−.4	31.6	70.9	35.0
Other [1]	−32.0	20.0	11.3	3.4	−3.4	35.8	14.9
ALL SECTORS							
BY INSTRUMENT	1,180.5	1,351.3	1,174.0	1,240.3	1,254.0	1,417.8	1,229.9
Open market paper	86.8	59.5	85.5	65.3	39.5	126.0	107.3
U.S. Government securities	334.5	381.1	313.7	368.8	383.7	364.4	405.7
Municipal securities and loans	−54.9	−2.2	−107.2	−12.6	−14.2	36.9	−76.2
Corporate and foreign bonds	234.5	331.9	332.5	326.3	252.5	284.5	207.9
Bank loans n.e.c.	148.7	125.4	91.4	88.6	63.3	117.5	147.1
Other loans and advances	59.8	56.0	41.3	89.2	28.6	76.2	94.0
Mortgages	233.4	244.7	260.3	197.2	369.1	324.5	273.9
Consumer credit	137.6	155.0	156.4	117.5	131.5	87.8	70.2

Source: Board of Governors of the Federal Reserve System.

TABLE B–73.—*Mortgage debt outstanding by type of property and of financing, 1940–96*

[Billions of dollars]

End of year or quarter	All properties	Farm properties	Nonfarm properties				Nonfarm properties by type of mortgage					
							Government underwritten				Conventional [2]	
								1- to 4-family houses				
			Total	1- to 4-family houses	Multifamily properties	Commercial properties	Total [1]	Total	FHA insured	VA guaranteed	Total	1- to 4-family houses
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	411.1	27.5	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
1969	441.6	29.4	412.2	283.2	52.2	76.9	100.2	90.2	54.5	35.7	312.0	193.0
1970	473.7	30.5	443.2	297.4	60.1	85.6	109.2	97.3	59.9	37.3	333.9	200.2
1971	524.2	32.4	491.8	325.9	70.1	95.9	120.7	105.2	65.7	39.5	371.1	220.7
1972	597.4	35.4	562.0	366.5	82.8	112.7	131.1	113.0	68.2	44.7	430.9	253.5
1973	672.6	39.8	632.8	407.9	93.1	131.7	135.0	116.2	66.2	50.0	497.7	291.7
1974	732.5	44.9	687.5	440.7	100.0	146.9	140.2	121.3	65.1	56.2	547.3	319.4
1975	791.9	49.9	742.0	482.1	100.6	159.3	147.0	127.7	66.1	61.6	595.0	354.3
1976	878.6	55.4	823.2	546.3	105.7	171.2	154.1	133.5	66.5	67.0	669.0	412.8
1977	1,010.3	63.9	946.4	642.7	114.0	189.7	161.7	141.6	68.0	73.6	784.6	501.0
1978	1,163.0	72.8	1,090.2	753.5	124.9	211.8	176.4	153.4	71.4	82.0	913.9	600.2
1979	1,328.4	86.8	1,241.7	870.5	134.9	236.3	199.0	172.9	81.0	92.0	1,042.7	697.6
1980	1,463.0	97.5	1,365.5	969.0	141.0	255.5	225.1	195.2	93.6	101.6	1,140.4	773.9
1981	1,572.8	107.2	1,465.5	1,049.1	138.9	277.5	238.9	207.6	101.3	106.2	1,226.7	841.5
1982	1,650.7	111.3	1,539.3	1,096.4	140.8	302.2	248.9	217.9	108.0	109.9	1,290.5	878.5
1983	1,841.9	113.7	1,728.2	1,219.4	154.0	354.8	279.8	248.8	127.4	121.4	1,448.4	970.5
1984	2,071.1	112.4	1,958.7	1,360.4	177.0	421.4	294.8	265.9	136.7	129.1	1,663.9	1,094.5
1985	2,334.2	105.9	2,228.3	1,535.7	205.3	487.3	328.3	288.8	153.0	135.8	1,900.0	1,246.9
1986	2,635.1	95.2	2,539.9	1,741.7	238.5	559.7	370.5	328.6	185.5	143.1	2,169.4	1,413.1
1987	2,985.3	87.7	2,897.6	1,976.5	260.9	660.2	431.4	387.9	235.5	152.4	2,466.1	1,588.6
1988	3,280.3	83.0	3,197.3	2,217.4	277.5	702.4	459.7	414.2	258.8	155.4	2,737.7	1,803.3
1989	3,582.1	80.5	3,501.7	2,459.5	288.5	753.7	486.8	440.1	282.8	157.3	3,014.8	2,019.4
1990	3,802.3	78.9	3,723.4	2,674.8	289.8	758.8	517.9	470.9	310.9	160.0	3,205.5	2,203.9
1991	3,960.2	79.3	3,880.9	2,848.2	284.4	748.3	537.2	493.3	330.6	162.7	3,343.7	2,354.9
1992	4,091.8	80.7	4,011.1	3,036.3	274.2	700.6	533.3	489.8	326.0	163.8	3,477.8	2,546.5
1993	4,266.9	81.2	4,185.7	3,225.5	270.8	689.4	513.4	469.5	303.2	166.2	3,672.3	2,756.1
1994	4,472.7	83.0	4,389.7	3,429.4	275.7	684.6	559.3	514.2	336.8	177.3	3,830.4	2,915.2
1995	4,706.6	84.6	4,622.0	3,626.3	288.0	707.7	584.3	537.1	352.3	184.7	4,037.7	3,089.3
1994: I	4,299.8	81.3	4,218.5	3,263.2	271.5	683.8	521.2	476.7	309.7	167.0	3,697.3	2,786.5
II	4,358.5	82.1	4,276.4	3,316.8	273.6	686.1	533.5	488.8	318.8	170.0	3,742.9	2,827.9
III	4,417.9	82.6	4,335.3	3,374.3	276.2	684.7	551.1	506.2	331.9	174.3	3,784.2	2,868.1
IV	4,472.7	83.0	4,389.7	3,429.4	275.7	684.6	559.3	514.2	336.8	177.3	3,830.4	2,915.2
1995: I	4,514.2	83.4	4,430.8	3,465.0	277.8	688.0	565.4	520.3	341.7	178.6	3,865.4	2,944.7
II	4,581.6	83.8	4,497.8	3,519.0	280.9	697.9	571.3	525.8	345.5	180.3	3,926.6	2,993.2
III	4,657.9	84.4	4,573.5	3,587.1	284.2	702.2	578.4	531.0	348.5	182.5	3,995.2	3,056.1
IV	4,706.6	84.6	4,622.0	3,626.3	288.0	707.7	584.3	537.1	352.3	184.7	4,037.7	3,089.3
1996: I	4,782.0	85.2	4,696.8	3,689.2	291.9	715.7	592.3	544.3	357.2	187.2	4,104.5	3,144.8
II	4,869.4	86.5	4,782.9	3,757.7	297.0	728.2	599.5	551.9	362.5	189.3	4,183.4	3,205.8
III *p*	4,949.1	87.3	4,861.7	3,824.9	301.1	735.7	611.0	562.4	370.3	192.0	4,250.8	3,262.6

[1] Includes FHA insured multifamily properties, not shown separately.
[2] Derived figures. Total includes commercial properties, and multifamily properties, not shown separately.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B–74.—*Mortgage debt outstanding by holder, 1940–96*

[Billions of dollars]

End of year or quarter	Total	Major financial institutions: Total	Savings institutions[1]	Commercial banks[2]	Life insurance companies	Other holders: Federal and related agencies[3]	Individuals and others[4]
1940	36.5	19.5	9.0	4.6	6.0	4.9	12.0
1941	37.6	20.7	9.4	4.9	6.4	4.7	12.2
1942	36.7	20.7	9.2	4.7	6.7	4.3	11.7
1943	35.3	20.2	9.0	4.5	6.7	3.6	11.5
1944	34.7	20.2	9.1	4.4	6.7	3.0	11.5
1945	35.5	21.0	9.6	4.8	6.6	2.4	12.1
1946	41.8	26.0	11.5	7.2	7.2	2.0	13.8
1947	48.9	31.8	13.8	9.4	8.7	1.8	15.3
1948	56.2	37.8	16.1	10.9	10.8	1.8	16.6
1949	62.7	42.9	18.3	11.6	12.9	2.3	17.5
1950	72.8	51.7	21.9	13.7	16.1	2.8	18.4
1951	82.3	59.5	25.5	14.7	19.3	3.5	19.3
1952	91.4	66.9	29.8	15.9	21.3	4.1	20.4
1953	101.3	75.1	34.9	16.9	23.3	4.6	21.7
1954	113.7	85.7	41.1	18.6	26.0	4.8	23.2
1955	129.9	99.3	48.9	21.0	29.4	5.3	25.3
1956	144.5	111.2	55.5	22.7	33.0	6.2	27.1
1957	156.5	119.7	61.2	23.3	35.2	7.7	29.1
1958	171.8	131.5	68.9	25.5	37.1	8.0	32.3
1959	190.8	145.5	78.1	28.1	39.2	10.2	35.1
1960	207.5	157.6	87.0	28.8	41.8	11.5	38.4
1961	228.0	172.6	98.0	30.4	44.2	12.2	43.1
1962	251.4	192.5	111.1	34.5	46.9	12.6	46.3
1963	278.5	217.1	127.2	39.4	50.5	11.8	49.5
1964	305.9	241.0	141.9	44.0	55.2	12.2	52.7
1965	333.3	264.6	154.9	49.7	60.0	13.5	55.2
1966	356.5	280.8	161.8	54.4	64.6	17.5	58.2
1967	381.2	298.8	172.3	59.0	67.5	20.9	61.4
1968	411.1	319.9	184.3	65.7	70.0	25.1	66.1
1969	441.6	339.1	196.4	70.7	72.0	31.1	71.4
1970	473.7	355.9	208.3	73.3	74.4	38.3	79.4
1971	524.2	394.2	236.2	82.5	75.5	46.4	83.6
1972	597.4	450.0	273.7	99.3	76.9	54.6	92.8
1973	672.6	505.4	305.0	119.1	81.4	64.8	102.4
1974	732.5	542.6	324.2	132.1	86.2	82.2	107.7
1975	791.9	581.2	355.8	136.2	89.2	101.1	109.6
1976	878.6	647.5	404.6	151.3	91.6	116.7	114.4
1977	1,010.3	745.2	469.4	179.0	96.8	140.5	124.6
1978	1,163.0	848.2	528.0	214.0	106.2	170.6	144.3
1979	1,328.4	938.2	574.6	245.2	118.4	216.0	174.3
1980	1,463.0	996.8	603.1	262.7	131.1	256.8	209.4
1981	1,572.8	1,040.5	618.5	284.2	137.7	289.4	242.9
1982	1,650.7	1,021.3	578.1	301.3	142.0	355.4	273.9
1983	1,841.9	1,108.2	626.7	330.5	151.0	433.4	300.3
1984	2,071.1	1,245.9	709.7	379.5	156.7	490.6	334.6
1985	2,334.2	1,361.5	760.5	429.2	171.8	581.9	390.8
1986	2,635.1	1,474.3	778.0	502.5	193.8	733.7	427.0
1987	2,985.3	1,665.3	860.5	592.4	212.4	858.9	461.1
1988	3,280.3	1,831.5	924.6	674.0	232.9	937.8	511.1
1989	3,582.1	1,931.5	910.3	767.1	254.2	1,067.3	583.3
1990	3,802.3	1,914.3	801.6	844.8	267.9	1,258.9	629.1
1991	3,960.2	1,846.7	705.4	876.1	265.3	1,422.6	690.9
1992	4,091.8	1,769.2	628.0	894.5	246.7	1,558.3	764.3
1993	4,266.9	1,768.1	598.4	940.6	229.1	1,683.8	815.1
1994	4,472.7	1,815.8	596.2	1,004.3	215.3	1,791.5	865.4
1995	4,706.6	1,889.0	596.8	1,080.4	211.8	1,884.1	933.6
1994: I	4,299.8	1,746.7	584.5	938.2	224.0	1,727.0	826.2
II	4,358.5	1,763.3	585.7	957.0	220.7	1,759.9	835.3
III	4,417.9	1,786.2	587.5	981.5	217.2	1,781.1	850.6
IV	4,472.7	1,815.8	596.2	1,004.3	215.3	1,791.5	865.4
1995: I	4,514.2	1,842.0	601.8	1,025.0	215.2	1,796.1	876.1
II	4,581.6	1,868.2	599.7	1,053.2	215.4	1,812.0	901.4
III	4,657.9	1,895.4	604.6	1,072.8	217.9	1,841.0	921.6
IV	4,706.6	1,889.0	596.8	1,080.4	211.8	1,884.1	933.6
1996: I	4,782.0	1,901.5	602.6	1,087.2	211.7	1,912.7	967.8
II	4,869.4	1,925.0	612.9	1,099.6	212.6	1,958.1	986.3
III *p*	4,949.1	1,951.8	628.0	1,113.0	210.8	1,990.9	1,006.3

[1] Includes savings banks and savings and loan associations. Data reported by Federal Savings and Loan Insurance Corporation-insured institutions include loans in process for 1987 and exclude loans in process beginning 1988.

[2] Includes loans held by nondeposit trust companies, but not by bank trust departments.

[3] Includes Government National Mortgage Association (GNMA), Federal Housing Administration, Veterans Administration, Farmers Home Administration (FmHA), Federal Deposit Insurance Corporation, Resolution Trust Corporation (through 1995), and in earlier years Reconstruction Finance Corporation, Homeowners Loan Corporation, Federal Farm Mortgage Corporation, and Public Housing Administration. Also includes U.S.-sponsored agencies such as Federal National Mortgage Association (FNMA), Federal Land Banks, Federal Home Loan Mortgage Corporation (FHLMC), and mortgage pass-through securities issued or guaranteed by GNMA, FHLMC, FNMA or FmHA. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

[4] Includes private mortgage pools.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B–75.—*Consumer credit outstanding, 1955–96*

[Amount outstanding (end of month); billions of dollars, seasonally adjusted]

Year and month	Total consumer credit [1]	Automobile	Revolving [2]	Other [3]
December:				
1955	41.9	13.5	....	28.4
1956	45.4	14.5	....	30.9
1957	48.1	15.5	....	32.6
1958	48.3	14.3	....	34.1
1959	55.9	16.6	....	39.3
1960	60.0	18.1	....	41.9
1961	62.2	17.7	....	44.5
1962	68.1	20.0	....	48.1
1963	76.6	22.9	....	53.7
1964	86.0	25.9	....	60.1
1965	96.0	29.4	....	66.6
1966	101.9	31.0	....	70.8
1967	106.9	31.1	....	75.7
1968	117.4	34.4	2.0	81.0
1969	127.1	36.9	3.6	86.6
1970	131.5	36.3	4.9	90.2
1971	146.9	40.5	8.3	98.1
1972	166.1	47.8	9.4	108.9
1973	190.0	53.7	11.3	124.9
1974	198.8	54.2	13.2	131.3
1975	203.6	56.8	14.5	132.3
1976	224.8	65.9	16.6	142.3
1977	257.5	79.0	36.7	141.8
1978	302.1	95.8	45.2	161.0
1979	343.5	108.7	53.4	181.5
1980	350.1	112.0	55.1	183.0
1981	367.6	119.8	61.1	186.7
1982	384.6	127.5	66.5	190.7
1983	433.7	146.2	79.1	208.4
1984	512.8	175.3	100.3	237.2
1985	584.7	210.9	122.1	251.7
1986	638.9	247.2	136.0	255.7
1987	671.7	266.1	153.3	252.4
1988 [4]	729.9	285.5	174.5	269.9
1989	781.9	291.0	198.6	292.3
1990	796.4	282.4	223.3	290.7
1991	781.1	259.3	245.8	276.1
1992	784.9	257.1	257.8	269.9
1993	844.1	279.8	287.0	277.3
1994	966.5	317.2	339.3	309.9
1995	1,103.3	350.8	413.9	338.6
1995: Jan	978.1	320.1	346.2	311.8
Feb	984.3	322.3	352.3	309.7
Mar	999.7	325.0	359.5	315.1
Apr	1,010.7	326.8	363.8	320.1
May	1,024.4	330.2	371.8	322.4
June	1,037.0	332.6	378.8	325.6
July	1,047.5	336.9	382.2	328.4
Aug	1,059.9	339.2	390.1	330.6
Sept	1,074.7	341.0	399.5	334.2
Oct	1,082.7	344.1	404.6	334.0
Nov	1,094.4	347.2	407.4	339.7
Dec	1,103.3	350.8	413.9	338.6
1996: Jan	1,113.5	352.9	419.0	341.6
Feb	1,125.0	355.8	425.7	343.5
Mar	1,136.2	358.6	431.3	346.2
Apr	1,144.2	361.2	437.9	345.2
May	1,150.8	362.3	443.5	345.1
June	1,156.7	367.7	445.1	343.9
July	1,170.4	374.3	452.1	344.0
Aug	1,176.8	374.9	454.6	347.2
Sept	1,176.7	376.2	455.4	345.1
Oct	1,183.2	377.2	456.8	349.2
Nov *p*	1,190.6	377.7	460.0	352.8

[1] 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. Credit secured by real estate is excluded.

[2] Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Excludes 30-day charge credit held by travel and entertainment companies. Prior to 1968, included in "other." 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] Includes mobile home loans and all other loans not included in automobile or revolving credit, such as loans for education, boats, trailers, or vacations. Includes all noninstallment credit. These loans may be secured or unsecured.

[4] Data newly available in January 1989 result in breaks in many series between December 1988 and subsequent months.

Source: Board of Governors of the Federal Reserve System.

TABLE B–76.—*Federal receipts, outlays, surplus or deficit, and debt, selected fiscal years, 1929–98*

[Billions of dollars; fiscal years]

Fiscal year or period	Total			On-budget			Off-budget			Federal debt (end of period)		Addendum: Gross domestic product
	Receipts	Outlays	Surplus or deficit (–)	Receipts	Outlays	Surplus or deficit (–)	Receipts	Outlays	Surplus or deficit (–)	Gross Federal	Held by the public	
1929	3.9	3.1	0.7	3.9	3.1	0.7	....	....	....	[1] 16.9	....	....
1933	2.0	4.6	–2.6	2.0	4.6	–2.6	....	....	....	[1] 22.5	....	58.2
1939	6.3	9.1	–2.8	5.8	9.2	–3.4	0.5	–0.0	0.5	48.2	41.4	90.1
1940	6.5	9.5	–2.9	6.0	9.5	–3.5	.6	–.0	.6	50.7	42.8	97.8
1941	8.7	13.7	–4.9	8.0	13.6	–5.6	.7	.0	.7	57.5	48.2	115.4
1942	14.6	35.1	–20.5	13.7	35.1	–21.3	.9	.1	.8	79.2	67.8	145.3
1943	24.0	78.6	–54.6	22.9	78.5	–55.6	1.1	.1	1.0	142.6	127.8	179.8
1944	43.7	91.3	–47.6	42.5	91.2	–48.7	1.3	.1	1.2	204.1	184.8	206.7
1945	45.2	92.7	–47.6	43.8	92.6	–48.7	1.3	.1	1.2	260.1	235.2	217.4
1946	39.3	55.2	–15.9	38.1	55.0	–17.0	1.2	.2	1.0	271.0	241.9	217.8
1947	38.5	34.5	4.0	37.1	34.2	2.9	1.5	.3	1.2	257.1	224.3	228.5
1948	41.6	29.8	11.8	39.9	29.4	10.5	1.6	.4	1.2	252.0	216.3	253.5
1949	39.4	38.8	.6	37.7	38.4	–.7	1.7	.4	1.3	252.6	214.3	269.5
1950	39.4	42.6	–3.1	37.3	42.0	–4.7	2.1	.5	1.6	256.9	219.0	272.6
1951	51.6	45.5	6.1	48.5	44.2	4.3	3.1	1.3	1.8	255.3	214.3	321.0
1952	66.2	67.7	–1.5	62.6	66.0	–3.4	3.6	1.7	1.9	259.1	214.8	349.2
1953	69.6	76.1	–6.5	65.5	73.8	–8.3	4.1	2.3	1.8	266.0	218.4	372.4
1954	69.7	70.9	–1.2	65.1	67.9	–2.8	4.6	2.9	1.7	270.8	224.5	377.1
1955	65.5	68.4	–3.0	60.4	64.5	–4.1	5.1	4.0	1.1	274.4	226.6	395.5
1956	74.6	70.6	3.9	68.2	65.7	2.5	6.4	5.0	1.5	272.7	222.2	426.6
1957	80.0	76.6	3.4	73.2	70.6	2.6	6.8	6.0	.8	272.3	219.3	449.9
1958	79.6	82.4	–2.8	71.6	74.9	–3.3	8.0	7.5	.5	279.7	226.3	458.8
1959	79.2	92.1	–12.8	71.0	83.1	–12.1	8.3	9.0	–.7	287.5	234.7	489.7
1960	92.5	92.2	.3	81.9	81.3	.5	10.6	10.9	–.2	290.5	236.8	518.3
1961	94.4	97.7	–3.3	82.3	86.0	–3.8	12.1	11.7	.4	292.6	238.4	530.4
1962	99.7	106.8	–7.1	87.4	93.3	–5.9	12.3	13.5	–1.3	302.9	248.0	567.3
1963	106.6	111.3	–4.8	92.4	96.4	–4.0	14.2	15.0	–.8	310.3	254.0	599.0
1964	112.6	118.5	–5.9	96.2	102.8	–6.5	16.4	15.7	.6	316.1	256.8	639.8
1965	116.8	118.2	–1.4	100.1	101.7	–1.6	16.7	16.5	.2	322.3	260.8	686.8
1966	130.8	134.5	–3.7	111.7	114.8	–3.1	19.1	19.7	–.6	328.5	263.7	752.7
1967	148.8	157.5	–8.6	124.4	137.0	–12.6	24.4	20.4	4.0	340.4	266.6	811.9
1968	153.0	178.1	–25.2	128.1	155.8	–27.7	24.9	22.3	2.6	368.7	289.5	868.0
1969	186.9	183.6	3.2	157.9	158.4	–.5	29.0	25.2	3.7	365.8	278.1	948.1
1970	192.8	195.6	–2.8	159.3	168.0	–8.7	33.5	27.6	5.9	380.9	283.2	1,009.4
1971	187.1	210.2	–23.0	151.3	177.3	–26.1	35.8	32.8	3.0	408.2	303.0	1,077.4
1972	207.3	230.7	–23.4	167.4	193.8	–26.4	39.9	36.9	3.1	435.9	322.4	1,177.0
1973	230.8	245.7	–14.9	184.7	200.1	–15.4	46.1	45.6	.5	466.3	340.9	1,306.8
1974	263.2	269.4	–6.1	209.3	217.3	–8.0	53.9	52.1	1.8	483.9	343.7	1,438.1
1975	279.1	332.3	–53.2	216.6	271.9	–55.3	62.5	60.4	2.0	541.9	394.7	1,554.5
1976	298.1	371.8	–73.7	231.7	302.2	–70.5	66.4	69.6	–3.2	629.0	477.4	1,730.4
Transition quarter	81.2	96.0	–14.7	63.2	76.6	–13.3	18.0	19.4	–1.4	643.6	495.5	454.8
1977	355.6	409.2	–53.7	278.7	328.5	–49.8	76.8	80.7	–3.9	706.4	549.1	1,971.4
1978	399.6	458.7	–59.2	314.2	369.1	–54.9	85.4	89.7	–4.3	776.6	607.1	2,212.6
1979	463.3	504.0	–40.7	365.3	404.1	–38.7	98.0	100.0	–2.0	829.5	640.3	2,495.9
1980	517.1	590.9	–73.8	403.9	476.6	–72.7	113.2	114.3	–1.1	909.1	709.8	2,718.9
1981	599.3	678.2	–79.0	469.1	543.1	–74.0	130.2	135.2	–5.0	994.8	785.3	3,049.1
1982	617.8	745.8	–128.0	474.3	594.4	–120.1	143.5	151.4	–7.9	1,137.3	919.8	3,211.3
1983	600.6	808.4	–207.8	453.2	661.3	–208.0	147.3	147.1	.2	1,371.7	1,131.6	3,421.9
1984	666.5	851.9	–185.4	500.4	686.1	–185.7	166.1	165.8	.3	1,564.7	1,300.5	3,812.0
1985	734.2	946.5	–212.3	548.0	769.7	–221.7	186.2	176.8	9.4	1,817.5	1,499.9	4,102.1
1986	769.3	990.5	–221.2	569.0	807.0	–238.0	200.2	183.5	16.7	2,120.6	1,736.7	4,374.3
1987	854.4	1,004.2	–149.8	641.0	810.3	–169.3	213.4	193.8	19.6	2,346.1	1,888.7	4,605.1
1988	909.3	1,064.5	–155.2	667.8	861.8	–194.0	241.5	202.7	38.8	2,601.3	2,050.8	4,953.5
1989	991.2	1,143.7	–152.5	727.5	932.8	–205.2	263.7	210.9	52.8	2,868.0	2,189.9	5,351.8
1990	1,032.0	1,253.2	–221.2	750.3	1,028.1	–277.8	281.7	225.1	56.6	3,206.6	2,410.7	5,684.5
1991	1,055.0	1,324.4	–269.4	761.2	1,082.7	–321.6	293.9	241.7	52.2	3,598.5	2,688.1	5,858.8
1992	1,091.3	1,381.7	–290.4	788.9	1,129.3	–340.5	302.4	252.3	50.1	4,002.1	2,998.8	6,143.2
1993	1,154.4	1,409.4	–255.0	842.5	1,142.8	–300.4	311.9	266.6	45.3	4,351.4	3,247.5	6,470.8
1994	1,258.6	1,461.7	–203.1	923.6	1,182.4	–258.8	335.0	279.4	55.7	4,643.7	3,432.1	6,830.4
1995	1,351.8	1,515.7	–163.9	1,000.8	1,227.1	–226.3	351.1	288.7	62.4	4,921.0	3,603.4	7,186.9
1996	1,453.1	1,560.3	–107.3	1,085.6	1,259.9	–174.3	367.5	300.5	67.0	5,181.9	3,733.0	7,484.7
1997 [2]	1,505.4	1,631.0	–125.6	1,116.5	1,316.0	–199.5	388.9	315.0	73.9	5,453.7	3,875.8	7,853.8
1998 [2]	1,566.8	1,687.5	–120.6	1,161.9	1,358.9	–197.0	404.9	328.6	76.4	5,736.2	4,021.4	8,218.6

[1] Not strictly comparable with later data.
[2] Estimates.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Refunds of receipts are excluded from receipts and outlays.

See *Budget of the United States Government, Fiscal Year 1998,* February 1997, for additional information.

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

TABLE B–77.—*Federal budget receipts, outlays, surplus or deficit, and debt, as percent of gross domestic product, fiscal years 1934–98*

[Percent; fiscal years]

Fiscal year or period	Receipts	Outlays		Surplus or deficit (–)	Federal debt (end of period)	
		Total	National defense		Gross Federal	Held by public
1934	4.8	10.6	....	–5.8	....	....
1935	5.1	9.1	....	–4.0	....	....
1936	4.9	10.4	....	–5.4	....	....
1937	6.1	8.5	....	–2.5	....	....
1938	7.5	7.6	....	–.1	....	....
1939	7.0	10.1	....	–3.2	53.5	45.9
1940	6.7	9.7	1.7	–3.0	51.8	43.7
1941	7.5	11.8	5.6	–4.3	49.9	41.8
1942	10.1	24.2	17.7	–14.1	54.5	46.6
1943	13.3	43.7	37.1	–30.3	79.3	71.1
1944	21.2	44.2	38.3	–23.0	98.7	89.4
1945	20.8	42.6	38.2	–21.9	119.7	108.2
1946	18.0	25.4	19.6	–7.3	124.4	111.0
1947	16.9	15.1	5.6	1.8	112.5	98.2
1948	16.4	11.7	3.6	4.7	99.4	85.3
1949	14.6	14.4	4.9	.2	93.7	79.5
1950	14.5	15.6	5.0	–1.1	94.2	80.3
1951	16.1	14.2	7.3	1.9	79.5	66.8
1952	18.9	19.4	13.2	–.4	74.2	61.5
1953	18.7	20.4	14.2	–1.7	71.4	58.6
1954	18.5	18.8	13.1	–.3	71.8	59.5
1955	16.5	17.3	10.8	–.8	69.4	57.3
1956	17.5	16.6	10.0	.9	63.9	52.1
1957	17.8	17.0	10.1	.8	60.5	48.7
1958	17.4	18.0	10.2	–.6	61.0	49.3
1959	16.2	18.8	10.0	–2.6	58.7	47.9
1960	17.8	17.8	9.3	.1	56.1	45.7
1961	17.8	18.4	9.4	–.6	55.2	44.9
1962	17.6	18.8	9.2	–1.3	53.4	43.7
1963	17.8	18.6	8.9	–.8	51.8	42.4
1964	17.6	18.5	8.6	–.9	49.4	40.1
1965	17.0	17.2	7.4	–.2	46.9	38.0
1966	17.4	17.9	7.7	–.5	43.6	35.0
1967	18.3	19.4	8.8	–1.1	41.9	32.8
1968	17.6	20.5	9.4	–2.9	42.5	33.4
1969	19.7	19.4	8.7	.3	38.6	29.3
1970	19.1	19.4	8.1	–.3	37.7	28.1
1971	17.4	19.5	7.3	–2.1	37.9	28.1
1972	17.6	19.6	6.7	–2.0	37.0	27.4
1973	17.7	18.8	5.9	–1.1	35.7	26.1
1974	18.3	18.7	5.5	–.4	33.6	23.9
1975	18.0	21.4	5.6	–3.4	34.9	25.4
1976	17.2	21.5	5.2	–4.3	36.3	27.6
Transition quarter	17.9	21.1	4.9	–3.2	35.4	27.2
1977	18.0	20.8	4.9	–2.7	35.8	27.9
1978	18.1	20.7	4.7	–2.7	35.1	27.4
1979	18.6	20.2	4.7	–1.6	33.2	25.7
1980	19.0	21.7	4.9	–2.7	33.4	26.1
1981	19.7	22.2	5.2	–2.6	32.6	25.8
1982	19.2	23.2	5.8	–4.0	35.4	28.6
1983	17.6	23.6	6.1	–6.1	40.1	33.1
1984	17.5	22.3	6.0	–4.9	41.0	34.1
1985	17.9	23.1	6.2	–5.2	44.3	36.6
1986	17.6	22.6	6.2	–5.1	48.5	39.7
1987	18.6	21.8	6.1	–3.3	50.9	41.0
1988	18.4	21.5	5.9	–3.1	52.5	41.4
1989	18.5	21.4	5.7	–2.8	53.6	40.9
1990	18.2	22.0	5.3	–3.9	56.4	42.4
1991	18.0	22.6	4.7	–4.6	61.4	45.9
1992	17.8	22.5	4.9	–4.7	65.1	48.8
1993	17.8	21.8	4.5	–3.9	67.2	50.2
1994	18.4	21.4	4.1	–3.0	68.0	50.2
1995	18.8	21.1	3.8	–2.3	68.5	50.1
1996	19.4	20.8	3.6	–1.4	69.2	49.9
1997 [1]	19.2	20.8	3.4	–1.6	69.4	49.3
1998 [1]	19.1	20.5	3.2	–1.5	69.8	48.9

[1] Estimates.

Note.—See Note, Table B–76.

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

TABLE B–78.—*Federal receipts and outlays, by major category, and surplus or deficit, fiscal years 1940–98*

[Billions of dollars; fiscal years]

Fiscal year or period	Receipts (on-budget and off-budget)					Outlays (on-budget and off-budget)										Surplus or deficit (–) (on-budget and off-budget)
	Total	Individual income taxes	Corporation income taxes	Social insurance taxes and contributions	Other	Total	National defense: Total	National defense: Department of Defense, military	International affairs	Health	Medicare	Income security	Social security	Net interest	Other	
1940	6.5	0.9	1.2	1.8	2.7	9.5	1.7	....	0.1	0.1	....	1.5	0.0	0.9	5.3	–2.9
1941	8.7	1.3	2.1	1.9	3.3	13.7	6.4	....	.1	.1	....	1.9	.1	.9	4.1	–4.9
1942	14.6	3.3	4.7	2.5	4.2	35.1	25.7	....	1.0	.1	....	1.8	.1	1.1	5.4	–20.5
1943	24.0	6.5	9.6	3.0	4.9	78.6	66.7	....	1.3	.1	....	1.7	.2	1.5	7.0	–54.6
1944	43.7	19.7	14.8	3.5	5.7	91.3	79.1	....	1.4	.2	....	1.5	.2	2.2	6.6	–47.6
1945	45.2	18.4	16.0	3.5	7.3	92.7	83.0	....	1.9	.2	....	1.1	.3	3.1	3.1	–47.6
1946	39.3	16.1	11.9	3.1	8.2	55.2	42.7	....	1.9	.2	....	2.4	.4	4.1	3.6	–15.9
1947	38.5	17.9	8.6	3.4	8.5	34.5	12.8	....	5.8	.2	....	2.8	.5	4.2	8.2	4.0
1948	41.6	19.3	9.7	3.8	8.8	29.8	9.1	....	4.6	.2	....	2.5	.6	4.3	8.5	11.8
1949	39.4	15.6	11.2	3.8	8.9	38.8	13.2	....	6.1	.2	....	3.2	.7	4.5	11.1	.6
1950	39.4	15.8	10.4	4.3	8.9	42.6	13.7	....	4.7	.3	....	4.1	.8	4.8	14.2	–3.1
1951	51.6	21.6	14.1	5.7	10.2	45.5	23.6	....	3.6	.3	....	3.4	1.6	4.7	8.4	6.1
1952	66.2	27.9	21.2	6.4	10.6	67.7	46.1	....	2.7	.3	....	3.7	2.1	4.7	8.1	–1.5
1953	69.6	29.8	21.2	6.8	11.7	76.1	52.8	....	2.1	.3	....	3.8	2.7	5.2	9.1	–6.5
1954	69.7	29.5	21.1	7.2	11.9	70.9	49.3	....	1.6	.3	....	4.4	3.4	4.8	7.1	–1.2
1955	65.5	28.7	17.9	7.9	11.0	68.4	42.7	....	2.2	.3	....	5.1	4.4	4.9	8.9	–3.0
1956	74.6	32.2	20.9	9.3	12.2	70.6	42.5	....	2.4	.4	....	4.7	5.5	5.1	10.1	3.9
1957	80.0	35.6	21.2	10.0	13.2	76.6	45.4	....	3.1	.5	....	5.4	6.7	5.4	10.1	3.4
1958	79.6	34.7	20.1	11.2	13.6	82.4	46.8	....	3.4	.5	....	7.5	8.2	5.6	10.3	–2.8
1959	79.2	36.7	17.3	11.7	13.5	92.1	49.0	....	3.1	.7	....	8.2	9.7	5.8	15.5	–12.8
1960	92.5	40.7	21.5	14.7	15.6	92.2	48.1	....	3.0	.8	....	7.4	11.6	6.9	14.4	.3
1961	94.4	41.3	21.0	16.4	15.7	97.7	49.6	....	3.2	.9	....	9.7	12.5	6.7	15.2	–3.3
1962	99.7	45.6	20.5	17.0	16.5	106.8	52.3	50.1	5.6	1.2	....	9.2	14.4	6.9	17.2	–7.1
1963	106.6	47.6	21.6	19.8	17.6	111.3	53.4	51.1	5.3	1.5	....	9.3	15.8	7.7	18.3	–4.8
1964	112.6	48.7	23.5	22.0	18.5	118.5	54.8	52.6	4.9	1.8	....	9.7	16.6	8.2	22.6	–5.9
1965	116.8	48.8	25.5	22.2	20.3	118.2	50.6	48.8	5.3	1.8	....	9.5	17.5	8.6	25.0	–1.4
1966	130.8	55.4	30.1	25.5	19.8	134.5	58.1	56.6	5.6	2.5	0.1	9.7	20.7	9.4	28.5	–3.7
1967	148.8	61.5	34.0	32.6	20.7	157.5	71.4	70.1	5.6	3.4	2.7	10.3	21.7	10.3	32.1	–8.6
1968	153.0	68.7	28.7	33.9	21.7	178.1	81.9	80.4	5.3	4.4	4.6	11.8	23.9	11.1	35.1	–25.2
1969	186.9	87.2	36.7	39.0	23.9	183.6	82.5	80.8	4.6	5.2	5.7	13.1	27.3	12.7	32.6	3.2
1970	192.8	90.4	32.8	44.4	25.2	195.6	81.7	80.1	4.3	5.9	6.2	15.7	30.3	14.4	37.2	–2.8
1971	187.1	86.2	26.8	47.3	26.8	210.2	78.9	77.5	4.2	6.8	6.6	22.9	35.9	14.8	40.0	–23.0
1972	207.3	94.7	32.2	52.6	27.8	230.7	79.2	77.6	4.8	8.7	7.5	27.7	40.2	15.5	47.3	–23.4
1973	230.8	103.2	36.2	63.1	28.3	245.7	76.7	75.0	4.1	9.4	8.1	28.3	49.1	17.3	52.8	–14.9
1974	263.2	119.0	38.6	75.1	30.6	269.4	79.3	77.9	5.7	10.7	9.6	33.7	55.9	21.4	52.9	–6.1
1975	279.1	122.4	40.6	84.5	31.5	332.3	86.5	84.9	7.1	12.9	12.9	50.2	64.7	23.2	74.8	–53.2
1976	298.1	131.6	41.4	90.8	34.3	371.8	89.6	87.9	6.4	15.7	15.8	60.8	73.9	26.7	82.7	–73.7
Transition quarter	81.2	38.8	8.5	25.2	8.8	96.0	22.3	21.8	2.5	3.9	4.3	15.0	19.8	6.9	21.4	–14.7
1977	355.6	157.6	54.9	106.5	36.6	409.2	97.2	95.1	6.4	17.3	19.3	61.1	85.1	29.9	93.0	–53.7
1978	399.6	181.0	60.0	121.0	37.7	458.7	104.5	102.3	7.5	18.5	22.8	61.5	93.9	35.5	114.7	–59.2
1979	463.3	217.8	65.7	138.9	40.8	504.0	116.3	113.6	7.5	20.5	26.5	66.4	104.1	42.6	120.2	–40.7
1980	517.1	244.1	64.6	157.8	50.6	590.9	134.0	130.9	12.7	23.2	32.1	86.6	118.5	52.5	131.3	–73.8
1981	599.3	285.9	61.1	182.7	69.5	678.2	157.5	153.9	13.1	26.9	39.1	99.7	139.6	68.8	133.5	–79.0
1982	617.8	297.7	49.2	201.5	69.3	745.8	185.3	180.7	12.3	27.4	46.6	107.7	156.0	85.0	125.4	–128.0
1983	600.6	288.9	37.0	209.0	65.6	808.4	209.9	204.4	11.8	28.6	52.6	122.6	170.7	89.8	122.2	–207.8
1984	666.5	298.4	56.9	239.4	71.8	851.9	227.4	220.9	15.9	30.4	57.5	112.7	178.2	111.1	118.6	–185.4
1985	734.2	334.5	61.3	265.2	73.1	946.5	252.7	245.2	16.2	33.5	65.8	128.2	188.6	129.5	131.9	–212.3
1986	769.3	349.0	63.1	283.9	73.3	990.5	273.4	265.5	14.2	35.9	70.2	119.8	198.8	136.0	142.3	–221.2
1987	854.4	392.6	83.9	303.3	74.6	1,004.2	282.0	274.0	11.6	40.0	75.1	123.3	207.4	138.7	126.1	–149.8
1988	909.3	401.2	94.5	334.3	79.3	1,064.5	290.4	281.9	10.5	44.5	78.9	129.4	219.3	151.8	139.7	–155.2
1989	991.2	445.7	103.3	359.4	82.8	1,143.7	303.6	294.9	9.6	48.4	85.0	136.1	232.5	169.3	159.3	–152.5
1990	1,032.0	466.9	93.5	380.0	91.5	1,253.2	299.3	289.8	13.8	57.7	98.1	147.1	248.6	184.2	204.3	–221.2
1991	1,055.0	467.8	98.1	396.0	93.1	1,324.4	273.3	262.4	15.9	71.2	104.5	170.3	269.0	194.5	225.7	–269.4
1992	1,091.3	476.0	100.3	413.7	101.4	1,381.7	298.4	286.9	16.1	89.5	119.0	197.0	287.6	199.4	174.7	–290.4
1993	1,154.4	509.7	117.5	428.3	98.9	1,409.4	291.1	278.6	17.2	99.4	130.6	207.3	304.6	198.8	160.4	–255.0
1994	1,258.6	543.1	140.4	461.5	113.7	1,461.7	281.6	268.6	17.1	107.1	144.7	214.1	319.6	203.0	174.5	–203.1
1995	1,351.8	590.2	157.0	484.5	120.1	1,515.7	272.1	259.4	16.4	115.4	159.9	220.5	335.8	232.2	163.4	–163.9
1996	1,453.1	656.4	171.8	509.4	115.4	1,560.3	265.7	253.2	13.5	119.4	174.2	226.0	349.7	241.1	170.7	–107.3
1997 [1]	1,505.4	672.7	176.2	535.8	120.8	1,631.0	267.2	254.3	14.8	127.6	194.3	238.9	367.7	247.4	173.2	–125.6
1998 [1]	1,566.8	691.2	189.7	557.8	128.2	1,687.5	259.4	247.5	14.9	138.2	207.1	247.5	384.3	249.9	186.2	–120.6

[1] Estimates.

Note.—See Note, Table B–76.

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

TABLE B–79.—*Federal receipts, outlays, deficit, and debt, fiscal years 1992–98*

[Millions of dollars; fiscal years]

Description	Actual					Estimates	
	1992	1993	1994	1995	1996	1997	1998
RECEIPTS AND OUTLAYS:							
Total receipts	1,091,279	1,154,401	1,258,627	1,351,830	1,453,062	1,505,425	1,566,842
Total outlays	1,381,681	1,409,414	1,461,731	1,515,729	1,560,330	1,631,016	1,687,475
Total surplus or deficit (–)	–290,402	–255,013	–203,104	–163,899	–107,268	–125,591	–120,633
On-budget receipts	788,853	842,467	923,601	1,000,751	1,085,570	1,116,522	1,161,898
On-budget outlays	1,129,343	1,142,827	1,182,359	1,227,065	1,259,872	1,316,014	1,358,896
On-budget surplus or deficit (–)	–340,489	–300,360	–258,758	–226,314	–174,302	–199,492	–196,998
Off-budget receipts	302,426	311,934	335,026	351,079	367,492	388,903	404,944
Off-budget outlays	252,339	266,587	279,372	288,664	300,458	315,002	328,579
Off-budget surplus or deficit (–)	50,087	45,347	55,654	62,415	67,034	73,901	76,365
OUTSTANDING DEBT, END OF PERIOD:							
Gross Federal debt	4,002,136	4,351,416	4,643,705	4,921,018	5,181,930	5,453,677	5,736,159
Held by Government accounts	1,003,302	1,103,945	1,211,588	1,317,645	1,448,967	1,577,902	1,714,801
Held by the public	2,998,834	3,247,471	3,432,117	3,603,373	3,732,964	3,875,775	4,021,358
Federal Reserve System	296,397	325,653	355,150	374,114	390,924		
Other	2,702,437	2,921,818	3,076,967	3,229,259	3,342,039		
RECEIPTS: ON-BUDGET AND OFF-BUDGET	1,091,279	1,154,401	1,258,627	1,351,830	1,453,062	1,505,425	1,566,842
Individual income taxes	475,964	509,680	543,055	590,244	656,417	672,683	691,199
Corporation income taxes	100,270	117,520	140,385	157,004	171,824	176,199	189,662
Social insurance taxes and contributions	413,689	428,300	461,475	484,473	509,414	535,766	557,783
On-budget	111,263	116,366	126,450	133,394	141,922	146,863	152,839
Off-budget	302,426	311,934	335,026	351,079	367,492	388,903	404,944
Excise taxes	45,569	48,057	55,225	57,484	54,014	57,247	61,239
Estate and gift taxes	11,143	12,577	15,225	14,763	17,189	17,588	18,817
Customs duties and fees	17,359	18,802	20,099	19,301	18,670	17,328	18,307
Miscellaneous receipts	27,284	19,465	23,164	28,561	25,534	28,614	29,835
Deposits of earnings by Federal Reserve System	22,920	14,908	18,023	23,378	20,477	23,184	23,006
All other	4,364	4,557	5,141	5,183	5,057	5,430	6,829
OUTLAYS: ON-BUDGET AND OFF-BUDGET	1,381,681	1,409,414	1,461,731	1,515,729	1,560,330	1,631,016	1,687,475
National defense	298,350	291,086	281,642	272,066	265,748	267,176	259,388
International affairs	16,107	17,248	17,083	16,434	13,496	14,822	14,905
General science, space, and technology	16,409	17,030	16,227	16,724	16,709	16,551	16,488
Energy	4,500	4,319	5,219	4,936	2,836	2,053	2,279
Natural resources and environment	20,025	20,239	21,064	22,078	21,614	22,773	22,314
Agriculture	15,205	20,363	15,046	9,778	9,159	10,252	12,341
Commerce and housing credit	10,919	–21,853	–4,228	–17,808	–10,646	–8,808	3,359
On-budget	10,260	–23,294	–5,331	–15,839	–10,020	–10,784	–735
Off-budget	659	1,441	1,103	–1,969	–626	1,976	4,094
Transportation	33,332	35,004	38,066	39,350	39,565	39,262	39,259
Community and regional development	6,838	9,052	10,454	10,641	10,685	12,752	11,435
Education, training, employment, and social services	45,248	50,012	46,307	54,263	52,001	51,291	56,204
Health	89,497	99,415	107,122	115,418	119,378	127,630	138,241
Medicare	119,024	130,552	144,747	159,855	174,225	194,256	207,084
Income security	197,022	207,299	214,089	220,493	225,989	238,855	247,499
Social security	287,585	304,585	319,565	335,846	349,676	367,713	384,338
On-budget	6,166	6,236	5,683	5,476	5,807	6,944	7,626
Off-budget	281,418	298,349	313,881	330,370	343,869	360,769	376,712
Veterans benefits and services	34,064	35,671	37,585	37,890	36,985	39,650	40,971
Administration of justice	14,426	14,955	15,256	16,216	17,548	20,784	24,228
General government	12,990	13,009	11,303	13,835	11,892	13,109	12,873
Net interest	199,421	198,811	202,957	232,169	241,090	247,382	249,859
On-budget	223,059	225,599	232,160	265,474	277,597	288,620	295,058
Off-budget	–23,637	–26,788	–29,203	–33,305	–36,507	–41,238	–45,199
Undistributed offsetting receipts	–39,280	–37,386	–37,772	–44,455	–37,620	–46,487	–55,590
On-budget	–33,179	–30,970	–31,362	–38,023	–31,342	–39,982	–48,562
Off-budget	–6,101	–6,416	–6,409	–6,432	–6,278	–6,505	–7,028

Note.—See Note, Table B–76.

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

TABLE B–80.—*Federal Government receipts and current expenditures, national income and product accounts (NIPA), 1978–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts: Total	Receipts: Personal tax and nontax receipts	Receipts: Corporate profits tax accruals	Receipts: Indirect business tax and nontax accruals	Receipts: Contributions for social insurance	Current expenditures: Total[1]	Consumption expenditures: Total	Consumption expenditures: National defense	Transfer payments: To persons	Transfer payments: To rest of the world (net)	Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises	Current surplus or deficit (–) (NIPA)
Fiscal:														
1978	429.2	185.5	67.4	27.9	148.4	467.5	165.5	116.2	179.3	3.5	74.7	33.1	11.6	–38.3
1979	497.0	221.6	75.3	29.9	170.2	514.8	181.2	126.9	198.5	4.0	79.1	40.2	11.7	–17.8
1980	546.7	249.1	70.4	36.2	190.9	597.0	207.5	145.3	235.4	4.3	86.7	50.1	13.0	–50.3
1981	633.5	287.9	69.3	54.3	222.0	690.1	239.0	168.6	274.6	5.2	90.1	66.1	15.2	–56.6
1982	653.7	308.4	51.6	51.5	242.2	758.5	263.7	192.2	305.6	6.3	83.4	81.8	17.7	–104.8
1983	658.1	291.0	56.4	51.6	259.1	836.8	292.0	212.1	339.9	7.0	86.2	89.9	21.4	–178.7
1984	723.7	300.7	75.1	57.4	290.5	877.0	297.1	222.5	342.4	9.0	91.6	107.2	29.9	–153.3
1985	798.7	337.8	75.0	58.9	326.9	958.2	334.4	250.7	360.7	12.3	98.6	125.4	26.6	–159.5
1986	836.4	353.6	80.5	53.7	348.7	1,017.6	358.9	271.0	380.6	13.3	108.2	129.9	26.7	–181.2
1987	922.5	398.3	99.3	56.4	368.5	1,048.8	371.1	280.8	399.4	10.7	103.3	134.2	30.2	–126.4
1988	981.5	407.9	107.7	60.4	405.6	1,103.5	382.6	293.4	420.5	11.1	108.4	146.5	34.4	–122.0
1989	1,069.9	458.3	119.1	61.7	430.8	1,179.7	407.8	308.2	449.7	11.7	115.8	161.9	32.9	–109.9
1990	1,112.5	477.3	116.5	63.6	455.1	1,259.2	417.2	306.1	490.7	14.9	128.4	178.5	29.5	–146.7
1991	1,141.5	477.4	111.5	75.8	476.7	1,318.1	442.5	324.4	535.7	–26.0	147.1	187.1	31.7	–176.6
1992	1,181.0	485.8	115.4	80.9	499.0	1,456.7	448.9	318.9	595.8	11.5	168.4	197.9	34.1	–275.7
1993	1,253.0	513.4	130.9	86.4	522.3	1,515.1	452.3	315.0	633.6	17.7	180.1	192.0	39.3	–262.1
1994	1,357.5	555.9	157.6	92.7	551.2	1,563.9	454.3	310.8	661.7	15.3	196.3	195.9	40.5	–206.4
1995	1,458.8	602.7	183.2	91.7	581.2	1,629.4	454.8	303.5	697.3	15.1	204.4	224.3	33.5	–170.6
Calendar:														
1978	446.5	193.8	71.4	28.9	152.4	478.1	168.8	118.4	182.4	3.8	77.3	34.6	11.4	–31.7
1979	511.1	229.7	74.4	30.1	176.8	529.5	185.9	130.7	205.7	4.1	80.5	42.1	11.3	–18.4
1980	561.5	256.2	70.3	39.7	195.3	622.5	215.2	150.9	247.0	5.0	88.7	52.7	13.9	–61.0
1981	649.3	297.2	65.7	57.3	229.1	707.1	246.0	174.3	282.1	5.0	87.9	71.7	14.4	–57.8
1982	646.4	302.9	49.0	49.7	244.8	781.0	270.0	197.6	316.4	7.0	83.9	84.4	19.4	–134.7
1983	671.9	293.0	61.3	53.3	264.2	846.3	293.0	214.9	340.0	7.8	87.0	92.8	25.4	–174.4
1984	746.9	308.3	75.2	57.9	305.3	902.9	314.1	236.3	344.6	9.7	94.4	113.3	27.1	–156.0
1985	811.3	343.7	76.3	58.2	333.1	974.2	342.5	257.6	366.9	12.2	100.3	126.9	25.2	–162.9
1986	850.1	358.3	83.8	53.2	354.7	1,027.6	362.3	272.7	386.2	12.9	107.6	130.5	28.0	–177.5
1987	937.4	402.4	103.2	57.8	374.1	1,066.3	378.2	287.6	401.8	11.2	102.9	137.8	34.4	–128.9
1988	997.2	414.4	111.0	60.9	410.9	1,118.5	387.8	297.9	425.8	11.4	111.2	148.4	33.8	–121.3
1989	1,079.3	463.4	117.1	61.7	437.1	1,192.7	405.2	303.3	460.3	11.4	118.2	166.7	30.8	–113.4
1990	1,129.8	485.7	118.0	65.1	461.1	1,284.5	426.6	312.7	500.0	13.3	132.4	179.9	32.4	–154.7
1991	1,149.0	476.9	109.8	79.7	482.6	1,345.0	445.9	325.4	550.1	–27.9	153.4	192.7	30.8	–196.0
1992	1,198.5	490.8	118.6	81.9	507.1	1,479.4	451.0	319.7	608.5	16.6	172.2	195.8	35.1	–280.9
1993	1,275.3	523.6	137.5	88.2	526.0	1,530.9	451.9	313.5	641.8	17.3	185.7	192.3	41.8	–255.6
1994	1,377.0	561.4	164.4	92.6	558.6	1,567.3	450.7	305.8	666.4	16.5	195.9	201.4	36.4	–190.2
1995	1,478.4	614.9	184.3	91.2	588.0	1,640.1	453.8	302.3	708.4	11.5	206.1	229.1	31.3	–161.7
1990: I	1,107.3	477.4	111.6	63.2	455.1	1,261.5	421.7	311.7	492.7	11.5	128.4	176.2	30.9	–154.1
II	1,132.7	490.7	118.5	64.2	459.3	1,276.9	423.7	310.8	494.1	15.5	132.2	179.7	31.7	–144.1
III	1,144.1	489.7	124.3	65.5	464.5	1,286.7	423.2	307.3	500.0	13.2	131.8	185.8	32.7	–142.6
IV	1,135.2	484.9	117.4	67.4	465.6	1,313.0	437.7	321.0	513.3	12.9	137.1	177.8	34.4	–177.7
1991: I	1,140.1	478.4	107.3	77.2	477.2	1,274.7	450.5	331.3	538.6	–76.9	144.8	186.3	31.6	–134.6
II	1,142.6	474.3	108.9	79.1	480.3	1,339.3	449.1	328.6	547.5	–32.0	151.8	192.6	30.0	–196.7
III	1,152.3	476.0	111.8	79.9	484.7	1,366.3	443.7	323.1	551.0	–5.4	154.4	191.9	30.7	–214.0
IV	1,160.9	479.0	111.1	82.8	488.1	1,399.8	440.5	318.5	563.2	2.6	162.7	200.0	30.9	–238.8
1992: I	1,183.4	481.0	119.6	80.8	502.0	1,450.7	445.8	317.2	598.7	12.4	165.4	196.8	31.8	–267.4
II	1,193.1	481.6	125.3	80.2	506.1	1,472.8	446.3	317.3	606.9	15.0	173.0	198.4	33.1	–279.6
III	1,187.0	490.7	106.0	80.2	510.1	1,484.5	454.4	323.5	611.3	12.9	174.2	196.4	35.3	–297.5
IV	1,230.5	510.0	123.7	86.5	510.3	1,509.5	457.7	320.7	617.2	26.1	176.3	191.8	40.3	–279.0
1993: I	1,225.2	501.0	127.5	84.3	512.4	1,509.7	451.3	314.4	633.4	12.6	177.3	190.5	44.7	–284.5
II	1,271.3	521.0	136.5	87.5	526.2	1,521.5	448.5	312.6	639.8	14.8	181.5	193.2	43.6	–250.2
III	1,280.3	529.1	133.7	87.2	530.3	1,534.7	453.5	315.1	645.3	15.5	187.2	192.7	40.5	–254.4
IV	1,324.4	543.4	152.2	93.7	535.1	1,557.7	454.3	312.0	648.7	26.3	197.0	192.8	38.6	–233.3
1994: I	1,321.9	539.3	144.3	92.8	545.5	1,534.6	446.7	301.3	659.7	11.2	192.2	188.3	36.5	–212.7
II	1,382.8	571.3	162.2	91.3	558.1	1,552.5	445.1	303.4	663.4	12.9	197.5	198.3	35.3	–169.6
III	1,387.1	560.4	171.3	93.3	562.1	1,575.7	455.7	313.5	667.8	15.7	196.9	204.3	35.2	–188.5
IV	1,416.3	574.5	180.0	93.2	568.6	1,606.4	455.3	305.0	674.7	26.2	196.9	214.8	38.5	–190.1
1995: I	1,449.3	594.6	183.1	91.7	579.9	1,621.9	454.6	302.8	696.2	12.1	205.8	220.9	32.3	–172.6
II	1,483.2	624.4	180.7	93.5	584.6	1,644.3	455.6	304.8	705.2	11.0	211.3	229.3	32.0	–161.1
III	1,486.6	617.3	189.1	88.4	591.8	1,645.0	453.6	301.4	713.0	11.3	203.8	232.3	31.1	–158.5
IV	1,494.7	623.3	184.3	91.3	595.9	1,649.3	451.4	300.1	719.3	11.6	203.3	233.9	29.9	–154.5
1996: I	1,523.1	639.6	196.4	84.4	602.6	1,678.3	453.6	298.7	737.2	19.0	207.6	230.5	30.4	–155.2
II	1,575.6	681.4	199.0	83.2	612.0	1,702.3	463.5	307.4	746.0	11.8	219.3	230.8	30.8	–126.7
III	1,581.9	680.2	196.5	85.7	619.4	1,702.6	461.3	304.7	751.2	11.7	214.5	233.7	30.3	–120.8

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

Note.—See Note, Table B–76.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–81.—*Federal and State and local government receipts and current expenditures, national income and product accounts (NIPA), 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total government			Federal Government			State and local government			Addendum: Grants-in-aid to State and local governments
	Receipts	Current expenditures	Current surplus or deficit (−) (NIPA)	Receipts	Current expenditures	Current surplus or deficit (−) (NIPA)	Receipts	Current expenditures	Current surplus or deficit (−) (NIPA)	
1959	128.8	116.6	12.2	90.6	88.0	2.6	45.0	35.4	9.6	6.8
1960	138.8	121.5	17.3	97.0	89.6	7.4	48.3	38.4	9.9	6.5
1961	144.1	130.8	13.3	99.0	96.1	2.9	52.4	42.0	10.4	7.2
1962	155.8	141.3	14.5	107.2	104.4	2.8	56.6	44.8	11.7	8.0
1963	167.5	149.1	18.4	115.5	110.2	5.4	61.1	48.1	13.0	9.1
1964	172.9	157.3	15.6	116.2	115.4	.9	67.1	52.4	14.7	10.4
1965	187.0	168.6	18.5	125.8	122.4	3.4	72.3	57.2	15.1	11.1
1966	210.7	190.8	19.9	143.5	140.9	2.6	81.5	64.3	17.3	14.4
1967	226.4	217.5	8.9	152.6	160.9	−8.3	89.8	72.5	17.3	15.9
1968	260.9	243.7	17.2	176.8	179.7	−2.8	102.7	82.6	20.0	18.6
1969	293.9	264.1	29.8	199.5	190.8	8.7	114.8	93.7	21.1	20.3
1970	299.6	292.9	6.7	195.1	209.1	−14.1	129.0	108.2	20.8	24.4
1971	319.6	323.2	−3.7	203.3	228.6	−25.3	145.3	123.7	21.7	29.0
1972	364.8	353.1	11.6	232.6	253.1	−20.5	169.7	137.5	32.2	37.5
1973	408.8	386.5	22.2	264.0	275.1	−11.1	185.3	152.0	33.4	40.6
1974	451.8	438.3	13.6	295.1	312.0	−16.9	200.6	170.2	30.5	43.9
1975	468.4	514.7	−46.3	297.4	371.3	−73.9	225.6	198.0	27.6	54.6
1976	535.9	557.1	−21.3	343.1	400.3	−57.2	253.9	217.9	35.9	61.1
1977	603.9	605.5	−1.5	389.6	435.9	−46.3	281.9	237.1	44.7	67.5
1978	678.5	657.5	20.9	446.5	478.1	−31.7	309.3	256.7	52.6	77.3
1979	761.1	727.3	33.8	511.1	529.5	−18.4	330.6	278.3	52.3	80.5
1980	834.2	840.8	−6.6	561.5	622.5	−61.0	361.4	307.0	54.4	88.7
1981	952.2	954.6	−2.4	649.3	707.1	−57.8	390.8	335.4	55.4	87.9
1982	971.5	1,054.9	−83.4	646.4	781.0	−134.7	409.0	357.7	51.3	83.9
1983	1,028.6	1,138.1	−109.5	671.9	846.3	−174.4	443.6	378.8	64.9	87.0
1984	1,144.5	1,213.7	−69.1	746.9	902.9	−156.0	492.0	405.1	86.9	94.4
1985	1,239.7	1,311.7	−71.9	811.3	974.2	−162.9	528.7	437.8	91.0	100.3
1986	1,313.1	1,395.7	−82.6	850.1	1,027.6	−177.5	570.6	475.7	94.9	107.6
1987	1,429.4	1,474.5	−45.1	937.4	1,066.3	−128.9	594.9	511.1	83.8	102.9
1988	1,517.3	1,552.7	−35.4	997.2	1,118.5	−121.3	631.4	545.5	85.9	111.2
1989	1,642.1	1,660.4	−18.3	1,079.3	1,192.7	−113.4	681.0	585.9	95.1	118.2
1990	1,726.4	1,800.9	−74.5	1,129.8	1,284.5	−154.7	728.9	648.8	80.1	132.4
1991	1,779.8	1,900.0	−120.2	1,149.0	1,345.0	−196.0	784.2	708.4	75.8	153.4
1992	1,870.6	2,065.2	−194.6	1,198.5	1,479.4	−280.9	844.3	758.0	86.3	172.2
1993	1,986.6	2,147.3	−160.7	1,275.3	1,530.9	−255.6	897.1	802.2	94.9	185.7
1994	2,127.5	2,218.0	−90.5	1,377.0	1,567.3	−190.2	946.4	846.6	99.7	195.9
1995	2,268.4	2,335.1	−66.7	1,478.4	1,640.1	−161.7	996.1	901.1	95.0	206.1
1990: I	1,689.2	1,757.8	−68.6	1,107.3	1,261.5	−154.1	710.3	624.8	85.5	128.4
II	1,721.8	1,783.1	−61.4	1,132.7	1,276.9	−144.1	721.3	638.5	82.8	132.2
III	1,748.5	1,810.4	−61.9	1,144.1	1,286.7	−142.6	736.2	655.5	80.7	131.8
IV	1,746.1	1,852.4	−106.2	1,135.2	1,313.0	−177.7	748.0	676.5	71.5	137.1
1991: I	1,753.9	1,819.7	−65.9	1,140.1	1,274.7	−134.6	758.5	689.8	68.8	144.8
II	1,766.6	1,889.6	−123.0	1,142.6	1,339.3	−196.7	775.8	702.1	73.7	151.8
III	1,789.4	1,926.3	−136.9	1,152.3	1,366.3	−214.0	791.4	714.3	77.1	154.4
IV	1,809.3	1,964.3	−155.1	1,160.9	1,399.8	−238.8	811.0	727.2	83.8	162.7
1992: I	1,841.4	2,024.0	−182.6	1,183.4	1,450.7	−267.4	823.4	738.6	84.8	165.4
II	1,858.9	2,051.9	−193.0	1,193.1	1,472.8	−279.6	838.8	752.2	86.6	173.0
III	1,860.1	2,075.7	−215.5	1,187.0	1,484.5	−297.5	847.3	765.4	82.0	174.2
IV	1,921.8	2,109.1	−187.3	1,230.5	1,509.5	−279.0	867.7	775.9	91.7	176.3
1993: I	1,916.8	2,120.9	−204.0	1,225.2	1,509.7	−284.5	869.0	788.5	80.5	177.3
II	1,977.4	2,138.5	−161.0	1,271.3	1,521.5	−250.2	887.6	798.5	89.1	181.5
III	1,995.0	2,154.5	−159.5	1,280.3	1,534.7	−254.4	901.9	807.0	94.9	187.2
IV	2,057.1	2,175.4	−118.3	1,324.4	1,557.7	−233.3	929.7	814.7	115.0	197.0
1994: I	2,053.3	2,171.2	−117.9	1,321.9	1,534.6	−212.7	923.6	828.8	94.8	192.2
II	2,129.1	2,193.5	−64.4	1,382.8	1,552.5	−169.6	943.8	838.6	105.2	197.5
III	2,143.3	2,232.2	−88.9	1,387.1	1,575.7	−188.5	953.1	853.5	99.6	196.9
IV	2,184.4	2,275.2	−90.7	1,416.3	1,606.4	−190.1	965.0	865.6	99.3	196.9
1995: I	2,224.4	2,298.0	−73.7	1,449.3	1,621.9	−172.6	980.9	882.0	99.0	205.8
II	2,266.7	2,328.7	−62.1	1,483.2	1,644.3	−161.1	994.8	895.8	99.0	211.3
III	2,284.2	2,348.8	−64.6	1,486.6	1,645.0	−158.5	1,001.4	907.5	93.9	203.8
IV	2,298.6	2,365.0	−66.4	1,494.7	1,649.3	−154.5	1,007.1	919.0	88.1	203.3
1996: I	2,338.5	2,402.7	−64.3	1,523.1	1,678.3	−155.2	1,023.0	932.0	91.0	207.6
II	2,402.0	2,427.6	−25.7	1,575.6	1,702.3	−126.7	1,045.7	944.7	101.0	219.3
III	2,414.9	2,446.5	−31.6	1,581.9	1,702.6	−120.8	1,047.6	958.4	89.2	214.5

Note.—Federal grants-in-aid to State and local governments are reflected in Federal current expenditures and State and local receipts. Total government receipts and current expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–82.—*Federal and State and local government receipts and current expenditures, national income and product accounts (NIPA), by major type, 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Current expenditures								Current surplus or deficit (–) (NIPA)	Addendum: Grants-in-aid to State and local governments
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total [1]	Consumption expenditures	Transfer payments	Net interest paid			Less: Dividends received by government [2]	Subsidies less current surplus of government enterprises		
									Total	Interest paid	Less: Interest received by government [2]				
1959	128.8	44.5	23.6	41.9	18.8	116.6	82.7	27.5	6.3	....	....	....	0.1	12.2	6.8
1960	138.8	48.7	22.7	45.5	21.9	121.5	85.0	29.3	6.9	10.1	3.3	....	.3	17.3	6.5
1961	144.1	50.3	22.8	48.1	22.9	130.8	89.6	33.6	6.4	9.9	3.5	....	1.3	13.3	7.2
1962	155.8	54.8	24.0	51.7	25.4	141.3	98.2	34.7	6.9	10.8	3.9	....	1.5	14.5	8.0
1963	167.5	58.0	26.2	54.7	28.5	149.1	104.2	36.6	7.4	11.6	4.2	....	.9	18.4	9.1
1964	172.9	56.0	28.0	58.8	30.1	157.3	109.9	38.1	7.9	12.5	4.6	....	1.4	15.6	10.4
1965	187.0	61.9	30.9	62.7	31.6	168.6	117.6	41.1	8.1	13.2	5.1	....	1.7	18.5	11.1
1966	210.7	71.0	33.7	65.4	40.6	190.8	133.5	45.8	8.5	14.5	6.0	....	3.0	19.9	14.4
1967	226.4	77.9	32.7	70.4	45.5	217.5	151.2	54.5	8.9	15.7	6.8	....	2.9	8.9	15.9
1968	260.9	92.1	39.4	79.0	50.4	243.7	167.8	62.6	10.3	18.1	7.7	0.1	3.1	17.2	18.6
1969	293.9	109.9	39.7	86.6	57.8	264.1	179.9	69.3	11.5	19.8	8.3	.2	3.6	29.8	20.3
1970	299.6	109.0	34.4	94.3	62.0	292.9	192.1	83.8	12.4	22.3	9.9	.2	4.9	6.7	24.4
1971	319.6	108.7	37.7	103.6	69.6	323.2	206.7	99.4	12.5	23.1	10.6	.3	5.1	–3.7	29.0
1972	364.8	132.0	41.9	111.4	79.5	353.1	223.6	110.9	12.9	24.8	11.9	.3	6.4	11.6	37.5
1973	408.8	140.6	49.3	121.0	97.9	386.5	239.4	126.6	15.2	29.6	14.4	.5	5.9	22.2	40.6
1974	451.8	159.1	51.8	129.3	111.7	438.3	267.2	150.5	16.3	33.6	17.3	.9	4.5	13.6	43.9
1975	468.4	156.4	50.9	140.0	121.1	514.7	299.9	189.2	18.5	37.7	19.2	.9	8.1	–46.3	54.6
1976	535.9	182.3	64.2	151.6	137.7	557.1	321.4	206.5	22.8	43.6	20.9	.9	7.4	–21.3	61.1
1977	603.9	210.0	73.0	165.5	155.4	605.5	351.5	220.9	24.4	47.9	23.5	1.3	10.1	–1.5	67.5
1978	678.5	240.1	83.5	177.8	177.0	657.5	383.3	238.6	26.5	56.8	30.3	1.7	11.1	20.9	77.3
1979	761.1	280.2	88.0	188.7	204.2	727.3	421.8	266.9	28.7	68.6	39.9	2.0	11.7	33.8	80.5
1980	834.2	312.4	84.8	212.0	225.0	840.8	476.4	317.6	33.4	83.9	50.5	1.9	15.2	–6.6	88.7
1981	952.2	360.2	81.1	249.3	261.6	954.6	531.3	360.7	48.1	110.2	62.1	2.3	16.9	–2.4	87.9
1982	971.5	371.4	63.1	256.4	280.6	1,054.9	577.9	403.3	55.5	130.6	75.0	2.9	21.1	–83.4	83.9
1983	1,028.6	369.3	77.2	280.1	301.9	1,138.1	619.2	434.4	61.8	146.7	84.9	3.4	25.6	–109.5	87.0
1984	1,144.5	395.5	94.0	309.5	345.5	1,213.7	664.9	448.2	79.1	174.7	95.6	3.9	25.5	–69.1	94.4
1985	1,239.7	437.7	96.5	329.6	375.9	1,311.7	725.1	480.9	88.0	195.9	107.9	4.5	21.9	–71.9	100.3
1986	1,313.1	459.9	106.5	344.7	402.0	1,395.7	775.0	510.9	89.8	208.0	118.2	5.1	25.1	–82.6	107.6
1987	1,429.4	514.2	127.1	364.8	423.3	1,474.5	819.3	533.7	96.3	216.0	119.7	5.9	31.0	–45.1	102.9
1988	1,517.3	532.0	137.0	385.5	462.8	1,552.7	859.1	568.3	103.7	229.7	125.9	6.9	28.5	–35.4	111.2
1989	1,642.1	594.9	141.3	414.7	491.2	1,660.4	912.4	616.3	115.5	251.0	135.5	8.1	24.2	–18.3	118.2
1990	1,726.4	624.8	140.5	442.6	518.5	1,800.9	976.7	679.8	128.2	268.6	140.4	9.0	25.3	–74.5	132.4
1991	1,779.8	624.8	133.4	478.1	543.5	1,900.0	1,025.4	721.1	139.4	282.8	143.5	9.5	23.6	–120.2	153.4
1992	1,870.6	650.5	143.0	505.6	571.4	2,065.2	1,054.7	852.3	141.2	282.7	141.5	10.1	27.1	–194.6	172.2
1993	1,986.6	689.9	163.8	540.0	592.9	2,147.3	1,079.8	905.9	140.4	278.8	138.4	10.5	31.7	–160.7	185.7
1994	2,127.5	731.4	195.3	572.5	628.3	2,218.0	1,102.4	950.3	151.6	288.3	136.6	11.4	25.1	–90.5	195.9
1995	2,268.4	794.3	218.7	595.5	660.0	2,335.1	1,136.4	1,011.5	181.7	318.0	136.3	12.6	18.2	–66.7	206.1
1990: I	1,689.2	613.0	133.0	432.1	511.1	1,757.8	957.0	660.7	125.0	260.6	135.6	8.7	23.8	–68.6	128.4
II	1,721.8	628.2	141.2	436.1	516.2	1,783.1	967.6	672.0	128.0	264.6	136.6	9.0	24.5	–61.4	132.2
III	1,748.5	630.8	148.0	447.3	522.4	1,810.4	977.2	682.5	134.1	271.9	137.8	9.0	25.7	–61.9	131.8
IV	1,746.1	627.1	139.7	455.0	524.3	1,852.4	1,005.0	703.8	125.8	277.2	151.5	9.3	27.3	–106.2	137.1
1991: I	1,753.9	622.3	130.1	464.7	536.8	1,819.7	1,022.6	648.7	133.7	279.2	145.5	9.4	24.4	–65.9	144.8
II	1,766.6	620.5	132.3	472.9	540.9	1,889.6	1,025.9	710.5	139.6	282.7	143.2	9.5	22.7	–123.0	151.8
III	1,789.4	623.7	136.0	483.7	546.0	1,926.3	1,025.2	748.7	138.3	282.4	144.1	9.5	23.5	–136.9	154.4
IV	1,809.3	632.5	135.2	491.2	550.3	1,964.3	1,027.8	776.6	145.9	286.9	141.0	9.6	23.6	–155.1	162.7
1992: I	1,841.4	636.7	143.9	495.7	565.1	2,024.0	1,038.4	828.8	142.0	283.2	141.2	9.8	24.6	–182.6	165.4
II	1,858.9	640.0	150.9	497.9	570.1	2,051.9	1,047.1	846.0	143.5	285.1	141.6	10.1	25.4	–193.0	173.0
III	1,860.1	650.6	127.6	507.1	574.8	2,075.7	1,061.8	855.4	141.7	282.9	141.3	10.1	26.9	–215.5	174.2
IV	1,921.8	674.8	149.7	521.7	575.7	2,109.1	1,071.3	879.1	137.6	279.4	141.9	10.3	31.5	–187.3	176.3
1993: I	1,916.8	662.4	151.5	524.7	578.3	2,120.9	1,072.1	886.2	137.5	276.7	139.2	10.2	35.2	–204.0	177.3
II	1,977.4	686.9	162.6	535.1	592.8	2,138.5	1,074.5	899.7	141.0	279.8	138.9	10.4	33.7	–161.0	181.5
III	1,995.0	696.4	159.3	541.7	597.5	2,154.5	1,084.2	909.8	141.1	279.6	138.5	10.5	29.9	–159.5	187.2
IV	2,057.1	713.8	181.7	558.5	603.1	2,175.4	1,088.4	927.8	141.9	279.0	137.1	10.8	28.0	–118.3	197.0
1994: I	2,053.3	705.5	171.4	562.1	614.2	2,171.2	1,089.0	928.3	137.8	274.6	136.8	11.1	27.2	–117.9	192.2
II	2,129.1	740.8	192.8	568.0	627.5	2,193.5	1,092.3	940.2	148.3	284.7	136.4	11.3	24.0	–64.4	197.5
III	2,143.3	731.3	203.4	576.4	632.2	2,232.2	1,111.1	954.5	154.7	291.2	136.5	11.5	23.4	–88.9	196.9
IV	2,184.4	748.1	213.5	583.5	639.3	2,275.2	1,117.2	978.2	165.7	302.6	136.9	11.8	25.9	–90.7	196.9
1995: I	2,224.4	770.0	217.3	586.0	651.0	2,298.0	1,126.7	991.9	172.5	309.6	137.1	12.2	19.2	–73.7	205.8
II	2,266.7	801.5	214.2	594.8	656.2	2,328.7	1,135.6	1,005.2	181.6	318.9	137.3	12.4	18.7	–62.1	211.3
III	2,284.2	798.4	224.5	597.3	664.0	2,348.8	1,139.9	1,018.5	185.2	320.7	135.5	12.7	17.9	–64.6	203.8
IV	2,298.6	807.2	218.7	604.1	668.6	2,365.0	1,143.3	1,030.3	187.5	322.8	135.3	13.0	16.8	–66.4	203.3
1996: I	2,338.5	824.9	233.4	604.1	676.0	2,402.7	1,154.9	1,059.1	184.8	319.8	135.0	13.3	17.3	–64.3	207.6
II	2,402.0	870.6	236.4	608.7	686.2	2,427.6	1,173.7	1,064.5	185.6	319.7	134.0	13.7	17.6	–25.7	219.3
III	2,414.9	872.5	233.4	614.6	694.4	2,446.5	1,180.6	1,073.8	189.1	322.3	133.2	13.7	16.8	–31.6	214.5

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.
[2] Prior to 1968, dividends received is included in interest received.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–83.—*State and local government receipts and current expenditures, national income and product accounts (NIPA), 1959–96*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts						Current expenditures					Current surplus or deficit (–) (NIPA)
	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]	Consumption expenditures	Transfer payments to persons	Net interest paid less dividends received	Subsidies less current surplus of government enterprises	
1959	45.0	4.6	1.2	29.3	3.1	6.8	35.4	30.9	5.6	0.1	–1.2	9.6
1960	48.3	5.2	1.2	32.0	3.4	6.5	38.4	33.7	5.9	.1	–1.3	9.9
1961	52.4	5.7	1.3	34.4	3.7	7.2	42.0	36.7	6.5	.1	–1.4	10.4
1962	56.6	6.3	1.5	37.0	3.9	8.0	44.8	39.1	7.0	.2	–1.4	11.7
1963	61.1	6.7	1.7	39.4	4.2	9.1	48.1	42.2	7.5	.1	–1.7	13.0
1964	67.1	7.5	1.8	42.6	4.7	10.4	52.4	46.0	8.2	–.1	–1.7	14.7
1965	72.3	8.1	2.0	46.1	5.0	11.1	57.2	50.5	8.8	–.3	–1.7	15.1
1966	81.5	9.5	2.2	49.7	5.7	14.4	64.3	56.5	10.1	–.6	–1.7	17.3
1967	89.8	10.6	2.6	53.9	6.7	15.9	72.5	62.9	12.1	–.9	–1.6	17.3
1968	102.7	12.7	3.3	60.8	7.2	18.6	82.6	70.8	14.5	–1.1	–1.6	20.0
1969	114.8	15.2	3.6	67.4	8.3	20.3	93.7	79.8	16.7	–1.4	–1.5	21.1
1970	129.0	16.7	3.7	74.8	9.2	24.4	108.2	91.6	20.1	–2.0	–1.6	20.8
1971	145.3	18.7	4.3	83.1	10.2	29.0	123.7	102.9	24.0	–1.7	–1.4	21.7
1972	169.7	24.2	5.3	91.2	11.5	37.5	137.5	113.4	27.5	–1.8	–1.6	32.2
1973	185.3	26.3	6.0	99.5	13.0	40.6	152.0	126.4	30.4	–3.4	–1.5	33.4
1974	200.6	28.2	6.7	107.2	14.6	43.9	170.2	144.0	32.3	–5.3	–.9	30.5
1975	225.6	31.0	7.3	115.8	16.8	54.6	198.0	164.9	38.9	–5.4	–.4	27.6
1976	253.9	35.8	9.6	127.8	19.5	61.1	217.9	179.7	43.6	–5.0	–.4	35.9
1977	281.9	41.0	11.4	139.9	22.1	67.5	237.1	196.1	47.4	–6.0	–.3	44.7
1978	309.3	46.3	12.1	148.9	24.7	77.3	256.7	214.5	52.4	–9.8	–.3	52.6
1979	330.6	50.5	13.6	158.6	27.4	80.5	278.3	235.9	57.2	–15.3	.4	52.3
1980	361.4	56.2	14.5	172.3	29.7	88.7	307.0	261.3	65.7	–21.2	1.2	54.4
1981	390.8	63.0	15.4	192.0	32.5	87.9	335.4	285.3	73.6	–25.9	2.4	55.4
1982	409.0	68.5	14.0	206.8	35.8	83.9	357.7	307.9	79.9	–31.8	1.7	51.3
1983	443.6	76.2	15.9	226.8	37.7	87.0	378.8	326.2	86.6	–34.4	.2	64.9
1984	492.0	87.1	18.8	251.5	40.2	94.4	405.1	350.8	93.9	–38.0	–1.6	86.9
1985	528.7	94.0	20.2	271.4	42.8	100.3	437.8	382.6	101.9	–43.4	–3.3	91.0
1986	570.6	101.6	22.7	291.5	47.3	107.6	475.7	412.7	111.8	–45.8	–3.0	94.9
1987	594.9	111.8	23.9	307.1	49.2	102.9	511.1	441.1	120.7	–47.4	–3.4	83.8
1988	631.4	117.6	26.0	324.6	51.9	111.2	545.5	471.3	131.0	–51.5	–5.3	85.9
1989	681.0	131.4	24.2	353.0	54.1	118.2	585.9	507.2	144.5	–59.3	–6.6	95.1
1990	728.9	139.1	22.5	377.6	57.4	132.4	648.8	550.1	166.5	–60.7	–7.1	80.1
1991	784.2	147.8	23.6	398.4	60.9	153.4	708.4	579.4	199.0	–62.8	–7.2	75.8
1992	844.3	159.7	24.4	423.7	64.3	172.2	758.0	603.6	227.2	–64.8	–8.0	86.3
1993	897.1	166.2	26.3	451.8	66.9	185.7	802.2	627.9	246.8	–62.4	–10.1	94.9
1994	946.4	170.0	30.9	479.9	69.7	195.9	846.6	651.7	267.4	–61.2	–11.2	99.7
1995	996.1	179.4	34.4	504.3	71.9	206.1	901.1	682.6	291.6	–60.0	–13.1	95.0
1990: I	710.3	135.6	21.4	368.9	56.0	128.4	624.8	535.3	156.5	–59.9	–7.1	85.5
II	721.3	137.5	22.7	371.9	56.9	132.2	638.5	543.9	162.4	–60.7	–7.1	82.8
III	736.2	141.2	23.7	381.8	57.9	131.8	655.5	554.0	169.3	–60.8	–7.0	80.7
IV	748.0	142.3	22.2	387.7	58.7	137.1	676.5	567.3	177.7	–61.3	–7.1	71.5
1991: I	758.5	143.9	22.8	387.5	59.6	144.8	689.8	572.1	186.9	–62.0	–7.2	68.8
II	775.8	146.3	23.4	393.8	60.5	151.8	702.1	576.9	195.0	–62.5	–7.2	73.7
III	791.4	147.7	24.3	403.8	61.3	154.4	714.3	581.5	203.1	–63.1	–7.2	77.1
IV	811.0	153.5	24.2	408.4	62.2	162.7	727.2	587.3	210.8	–63.6	–7.2	83.8
1992: I	823.4	155.7	24.3	414.9	63.1	165.4	738.6	592.6	217.7	–64.5	–7.2	84.8
II	838.8	158.4	25.7	417.7	64.0	173.0	752.2	600.8	224.1	–65.0	–7.7	86.6
III	847.3	159.9	21.6	427.0	64.7	174.2	765.4	607.4	231.2	–64.9	–8.3	82.0
IV	867.7	164.9	25.9	435.2	65.4	176.3	775.9	613.6	235.8	–64.5	–8.9	91.7
1993: I	869.0	161.4	24.0	440.4	65.9	177.3	788.5	620.8	240.3	–63.1	–9.5	80.5
II	887.6	165.9	26.1	447.6	66.6	181.5	798.5	626.0	245.0	–62.7	–9.9	89.1
III	901.9	167.3	25.7	454.5	67.2	187.2	807.0	630.8	249.0	–62.1	–10.6	94.9
IV	929.7	170.4	29.5	464.9	67.9	197.0	814.7	634.1	252.8	–61.7	–10.6	115.0
1994: I	923.6	166.2	27.1	469.3	68.8	192.2	828.8	642.4	257.4	–61.6	–9.3	94.8
II	943.8	169.5	30.6	476.7	69.4	197.5	838.6	647.3	263.8	–61.2	–11.3	105.2
III	953.1	170.8	32.2	483.1	70.1	196.9	853.5	655.4	270.9	–61.1	–11.8	99.6
IV	965.0	173.6	33.6	490.3	70.6	196.9	865.6	661.9	277.2	–60.9	–12.6	99.3
1995: I	980.9	175.5	34.2	494.3	71.1	205.8	882.0	672.1	283.6	–60.7	–13.1	99.0
II	994.8	177.0	33.5	501.3	71.6	211.3	895.8	680.1	289.0	–60.1	–13.3	99.0
III	1,001.4	181.2	35.4	508.9	72.2	203.8	907.5	686.2	294.3	–59.7	–13.2	93.9
IV	1,007.1	183.8	34.4	512.8	72.8	203.3	919.0	691.9	299.4	–59.4	–13.0	88.1
1996: I	1,023.0	185.3	36.9	519.7	73.4	207.6	932.0	701.3	302.9	–59.0	–13.1	91.0
II	1,045.7	189.2	37.4	525.5	74.2	219.3	944.7	710.2	306.6	–58.8	–13.3	101.0
III	1,047.6	192.3	36.9	528.9	74.9	214.5	958.4	719.3	310.9	–58.3	–13.4	89.2

[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–84.—*State and local government revenues and expenditures, selected fiscal years, 1927–93*

[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	14,456	3,269	1,505	8,722	14,850	64,816	23,776	11,136	5,481	24,423
1962–63	62,269	19,833	14,446	3,267	1,505	8,663	14,556	63,977	23,729	11,150	5,420	23,678
1963–64	68,443	21,241	15,762	3,791	1,695	10,002	15,951	69,302	26,286	11,664	5,766	25,586
1964–65	74,000	22,583	17,118	4,090	1,929	11,029	17,250	74,678	28,563	12,221	6,315	27,579
1965–66	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	168,549	65,814	19,021	21,117	62,597
1972–73	190,222	45,283	42,047	17,994	5,425	39,264	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	230,722	87,858	22,528	28,156	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	296,984	110,758	24,609	39,140	122,477
1978–79	343,236	64,944	74,247	36,932	12,128	75,164	79,821	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	54,105	172,957
1981–82	457,654	82,067	93,613	50,738	15,028	87,282	128,926	436,733	154,282	34,520	57,996	189,935
1982–83	486,753	89,105	100,247	55,129	14,258	90,007	138,008	466,516	163,876	36,655	60,906	205,079
1983–84	542,730	96,457	114,097	64,529	17,141	96,935	153,570	505,008	176,108	39,419	66,414	223,068
1984–85	598,121	103,757	126,376	70,361	19,152	106,158	172,317	553,899	192,686	44,989	71,479	244,745
1985–86	641,486	111,709	135,005	74,365	19,994	113,099	187,314	605,623	210,819	49,368	75,868	269,568
1986–87	686,860	121,203	144,091	83,935	22,425	114,857	200,350	657,134	226,619	52,355	82,650	295,510
1987–88	726,762	132,212	156,452	88,350	23,663	117,602	208,482	704,921	242,683	55,621	89,090	317,528
1988–89	786,129	142,400	166,336	97,806	25,926	125,824	227,838	762,360	263,898	58,105	97,879	342,479
1989–90	849,502	155,613	177,885	105,640	23,566	136,802	249,996	834,818	288,148	61,057	110,518	375,095
1990–91	902,207	167,999	185,570	109,341	22,242	154,099	262,955	908,108	309,302	64,937	130,402	403,467
1991–92	979,137	180,337	197,731	115,638	23,880	179,174	282,376	981,253	324,652	67,351	158,723	430,526
1992–93	1,038,300	188,535	209,546	123,221	26,417	198,529	292,052	1,027,488	342,595	68,134	170,653	446,105

[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 other taxes and charges and miscellaneous revenues.

[4] Includes expenditures for libraries, hospitals, health, employment security administration, veterans' services, air transportation, water transport and terminals, parking facilities, and transit subsidies, police protection, fire protection, correction, protective inspection and regulation, sewerage, natural resources, parks and recreation, housing and community development, solid waste management, financial administration, judicial and legal, general public buildings, other government administration, interest on general debt, and general expenditures, n.e.c.

Note.—Data for fiscal years listed from 1962–63 to 1992–93 are the aggregations of data for government fiscal years that 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–85.—*Interest-bearing public debt securities by kind of obligation, 1967–96*

[Millions of dollars]

End of year or month	Total interest-bearing public debt securities	Marketable				Nonmarketable				
		Total [1]	Treasury bills	Treasury notes	Treasury bonds	Total	U.S. savings bonds	Foreign government and public series [2]	Government account series	Other [3]
Fiscal year:										
1967	322,286	[4] 210,672	58,535	49,108	97,418	111,614	51,213	1,514	56,155	2,732
1968	344,401	226,592	64,440	71,073	91,079	117,808	51,712	3,741	59,526	2,829
1969	351,729	226,107	68,356	78,946	78,805	125,623	51,711	4,070	66,790	3,052
1970	369,026	232,599	76,154	93,489	62,956	136,426	51,281	4,755	76,323	4,067
1971	396,289	245,473	86,677	104,807	53,989	150,816	53,003	9,270	82,784	5,759
1972	425,360	257,202	94,648	113,419	49,135	168,158	55,921	18,985	89,598	3,654
1973	456,353	262,971	100,061	117,840	45,071	193,382	59,418	28,524	101,738	3,702
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	3,645
1976	619,254	392,581	161,198	191,758	39,626	226,673	69,733	21,500	130,557	4,883
1977	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,798
1978	766,971	485,155	160,936	267,865	56,355	281,816	79,798	21,680	153,271	27,067
1979	819,007	506,693	161,378	274,242	71,073	312,314	80,440	28,115	176,360	27,399
1980	906,402	594,506	199,832	310,903	83,772	311,896	72,727	25,158	189,848	24,163
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	24,084
1983	1,375,751	1,024,000	340,733	557,525	125,742	351,751	70,024	11,450	234,684	35,593
1984	1,559,570	1,176,556	356,798	661,687	158,070	383,015	72,832	8,806	259,534	41,843
1985	1,821,010	1,360,179	384,220	776,449	199,510	460,831	77,011	6,638	313,928	63,254
1986	2,122,684	[1] 1,564,329	410,730	896,884	241,716	558,355	85,551	4,128	365,872	102,804
1987	2,347,750	[1] 1,675,980	378,263	1,005,127	277,590	671,769	97,004	4,350	440,658	129,757
1988	2,599,877	[1] 1,802,905	398,451	1,089,578	299,875	796,972	106,176	6,320	536,455	148,021
1989	2,836,309	[1] 1,892,763	406,597	1,133,193	337,974	943,546	114,025	6,818	663,677	159,026
1990	3,210,943	[1] 2,092,759	482,454	1,218,081	377,224	1,118,184	122,152	36,041	779,412	180,579
1991	3,662,759	[1] 2,390,660	564,589	1,387,717	423,354	1,272,099	133,512	41,639	908,406	188,542
1992	4,061,801	[1] 2,677,476	634,287	1,566,349	461,840	1,384,325	148,266	37,039	1,011,020	188,000
1993	4,408,567	[1] 2,904,910	658,381	1,734,161	497,367	1,503,657	167,024	42,459	1,114,289	179,885
1994	4,689,524	[1] 3,091,602	697,295	1,867,507	511,800	1,597,922	176,413	41,996	1,211,689	167,824
1995	4,950,644	[1] 3,260,447	742,462	1,980,343	522,643	1,690,197	181,181	40,950	1,324,270	143,796
1996	5,220,790	[1] 3,418,371	761,232	2,098,670	543,469	1,802,419	184,147	37,488	1,454,690	126,094
1995: Jan	4,812,208	[1] 3,173,398	741,771	1,906,332	510,294	1,638,810	178,041	42,536	1,262,642	155,591
Feb	4,850,521	[1] 3,211,929	756,351	1,922,913	517,665	1,638,593	178,465	42,979	1,262,711	154,438
Mar	4,860,502	[1] 3,227,333	756,447	1,938,223	517,664	1,633,169	178,839	41,797	1,259,184	153,349
Apr	4,831,533	[1] 3,182,253	735,178	1,914,413	517,662	1,649,279	179,458	41,662	1,275,568	152,591
May	4,900,346	[1] 3,241,464	750,702	1,961,107	514,655	1,658,881	179,824	41,614	1,283,765	153,678
June	4,947,814	[1] 3,252,620	748,302	1,974,663	514,654	1,695,194	180,136	41,442	1,322,041	151,575
July	4,956,625	[1] 3,270,977	759,354	1,981,968	514,654	1,685,648	180,547	41,237	1,320,685	143,179
Aug	4,967,192	[1] 3,286,057	750,167	1,998,247	522,643	1,681,135	180,785	41,261	1,314,973	144,116
Sept	4,950,644	[1] 3,260,447	742,462	1,980,343	522,643	1,690,197	181,181	40,950	1,324,270	143,796
Oct	4,981,739	[1] 3,293,172	738,605	2,016,925	522,642	1,688,567	181,819	40,800	1,325,155	140,793
Nov	4,985,790	[1] 3,351,483	785,682	2,029,642	521,159	1,634,308	182,203	40,800	1,273,059	138,246
Dec	4,964,371	[1] 3,307,179	760,680	2,010,340	521,158	1,657,191	181,918	40,805	1,299,585	134,883
1996: Jan	4,983,247	[1] 3,331,836	756,723	2,038,955	521,158	1,651,411	182,238	39,678	1,299,967	129,528
Feb	5,012,872	[1] 3,387,122	795,328	2,042,732	534,062	1,625,750	182,691	40,361	1,274,699	127,999
Mar	5,082,952	[1] 3,375,055	811,919	2,014,074	534,062	1,707,897	182,992	40,361	1,357,647	126,897
Apr	5,097,989	[1] 3,367,197	769,061	2,049,074	534,062	1,730,792	183,481	40,362	1,380,433	126,516
May	5,124,422	[1] 3,387,187	782,756	2,055,370	534,061	1,737,235	183,594	38,004	1,387,235	128,402
June	5,126,748	[1] 3,348,433	773,612	2,025,761	534,061	1,778,315	183,770	37,781	1,428,508	128,256
July	5,184,908	[1] 3,411,190	789,809	2,072,321	534,060	1,773,718	183,949	37,615	1,427,185	124,969
Aug	5,173,734	[1] 3,395,960	781,044	2,056,447	543,469	1,777,774	184,037	37,615	1,429,850	126,272
Sept	5,220,790	[1] 3,418,371	761,232	2,098,670	543,469	1,802,419	184,147	37,488	1,454,690	126,094
Oct	5,243,339	[1] 3,431,060	763,392	2,109,198	543,469	1,812,280	184,301	37,842	1,462,867	127,270
Nov	5,263,423	[1] 3,444,643	802,272	2,072,410	554,962	1,818,780	184,379	37,635	1,466,961	129,805
Dec	5,317,188	[1] 3,459,691	777,414	2,112,315	554,962	1,857,497	182,442	37,427	1,505,937	131,691

[1] Includes Federal Financing Bank securities, not shown separately, in the amount of 15,000 million dollars.

[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–86.—*Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1967–96*

End of year or month	Amount outstanding, privately held	Maturity class: Within 1 year	Maturity class: 1 to 5 years	Maturity class: 5 to 10 years	Maturity class: 10 to 20 years	Maturity class: 20 years and over	Average length: Years	Average length: Months
	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	150,296	90,578	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
1984	1,017,488	437,941	332,808	130,417	49,664	66,658	4	6
1985	1,185,675	472,661	402,766	159,383	62,853	88,012	4	11
1986	1,354,275	506,903	467,348	189,995	70,664	119,365	5	3
1987	1,445,366	483,582	526,746	209,160	72,862	153,016	5	9
1988	1,555,208	524,201	552,993	232,453	74,186	171,375	5	9
1989	1,654,660	546,751	578,333	247,428	80,616	201,532	6	0
1990	1,841,903	626,297	630,144	267,573	82,713	235,176	6	1
1991	2,113,799	713,778	761,243	280,574	84,900	273,304	6	0
1992	2,363,802	808,705	866,329	295,921	84,706	308,141	5	11
1993	2,562,336	858,135	978,714	306,663	94,345	324,479	5	10
1994	2,719,861	877,932	1,128,322	289,998	88,208	335,401	5	8
1995	2,870,781	1,002,875	1,157,492	290,111	87,297	333,006	5	4
1996	3,011,185	1,058,558	1,212,258	306,643	111,360	322,366	5	3
1995: Jan	2,791,905	927,146	1,169,586	280,372	84,832	329,970	5	5
Feb	2,829,671	950,006	1,170,648	283,190	96,284	329,543	5	6
Mar	2,841,506	963,767	1,171,125	280,798	96,284	329,533	5	5
Apr	2,795,125	952,570	1,148,083	269,784	95,990	328,699	5	5
May	2,851,360	980,967	1,173,686	278,581	89,857	328,269	5	5
June	2,847,129	980,975	1,170,628	277,926	89,447	328,153	5	4
July	2,878,926	1,007,159	1,174,571	278,600	89,897	328,699	5	3
Aug	2,896,671	999,545	1,187,061	290,211	86,847	333,006	5	5
Sept	2,870,781	1,002,875	1,157,492	290,111	87,297	333,006	5	4
Oct	2,901,629	1,007,132	1,182,933	290,311	87,397	333,856	5	4
Nov	2,954,168	1,065,179	1,176,195	292,576	93,490	326,727	5	3
Dec	2,901,387	1,049,518	1,142,392	291,881	92,636	324,959	5	3
1996: Jan	2,937,115	1,050,406	1,174,222	292,525	93,339	326,622	5	2
Feb	2,994,090	1,078,387	1,189,173	299,298	95,090	332,141	5	3
Mar	2,980,688	1,097,120	1,158,416	298,496	94,990	331,666	5	2
Apr	2,968,878	1,055,822	1,188,828	297,917	94,820	331,491	5	3
May	2,983,624	1,061,225	1,199,184	298,842	111,981	312,391	5	3
June	2,943,097	1,052,190	1,168,683	299,042	111,395	311,787	5	3
July	2,996,840	1,067,689	1,196,678	309,371	110,820	312,282	5	2
Aug	2,989,680	1,074,540	1,176,091	305,079	112,150	321,820	5	3
Sept	3,011,185	1,058,558	1,212,258	306,643	111,360	322,366	5	3
Oct	3,021,881	1,062,308	1,207,999	317,522	111,893	322,160	5	3
Nov	3,028,647	1,084,720	1,198,931	302,951	128,832	313,214	5	3
Dec	3,032,551	1,061,459	1,231,747	301,103	128,054	310,188	5	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–87.—*Estimated ownership of public debt securities by private investors, 1976–96*

[Par values;[1] billions of dollars]

End of month	Held by private investors											
	Total	Commercial banks[2]	Nonbank investors									
			Total	Individuals[3]			Insurance companies	Money market funds	Corporations[5]	State and local governments[6]	Foreign and international[7]	Other investors[8]
				Total	Savings bonds[4]	Other securities						
1976: June	376.4	92.5	283.9	96.1	69.6	26.5	10.7	0.8	23.3	36.7	69.8	46.5
Dec	409.5	103.8	305.7	101.6	72.0	29.6	12.7	1.1	23.5	44.3	78.1	44.4
1977: June	421.0	102.9	318.1	104.9	74.4	30.5	13.0	.8	22.1	56.7	87.9	32.7
Dec	461.3	102.0	359.3	107.8	76.7	31.1	15.1	.9	18.2	68.1	109.6	39.6
1978: June	477.8	99.6	378.2	109.0	79.1	29.9	14.2	1.3	17.3	82.6	119.5	34.3
Dec	508.6	95.3	413.3	114.0	80.7	33.3	15.3	1.5	17.3	93.1	133.1	39.0
1979: June	516.6	94.6	422.0	115.5	80.6	34.9	16.0	3.8	18.6	102.7	114.9	50.5
Dec	540.5	95.6	444.9	118.0	79.9	38.1	15.6	5.6	17.0	100.2	119.0	69.5
1980: June	558.2	98.5	459.7	116.5	73.4	43.1	15.3	5.3	14.0	100.1	118.2	90.3
Dec	616.4	111.5	504.9	117.1	72.5	44.6	18.1	3.5	19.3	114.2	129.7	103.0
1981: June	651.2	115.0	536.2	107.4	69.2	38.2	19.9	9.0	19.9	128.1	136.6	115.3
Dec	694.5	113.8	580.7	110.8	68.1	42.7	21.6	21.5	17.9	135.9	136.6	136.4
1982: June	740.9	114.7	626.2	114.1	67.4	46.7	24.4	22.4	17.6	157.9	137.2	152.6
Dec	848.4	134.0	714.4	116.5	68.3	48.2	30.6	42.6	24.5	163.2	149.5	187.5
1983: June	948.6	167.4	781.2	121.3	69.7	51.6	37.8	28.3	32.8	184.3	160.1	216.6
Dec	1,022.6	179.5	843.1	133.4	71.5	61.9	46.0	22.8	39.7	199.1	166.3	235.8
1984: June	1,102.2	180.6	921.6	142.2	72.9	69.3	51.2	14.9	45.3	222.2	171.6	274.1
Dec	1,212.5	181.5	1,031.0	143.8	74.5	69.3	64.5	25.9	50.1	242.4	205.9	298.4
1985: June	1,292.0	195.6	1,096.4	148.7	76.7	72.0	69.1	24.8	54.9	279.4	213.8	305.7
Dec	1,417.2	189.4	1,227.8	154.8	79.8	75.0	80.5	25.1	59.0	359.6	224.8	324.1
1986: June	1,502.7	194.4	1,308.3	159.5	83.8	75.7	87.9	22.8	61.2	405.7	250.9	320.2
Dec	1,602.0	197.7	1,404.3	162.7	92.3	70.4	101.6	28.6	68.8	446.6	263.4	332.6
1987: June	1,658.1	192.5	1,465.6	165.6	96.8	68.8	104.7	20.6	79.7	492.7	281.1	321.2
Dec	1,731.4	194.4	1,537.0	172.4	101.1	71.3	108.1	14.6	84.6	500.3	299.7	357.3
1988: June	1,786.7	190.8	1,595.9	182.0	106.2	75.8	113.5	13.4	87.6	506.0	345.4	347.9
Dec	1,858.5	185.3	1,673.2	190.4	109.6	80.8	118.6	11.8	86.0	509.1	362.2	395.1
1989: June	1,909.1	178.4	1,730.7	211.7	114.0	97.7	120.6	11.3	91.0	481.9	369.1	445.1
Dec	2,015.8	165.3	1,850.5	216.4	117.7	98.7	123.9	14.9	93.4	489.5	429.6	482.8
1990: June	2,141.8	177.3	1,964.5	229.6	121.9	107.7	133.7	28.0	96.9	538.7	427.3	510.3
Dec	2,288.3	172.1	2,116.2	233.8	126.2	107.6	138.2	45.5	108.9	542.5	458.4	588.9
1991: June	2,397.9	196.2	2,201.7	243.5	133.2	110.3	156.8	55.4	130.8	561.8	473.6	579.8
Dec	2,563.2	232.5	2,330.7	263.9	138.1	125.8	181.8	80.0	150.8	579.2	491.7	583.3
1992: Mar	2,664.0	255.9	2,408.1	268.1	142.0	126.1	188.4	84.8	166.0	594.8	507.9	598.1
June	2,712.4	267.0	2,445.4	275.1	145.4	129.7	192.8	79.4	175.0	587.8	529.6	605.8
Sept	2,765.5	287.5	2,478.0	281.2	150.3	130.9	194.8	79.4	180.8	578.9	535.2	627.7
Dec	2,839.9	294.4	2,545.5	289.2	157.3	131.9	197.5	79.7	192.5	563.3	549.7	673.5
1993: Mar	2,895.0	310.2	2,584.8	297.7	163.6	134.1	208.0	77.9	199.3	578.9	564.2	658.9
June	2,938.4	307.2	2,631.2	303.0	166.5	136.4	217.8	76.2	206.1	599.9	567.7	660.5
Sept	2,983.0	313.9	2,669.1	305.8	169.1	136.7	229.4	74.8	215.6	603.5	591.3	648.6
Dec	3,047.4	322.2	2,725.2	309.9	171.9	137.9	234.5	80.8	213.0	605.9	622.9	658.3
1994: Mar	3,094.6	344.4	2,750.2	315.1	175.0	140.1	233.4	69.3	216.3	600.9	633.3	681.9
June	3,088.2	330.1	2,758.1	321.1	177.1	144.0	238.0	59.9	226.3	584.1	633.1	695.7
Sept	3,127.8	313.2	2,814.6	327.2	178.6	148.6	243.7	59.9	229.3	534.8	655.6	764.1
Dec	3,168.0	290.1	2,877.9	331.2	180.5	150.7	240.1	67.6	226.5	483.4	688.6	840.5
1995: Mar	3,239.2	307.7	2,931.5	342.8	181.4	161.4	245.7	67.7	230.3	467.1	729.0	848.8
June	3,245.0	298.0	2,947.0	344.2	182.6	161.6	248.3	58.7	227.7	433.9	784.1	850.1
Sept	3,279.5	289.0	2,990.5	345.9	183.5	162.4	249.8	64.2	224.1	389.8	848.1	868.6
Dec	3,294.9	280.1	3,014.8	347.7	185.0	162.7	250.8	71.3	228.8	352.2	861.8	902.2
1996: Mar	3,382.8	281.0	3,101.8	347.2	185.8	161.4	256.0	87.3	229.0	336.8	930.3	915.2
June	3,347.3	285.0	3,062.3	347.6	186.5	161.1	258.0	82.2	230.9	340.0	958.2	845.4
Sept	3,396.2	280.0	3,116.2	354.0	186.8	167.2	240.0	85.3	249.1	300.0	1,027.7	860.1

[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 banks, foreign banks, and banks in U.S. affiliated territories.
[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] State and local government holdings (beginning 1979) include their fully defeased debt that is backed by U.S. Treasury securities. Includes State and local pension funds.
[7] Consists of the investments of foreign and international accounts (both official and private) in U.S. public debt issues. Reflects 1978 benchmark through December 1984; December 1984 benchmark through 1989; and December 1989 benchmark thereafter.
[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 enterprises.

Source: Department of the Treasury.

TABLE B–88.—*Corporate profits with inventory valuation and capital consumption adjustments, 1959–96*

[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
1959	50.2	23.6	26.6	12.7	13.9
1960	48.8	22.7	26.1	13.4	12.7
1961	49.8	22.8	27.0	14.0	13.0
1962	57.7	24.0	33.7	15.0	18.7
1963	63.5	26.2	37.3	16.1	21.2
1964	70.4	28.0	42.4	18.0	24.4
1965	80.9	30.9	50.1	20.2	29.9
1966	86.3	33.7	52.6	20.9	31.7
1967	83.6	32.7	50.9	22.1	28.9
1968	90.3	39.4	51.0	24.6	26.3
1969	87.5	39.7	47.9	25.2	22.6
1970	75.7	34.4	41.4	23.7	17.7
1971	88.8	37.7	51.0	23.7	27.3
1972	102.2	41.9	60.3	25.8	34.5
1973	115.1	49.3	65.8	28.1	37.6
1974	103.7	51.8	51.9	30.4	21.5
1975	121.1	50.9	70.2	30.1	40.1
1976	147.0	64.2	82.8	35.9	47.0
1977	167.3	73.0	94.2	40.8	53.4
1978	191.6	83.5	108.1	46.0	62.0
1979	194.0	88.0	106.0	52.5	53.5
1980	167.1	84.8	82.3	59.3	23.0
1981	183.9	81.1	102.8	69.5	33.3
1982	159.2	63.1	96.1	69.8	26.3
1983	212.3	77.2	135.1	80.8	54.3
1984	268.2	94.0	174.2	83.2	91.0
1985	282.2	96.5	185.7	92.8	92.9
1986	271.0	106.5	164.5	110.2	54.2
1987	309.7	127.1	182.6	107.0	75.7
1988	357.2	137.0	220.2	116.8	103.3
1989	356.4	141.3	215.1	138.9	76.2
1990	369.5	140.5	229.0	151.9	77.2
1991	382.5	133.4	249.1	163.1	86.0
1992	401.4	143.0	258.4	169.5	88.9
1993	464.4	163.8	300.6	197.3	103.3
1994	529.5	195.3	334.2	211.0	123.2
1995	586.6	218.7	368.0	227.4	140.6
1990: I	369.3	133.0	236.3	150.7	85.6
II	392.8	141.2	251.6	152.4	99.2
III	350.4	148.0	202.4	152.4	50.0
IV	365.5	139.7	225.9	152.0	73.8
1991: I	393.7	130.1	263.6	158.6	105.0
II	380.0	132.3	247.7	162.6	85.1
III	376.8	136.0	240.7	165.9	74.9
IV	379.6	135.2	244.4	165.3	79.1
1992: I	417.3	143.9	273.4	162.1	111.3
II	409.3	150.9	258.3	164.6	93.7
III	351.3	127.6	223.8	170.9	52.9
IV	427.7	149.7	278.0	180.4	97.7
1993: I	427.4	151.5	275.9	190.2	85.7
II	447.8	162.6	285.2	195.8	89.4
III	469.6	159.3	310.3	200.2	110.1
IV	512.8	181.7	331.1	202.9	128.2
1994: I	459.7	171.4	288.3	204.4	83.9
II	534.3	192.8	341.5	208.8	132.7
III	553.1	203.4	349.7	212.5	137.2
IV	570.9	213.5	357.3	218.5	138.8
1995: I	560.0	217.3	342.7	221.7	121.0
II	562.3	214.2	348.1	224.6	123.5
III	612.5	224.5	388.1	228.5	159.6
IV	611.8	218.7	393.1	234.7	158.4
1996: I	645.1	233.4	411.8	239.9	171.8
II	655.8	236.4	419.4	243.1	176.3
III	661.2	233.4	427.7	245.2	182.5

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–89.—*Corporate profits by industry, 1959–96*

[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	Domestic industries										Rest of the world
		Total	Financial [1]			Nonfinancial						
			Total	Federal Reserve banks	Other	Total	Manufacturing [2]	Transportation and public utilities	Wholesale trade	Retail trade	Other	
1959	53.1	50.4	7.0	0.7	6.3	43.4	26.5	7.1	2.8	3.3	3.6	2.7
1960	51.0	47.8	7.7	.9	6.7	40.2	23.8	7.5	2.5	2.8	3.6	3.1
1961	51.3	48.0	7.5	.8	6.8	40.4	23.4	7.9	2.5	3.0	3.6	3.3
1962	56.4	52.6	7.6	.9	6.8	45.0	26.3	8.5	2.8	3.4	3.9	3.8
1963	61.2	57.1	7.3	1.0	6.4	49.8	29.6	9.5	2.8	3.6	4.4	4.1
1964	67.5	63.0	7.5	1.1	6.4	55.5	32.4	10.2	3.4	4.5	5.1	4.5
1965	77.6	72.9	7.9	1.3	6.5	65.0	39.7	11.0	3.8	4.9	5.6	4.7
1966	83.0	78.5	9.2	1.7	7.5	69.3	42.4	11.9	3.9	4.8	6.2	4.5
1967	80.3	75.5	9.5	2.0	7.6	66.0	39.0	10.9	4.0	5.6	6.4	4.8
1968	86.9	81.3	10.9	2.5	8.4	70.4	41.7	11.0	4.5	6.4	6.8	5.6
1969	83.2	76.6	11.6	3.1	8.5	65.0	37.0	10.6	4.8	6.4	6.2	6.6
1970	71.8	64.7	13.1	3.5	9.6	51.6	27.1	8.2	4.3	6.0	5.9	7.1
1971	85.5	77.7	15.2	3.3	11.9	62.5	34.8	8.9	5.1	7.2	6.6	7.9
1972	97.9	88.4	16.4	3.3	13.1	72.0	41.4	9.4	6.8	7.4	7.1	9.5
1973	110.9	96.0	17.5	4.5	13.0	78.5	46.7	9.0	8.0	6.6	8.2	14.9
1974	103.4	85.9	16.2	5.7	10.5	69.7	40.7	7.6	11.3	2.3	7.7	17.5
1975	129.4	114.8	15.9	5.6	10.3	98.9	54.5	10.9	13.6	8.2	11.6	14.6
1976	158.9	142.3	19.9	5.9	14.0	122.4	70.7	15.3	12.7	10.5	13.3	16.5
1977	186.8	167.7	25.7	6.1	19.6	142.0	78.5	18.5	15.4	12.4	17.1	19.1
1978	213.1	190.2	31.8	7.6	24.1	158.4	89.6	21.7	15.4	12.3	19.4	22.9
1979	220.2	185.6	31.6	9.4	22.2	153.9	88.3	16.9	18.5	9.8	20.5	34.6
1980	198.3	162.9	24.3	11.8	12.6	138.5	75.8	18.3	16.7	6.1	21.6	35.5
1981	204.1	174.4	18.7	14.4	4.3	155.7	87.5	20.1	21.9	9.8	16.3	29.7
1982	166.8	139.4	15.6	15.2	.4	123.8	63.4	20.9	19.0	13.1	7.4	27.4
1983	203.7	173.1	24.8	14.6	10.2	148.3	72.8	29.7	18.7	18.7	8.4	30.6
1984	238.5	205.8	20.5	16.4	4.1	185.3	86.6	39.7	27.8	21.5	9.8	32.7
1985	230.5	197.1	29.0	16.3	12.6	168.1	81.6	34.3	20.6	22.5	9.1	33.4
1986	234.0	199.3	36.4	15.5	20.9	162.9	60.2	38.1	22.9	23.7	18.0	34.6
1987	272.9	231.3	37.1	15.7	21.4	194.2	85.0	41.7	16.7	23.9	26.9	41.6
1988	325.0	274.3	43.0	17.6	25.4	231.2	115.1	48.7	19.3	19.6	28.5	50.7
1989	330.6	272.6	53.1	20.2	32.9	219.6	109.3	42.6	20.4	20.7	26.6	58.0
1990	358.2	292.5	68.6	21.4	47.2	223.8	112.3	43.2	17.2	20.6	30.6	65.7
1991	378.2	309.5	87.4	20.3	67.1	222.1	92.7	53.9	20.6	26.1	28.9	68.7
1992	398.9	334.0	83.7	17.8	65.9	250.3	96.3	57.8	23.0	32.2	41.0	64.9
1993	457.7	388.1	91.0	16.1	74.9	297.2	109.7	70.6	25.5	39.2	52.1	69.6
1994	517.9	453.7	94.4	17.8	76.6	359.3	142.7	81.3	34.5	42.2	58.6	64.3
1995	570.8	494.1	119.1	21.9	97.3	375.0	145.7	94.8	29.6	38.7	66.2	76.7
1990: I	353.4	289.7	63.1	20.6	42.5	226.5	115.9	42.1	18.9	19.9	29.8	63.7
II	381.1	316.2	69.4	21.2	48.2	246.7	125.1	48.7	19.0	22.7	31.3	64.9
III	341.9	281.5	71.5	22.2	49.2	210.0	99.8	46.8	13.9	17.0	32.5	60.4
IV	356.5	282.5	70.5	21.4	49.0	212.1	108.4	35.3	16.9	22.8	28.6	73.9
1991: I	388.3	313.2	82.2	21.0	61.2	230.9	104.3	52.3	21.0	25.3	28.1	75.2
II	375.5	309.2	87.5	20.2	67.3	221.7	91.7	55.6	22.9	23.8	27.8	66.2
III	373.8	311.9	92.2	20.1	72.0	219.8	90.8	53.5	21.4	26.5	27.5	61.9
IV	375.2	303.6	87.6	19.7	67.9	216.1	83.8	54.5	17.0	28.6	32.2	71.5
1992: I	411.4	341.7	105.1	18.8	86.3	236.6	92.0	61.2	14.6	32.0	36.8	69.7
II	404.3	337.6	96.9	18.4	78.5	240.7	89.6	57.4	21.8	34.3	37.5	66.7
III	359.4	295.6	49.7	17.3	32.4	245.9	98.4	54.3	27.4	25.2	40.6	63.9
IV	420.5	361.2	83.1	16.7	66.4	278.1	105.1	58.3	28.3	37.3	49.3	59.3
1993: I	422.4	347.0	85.7	16.5	69.2	261.2	90.4	68.5	17.9	36.3	48.2	75.4
II	442.0	375.7	88.1	16.1	72.0	287.6	108.4	66.4	28.6	38.1	46.2	66.3
III	465.9	393.1	88.8	15.9	72.9	304.3	106.0	73.6	27.0	42.4	55.2	72.8
IV	500.5	436.8	101.3	15.9	85.5	335.4	134.0	74.0	28.7	39.8	59.0	63.7
1994: I	471.6	407.0	64.9	16.1	48.8	342.1	145.3	73.3	28.8	38.3	56.3	64.6
II	516.2	452.4	97.8	16.9	80.9	354.6	134.2	81.3	39.5	43.2	56.5	63.8
III	534.3	469.9	108.4	18.1	90.3	361.5	142.8	81.6	34.3	43.7	59.0	64.4
IV	549.6	485.5	106.4	19.8	86.6	379.0	148.4	89.0	35.4	43.6	62.5	64.2
1995: I	542.6	467.5	114.3	21.5	92.7	353.2	134.7	88.5	29.7	36.0	64.3	75.1
II	547.3	468.2	112.6	22.3	90.3	355.6	137.8	92.5	26.4	36.6	62.3	79.1
III	597.9	527.1	130.4	21.9	108.5	396.7	153.2	102.3	31.2	42.5	67.5	70.8
IV	595.3	513.7	119.3	21.7	97.6	394.4	157.3	95.8	31.2	39.6	70.5	81.7
1996: I	624.8	541.6	134.9	21.5	113.4	406.7	161.3	95.6	37.5	41.7	70.6	83.2
II	633.5	555.1	136.6	21.7	114.9	418.5	164.7	104.5	32.8	44.3	72.2	78.4
III	637.6	561.0	135.0	21.6	113.4	426.1	170.6	102.5	34.5	44.5	73.9	76.6

[1] Consists of the following industries: Depository institutions; nondepository credit institutions; security and commodity brokers; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

[2] See Table B–90 for industry detail.

Note.—The industry classification is on a company basis and is based on the 1987 Standard Industrial Classification (SIC) beginning 1987, and on the 1972 SIC for earlier years shown.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–90.—*Corporate profits of manufacturing industries, 1959–96*

[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	Industrial machinery and equipment	Electronic and other electric equipment	Motor vehicles and equipment	Other	Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other
1959	26.5	13.7	2.3	1.1	2.2	1.7	3.0	3.5	12.8	2.5	3.5	2.6	4.3
1960	23.8	11.7	2.0	.8	1.8	1.3	3.0	2.8	12.1	2.2	3.1	2.6	4.2
1961	23.4	11.4	1.6	1.0	1.9	1.3	2.5	3.1	12.0	2.4	3.3	2.2	4.2
1962	26.3	14.1	1.6	1.2	2.4	1.5	4.0	3.5	12.2	2.4	3.2	2.2	4.4
1963	29.6	16.4	2.0	1.3	2.5	1.6	4.9	4.0	13.2	2.7	3.7	2.2	4.7
1964	32.4	18.0	2.5	1.4	3.3	1.7	4.6	4.5	14.4	2.7	4.1	2.3	5.3
1965	39.7	23.2	3.1	2.1	4.0	2.7	6.2	5.2	16.4	2.8	4.6	2.9	6.1
1966	42.4	23.9	3.6	2.4	4.5	3.0	5.1	5.3	18.4	3.3	4.9	3.4	6.8
1967	39.0	21.2	2.7	2.5	4.1	3.0	4.0	5.0	17.8	3.2	4.3	3.9	6.4
1968	41.7	22.4	1.9	2.3	4.1	2.9	5.5	5.7	19.2	3.2	5.2	3.7	7.0
1969	37.0	19.0	1.4	2.0	3.7	2.3	4.8	4.9	18.0	3.0	4.6	3.3	7.0
1970	27.1	10.4	.8	1.1	3.0	1.3	1.3	3.0	16.8	3.2	3.9	3.6	6.1
1971	34.8	16.6	.8	1.5	3.0	1.9	5.1	4.2	18.2	3.5	4.5	3.7	6.5
1972	41.4	22.6	1.6	2.2	4.3	2.8	5.9	5.7	18.8	2.9	5.2	3.2	7.5
1973	46.7	25.0	2.3	2.6	4.7	3.2	5.9	6.3	21.7	2.5	6.1	5.2	7.9
1974	40.7	15.1	5.0	1.8	3.1	.5	.7	4.1	25.7	2.6	5.2	10.7	7.2
1975	54.5	20.3	2.7	3.2	4.8	2.6	2.2	4.8	34.1	8.6	6.3	9.8	9.4
1976	70.7	31.2	2.1	3.9	6.7	3.8	7.4	7.4	39.5	7.1	8.2	13.3	11.0
1977	78.5	37.6	1.0	4.5	8.3	5.8	9.3	8.6	41.0	6.8	7.7	12.9	13.6
1978	89.6	45.0	3.6	5.0	10.4	6.6	8.9	10.5	44.6	6.1	8.2	15.5	14.8
1979	88.3	36.5	3.5	5.2	9.1	5.4	4.6	8.6	51.8	5.8	7.1	24.5	14.6
1980	75.8	17.9	2.6	4.3	7.5	5.0	–4.3	2.8	57.8	6.0	5.5	33.6	12.9
1981	87.5	18.1	3.0	4.4	8.2	4.9	.2	–2.7	69.4	9.0	7.6	38.6	14.2
1982	63.4	4.9	–4.7	2.6	3.4	1.3	–.3	2.7	58.5	7.3	4.7	31.6	14.9
1983	72.8	18.6	–5.0	3.0	3.7	3.4	5.2	8.3	54.2	6.1	6.9	22.5	18.6
1984	86.6	36.7	–.5	4.6	5.5	5.1	8.9	13.0	49.9	6.5	7.7	16.1	19.6
1985	81.6	30.1	–.8	4.7	5.5	2.5	7.3	10.8	51.6	8.6	6.1	17.3	19.6
1986	60.2	28.6	.9	5.2	2.7	2.7	4.4	12.7	31.7	7.3	8.0	–5.8	22.1
1987	85.0	40.1	2.7	5.4	4.7	6.5	3.8	17.0	45.0	11.3	15.1	–3.8	22.4
1988	115.1	49.2	5.9	6.3	9.4	5.7	5.7	16.2	65.9	11.9	19.3	10.4	24.3
1989	109.3	49.3	6.0	6.5	11.1	9.5	2.2	13.9	60.0	11.0	19.0	5.0	25.0
1990	112.3	40.9	3.3	6.2	10.2	8.4	–2.2	15.0	71.4	14.5	17.0	17.0	22.9
1991	92.7	30.5	1.3	5.4	4.3	8.9	–5.4	16.0	62.1	18.2	15.7	5.9	22.3
1992	96.3	37.1	–.1	6.5	5.6	10.0	–1.1	16.2	59.1	18.3	16.5	–1.6	26.0
1993	109.7	54.2	.2	7.7	7.0	14.8	4.2	20.3	55.5	16.2	16.4	–2.2	25.1
1994	142.7	77.2	.7	10.7	9.0	22.5	10.2	24.1	65.5	19.1	18.0	–.1	28.4
1995	145.7	77.2	3.0	11.1	12.1	25.6	4.4	20.9	68.5	17.7	20.9	.8	29.1
1990: I	115.9	48.9	5.6	7.6	12.4	10.3	–4.0	17.0	67.0	9.5	18.1	15.7	23.7
II	125.1	44.6	3.7	6.5	10.4	9.5	.0	14.6	80.5	14.9	20.2	21.3	24.2
III	99.8	42.3	1.5	5.6	10.0	8.5	1.9	14.8	57.5	16.1	17.0	–.3	24.7
IV	108.4	27.9	2.6	5.0	7.9	5.4	–6.6	13.7	80.5	17.5	12.6	31.4	19.0
1991: I	104.3	22.6	1.7	3.6	5.4	7.4	–9.6	14.1	81.7	17.7	12.9	32.4	18.7
II	91.7	35.3	1.5	6.2	5.0	9.9	–5.2	18.0	56.3	17.6	14.5	1.7	22.5
III	90.8	32.2	1.1	5.6	2.0	8.6	–2.3	17.1	58.6	21.5	17.0	–6.1	26.3
IV	83.8	31.9	1.0	6.1	5.0	9.7	–4.7	14.8	51.9	16.1	18.5	–4.5	21.9
1992: I	92.0	33.4	.5	6.2	4.7	9.8	–2.0	14.2	58.6	15.9	17.1	1.8	23.8
II	89.6	35.3	.3	6.4	5.4	8.5	–.2	14.8	54.3	20.2	15.2	–6.9	25.8
III	98.4	37.2	–.5	7.2	6.0	9.7	–2.8	17.6	61.2	20.0	16.2	–1.8	26.8
IV	105.1	42.6	–.8	6.4	6.4	11.8	.4	18.4	62.4	17.2	17.3	.4	27.6
1993: I	90.4	36.9	–1.2	5.3	3.8	12.6	–.4	16.9	53.5	18.8	17.5	–8.7	25.9
II	108.4	52.4	1.4	7.8	7.1	11.9	4.2	20.1	56.0	15.2	15.3	–1.6	27.1
III	106.0	55.4	–.5	8.1	9.1	15.9	2.3	20.5	50.7	16.0	15.3	–2.6	21.9
IV	134.0	72.1	1.3	9.5	7.9	18.8	10.7	23.8	61.9	14.6	17.5	4.2	25.6
1994: I	145.3	76.0	.6	10.9	8.7	18.9	14.2	22.7	69.3	19.5	17.6	.5	31.7
II	134.2	75.1	.9	10.6	9.1	21.2	9.5	23.8	59.1	18.0	18.5	–8.2	30.8
III	142.8	75.6	.8	10.2	8.0	23.8	8.5	24.3	67.1	19.7	17.0	3.3	27.1
IV	148.4	81.8	.4	11.1	10.1	26.1	8.6	25.5	66.7	19.4	19.0	4.2	24.2
1995: I	134.7	75.8	2.2	10.2	12.5	23.2	6.7	21.0	58.8	18.3	16.8	–2.3	26.0
II	137.8	74.0	4.7	11.5	12.1	22.4	3.0	20.4	63.8	18.4	21.3	–.2	24.3
III	153.2	78.1	2.5	10.7	12.5	27.3	4.4	20.6	75.0	16.8	23.6	5.2	29.4
IV	157.3	80.8	2.7	12.2	11.1	29.5	3.6	21.7	76.5	17.5	22.1	.3	36.6
1996: I	161.3	89.5	2.3	13.9	14.3	27.1	8.1	23.8	71.8	15.7	20.7	–4.5	39.9
II	164.7	92.4	1.4	14.4	13.6	27.4	10.6	25.0	72.3	13.2	21.9	1.3	35.9
III	170.6	94.6	3.2	16.0	13.0	29.2	10.2	23.0	76.1	18.3	23.0	–1.2	35.9

Note.—The industry classification is on a company basis and is based on the 1987 Standard Industrial Classification (SIC) beginning 1987 and on the 1972 SIC for earlier years shown. In the 1972 SIC, the categories shown here as "industrial machinery and equipment" and "electronic and other electric equipment" were identified as "machinery, except electrical" and "electric and electronic equipment," respectively.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–91.—*Sales, profits, and stockholders' equity, all manufacturing corporations, 1952–96*

[Billions of dollars]

Year or quarter	All manufacturing corporations				Durable goods industries				Nondurable goods industries			
	Sales (net)	Profits		Stock-holders' equity [2]	Sales (net)	Profits		Stock-holders' equity [2]	Sales (net)	Profits		Stock-holders' equity [2]
		Before income taxes [1]	After income taxes			Before income taxes [1]	After income taxes			Before income taxes [1]	After income taxes	
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
1983	2,114.3	133.1	85.8	812.8	973.5	48.7	30.0	372.4	1,140.8	84.4	55.8	440.4
1984	2,335.0	165.6	107.6	864.2	1,107.6	75.5	48.9	395.6	1,227.5	90.0	58.8	468.5
1985	2,331.4	137.0	87.6	866.2	1,142.6	61.5	38.6	420.9	1,188.8	75.6	49.1	445.3
1986	2,220.9	129.3	83.1	874.7	1,125.5	52.1	32.6	436.3	1,095.4	77.2	50.5	438.4
1987	2,378.2	173.0	115.6	900.9	1,178.0	78.0	53.0	444.3	1,200.3	95.1	62.6	456.6
1988	2,596.2	216.1	154.6	957.6	1,284.7	91.7	67.1	468.7	1,311.5	124.4	87.5	488.9
1989	2,745.1	188.8	136.3	999.0	1,356.6	75.2	55.7	501.3	1,388.5	113.5	80.6	497.7
1990	2,810.7	159.6	111.6	1,043.8	1,357.2	57.6	40.9	515.0	1,453.5	102.0	70.6	528.9
1991	2,761.1	99.8	67.5	1,064.1	1,304.0	14.1	7.4	506.8	1,457.1	85.7	60.1	557.4
1992 [3]	2,890.2	32.5	23.2	1,034.7	1,389.8	–33.5	–23.7	473.9	1,500.4	66.0	47.0	560.8
1993	3,015.1	118.6	83.9	1,039.7	1,490.2	39.0	27.6	482.7	1,524.9	79.6	56.4	557.1
1994	3,255.8	245.3	176.6	1,110.1	1,657.6	121.6	87.6	533.3	1,598.2	123.7	89.1	576.8
1995	3,524.9	276.6	200.1	1,240.1	1,803.9	131.3	94.8	613.3	1,721.0	145.3	105.3	626.8
1994: I	758.0	50.2	35.5	1,072.8	384.1	23.3	16.3	504.0	373.9	26.9	19.2	568.8
II	819.7	65.1	47.0	1,094.3	421.0	36.6	26.7	522.9	398.7	28.5	20.3	571.4
III	823.2	65.6	46.9	1,120.4	412.9	30.8	22.4	541.7	410.3	34.8	24.5	578.6
IV	854.9	64.4	47.3	1,153.0	439.6	30.9	22.2	564.7	415.3	33.6	25.1	588.3
1995: I	843.0	73.4	52.5	1,194.6	431.6	36.3	26.1	588.8	411.5	37.1	26.4	605.8
II	889.0	79.5	57.6	1,234.8	457.6	39.5	29.2	616.4	431.4	40.0	28.4	618.4
III	881.2	70.8	50.7	1,254.7	445.9	29.2	20.8	619.0	435.3	41.5	29.9	635.8
IV	911.6	52.9	39.3	1,276.1	468.8	26.3	18.6	628.9	442.8	26.6	20.7	647.2
1996: I	881.5	70.1	51.1	1,295.7	451.6	31.7	22.5	638.0	429.9	38.5	28.6	657.7
II	941.4	86.2	63.0	1,325.7	485.4	42.4	30.7	654.5	456.0	43.8	32.2	671.3
III	940.4	84.6	63.1	1,354.8	476.1	37.2	27.2	669.1	464.3	47.3	35.9	685.7

[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).

[3] Data for 1992 (most significantly 1992:I) reflect the early adoption of Financial Accounting Standards Board Statement 106 (Employer's Accounting for Post-Retirement Benefits Other Than Pensions) by a large number of companies during the fourth quarter of 1992. Data for 1993:I also reflect adoption of Statement 106. Corporations must show the cumulative effect of a change in accounting principle in the first quarter of the year in which the change is adopted.

Note.—Data are not necessarily comparable from one period to another due to changes in accounting principles, 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–92.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947–96*

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
1983	10.6	8.1	12.7	4.1	3.1	4.9
1984	12.5	12.4	12.5	4.6	4.4	4.8
1985	10.1	9.2	11.0	3.8	3.4	4.1
1986	9.5	7.5	11.5	3.7	2.9	4.6
1987	12.8	11.9	13.7	4.9	4.5	5.2
1988	16.1	14.3	17.9	6.0	5.2	6.7
1989	13.6	11.1	16.2	5.0	4.1	5.8
1990	10.7	8.0	13.4	4.0	3.0	4.9
1991	6.3	1.5	10.8	2.4	.6	4.1
1992[2]	2.2	–5.0	8.4	.8	–1.7	3.1
1993	8.1	5.7	10.1	2.8	1.9	3.7
1994	15.9	16.4	15.4	5.4	5.3	5.6
1995	16.1	15.5	16.8	5.7	5.3	6.1
1994: I	13.2	12.9	13.5	4.7	4.2	5.1
II	17.2	20.4	14.2	5.7	6.3	5.1
III	16.7	16.6	16.9	5.7	5.4	6.0
IV	16.4	15.7	17.1	5.5	5.0	6.0
1995: I	17.6	17.7	17.4	6.2	6.1	6.4
II	18.6	18.9	18.4	6.5	6.4	6.6
III	16.2	13.5	18.8	5.8	4.7	6.9
IV	12.3	11.9	12.8	4.3	4.0	4.7
1996: I	15.8	14.1	17.4	5.8	5.0	6.7
II	19.0	18.8	19.2	6.7	6.3	7.1
III	18.6	16.3	21.0	6.7	5.7	7.7

[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.

[2] See footnote 3, Table B–91.

Note.—Based on data in millions of dollars.

See Note, Table B–91.

Source: Department of Commerce, Bureau of the Census.

TABLE B–93.—*Common stock prices and yields, 1955–96*

Year or month	Common stock prices [1]							Common stock yields (S&P)(percent) [4]	
	New York Stock Exchange indexes (Dec. 31, 1965=50) [2]					Dow Jones industrial average [2]	Standard & Poor's composite index (1941–43=10) [2]	Dividend-price ratio [5]	Earnings-price ratio [6]
	Composite	Industrial	Transportation	Utility [3]	Finance				
1955	21.54	....	....	....	....	442.72	40.49	4.08	7.95
1956	24.40	....	....	....	....	493.01	46.62	4.09	7.55
1957	23.67	....	....	....	....	475.71	44.38	4.35	7.89
1958	24.56	....	....	....	....	491.66	46.24	3.97	6.23
1959	30.73	....	....	....	....	632.12	57.38	3.23	5.78
1960	30.01	....	....	....	....	618.04	55.85	3.47	5.90
1961	35.37	....	....	....	....	691.55	66.27	2.98	4.62
1962	33.49	....	....	....	....	639.76	62.38	3.37	5.82
1963	37.51	....	....	....	....	714.81	69.87	3.17	5.50
1964	43.76	....	....	....	....	834.05	81.37	3.01	5.32
1965	47.39	....	....	....	....	910.88	88.17	3.00	5.59
1966	46.15	46.18	50.26	90.81	44.45	873.60	85.26	3.40	6.63
1967	50.77	51.97	53.51	90.86	49.82	879.12	91.93	3.20	5.73
1968	55.37	58.00	50.58	88.38	65.85	906.00	98.70	3.07	5.67
1969	54.67	57.44	46.96	85.60	70.49	876.72	97.84	3.24	6.08
1970	45.72	48.03	32.14	74.47	60.00	753.19	83.22	3.83	6.45
1971	54.22	57.92	44.35	79.05	70.38	884.76	98.29	3.14	5.41
1972	60.29	65.73	50.17	76.95	78.35	950.71	109.20	2.84	5.50
1973	57.42	63.08	37.74	75.38	70.12	923.88	107.43	3.06	7.12
1974	43.84	48.08	31.89	59.58	49.67	759.37	82.85	4.47	11.59
1975	45.73	50.52	31.10	63.00	47.14	802.49	86.16	4.31	9.15
1976	54.46	60.44	39.57	73.94	52.94	974.92	102.01	3.77	8.90
1977	53.69	57.86	41.09	81.84	55.25	894.63	98.20	4.62	10.79
1978	53.70	58.23	43.50	78.44	56.65	820.23	96.02	5.28	12.03
1979	58.32	64.76	47.34	76.41	61.42	844.40	103.01	5.47	13.46
1980	68.10	78.70	60.61	74.69	64.25	891.41	118.78	5.26	12.66
1981	74.02	85.44	72.61	77.81	73.52	932.92	128.05	5.20	11.96
1982	68.93	78.18	60.41	79.49	71.99	884.36	119.71	5.81	11.60
1983	92.63	107.45	89.36	93.99	95.34	1,190.34	160.41	4.40	8.03
1984	92.46	108.01	85.63	92.89	89.28	1,178.48	160.46	4.64	10.02
1985	108.09	123.79	104.11	113.49	114.21	1,328.23	186.84	4.25	8.12
1986	136.00	155.85	119.87	142.72	147.20	1,792.76	236.34	3.49	6.09
1987	161.70	195.31	140.39	148.59	146.48	2,275.99	286.83	3.08	5.48
1988	149.91	180.95	134.12	143.53	127.26	2,060.82	265.79	3.64	8.01
1989	180.02	216.23	175.28	174.87	151.88	2,508.91	322.84	3.45	7.42
1990	183.46	225.78	158.62	181.20	133.26	2,678.94	334.59	3.61	6.47
1991	206.33	258.14	173.99	185.32	150.82	2,929.33	376.18	3.24	4.79
1992	229.01	284.62	201.09	198.91	179.26	3,284.29	415.74	2.99	4.22
1993	249.58	299.99	242.49	228.90	216.42	3,522.06	451.41	2.78	4.46
1994	254.12	315.25	247.29	209.06	209.73	3,793.77	460.33	2.82	5.83
1995	291.15	367.34	269.41	220.30	238.45	4,493.76	541.64	2.56	6.09
1996	358.17	453.98	327.33	249.77	303.89	5,742.89	670.83	2.19	....
1995: Jan	253.56	319.93	230.25	201.16	201.05	3,872.46	465.25	2.87	....
Feb	261.86	328.98	237.29	207.73	211.76	3,953.72	481.92	2.81	....
Mar	266.81	337.96	244.45	204.16	213.29	4,062.78	493.15	2.76	6.50
Apr	274.37	347.69	254.36	208.93	219.38	4,230.66	507.91	2.68	....
May	281.81	357.01	254.69	211.58	228.55	4,391.57	523.81	2.60	....
June	289.52	366.75	256.80	216.27	236.26	4,510.76	539.35	2.55	6.32
July	298.18	379.13	279.15	219.18	240.50	4,684.76	557.37	2.50	....
Aug	300.05	379.79	285.63	221.99	245.27	4,639.27	559.11	2.49	....
Sept	310.41	390.42	295.54	229.64	260.72	4,746.76	578.77	2.42	6.02
Oct	311.78	389.63	291.16	236.43	265.12	4,760.46	582.92	2.41	....
Nov	317.58	398.66	300.06	238.98	266.12	4,935.81	595.53	2.37	....
Dec	327.90	412.11	303.53	247.59	273.36	5,136.10	614.57	2.30	5.51
1996: Jan	329.22	412.71	300.30	254.07	273.73	5,179.37	614.42	2.31	....
Feb	346.46	435.92	315.29	257.80	290.97	5,518.73	649.54	2.22	....
Mar	346.73	439.56	324.76	245.77	290.45	5,612.24	647.07	2.22	5.27
Apr	347.50	441.99	326.42	244.87	287.92	5,579.86	647.17	2.24	....
May	354.84	452.63	334.66	249.73	290.43	5,616.71	661.23	2.21	....
June	358.32	458.30	331.57	247.20	294.42	5,671.51	668.50	2.21	5.21
July	345.52	438.58	316.66	245.31	287.89	5,496.26	644.07	2.28	....
Aug	354.59	449.41	321.61	244.74	302.95	5,685.50	662.68	2.22	....
Sept	360.96	459.69	323.12	242.25	308.16	5,804.01	674.88	2.20	5.25
Oct	373.54	473.98	332.93	249.61	324.42	5,996.21	701.46	2.11	....
Nov	388.75	490.60	348.32	258.85	345.30	6,318.36	735.67	2.01	....
Dec	391.61	494.38	352.28	257.09	350.01	6,435.87	743.25	2.01	....

[1] Averages of daily closing prices, except NYSE data through May 1964 are averages of weekly closing prices.
[2] Includes stocks as follows: for NYSE, all stocks listed (more than 2,000); for Dow-Jones industrial average, 30 stocks; and for S&P composite index, 500 stocks.
[3] Effective April 1993, the NYSE doubled the value of the utility index to facilitate trading of options and futures on the index. Annual indexes prior to 1993 reflect the doubling.
[4] Based on 500 stocks in the S&P composite index.
[5] 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.
[6] 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 data are averages of quarterly ratios.

Note.—All data relate to stocks listed on the New York Stock Exchange.

Sources: New York Stock Exchange (NYSE), Dow Jones & Co., Inc., and Standard & Poor's Corporation (S&P).

TABLE B–94.—*Business formation and business failures, 1955–96*

Year or month	Index of net business formation (1967=100)	New business incorporations (number)	Business failures[1]: Business failure rate[2]	Business failures[1]: Number of failures: Total	Number of failures: Liability size class: Under $100,000	Number of failures: Liability size class: $100,000 and over	Amount of current liabilities (millions of dollars): Total	Amount of current liabilities: Liability size class: Under $100,000	Amount of current liabilities: Liability size class: $100,000 and over
1955	96.6	139,915	41.6	10,969	10,113	856	449.4	206.4	243.0
1956	94.6	141,163	48.0	12,686	11,615	1,071	562.7	239.8	322.9
1957	90.3	137,112	51.7	13,739	12,547	1,192	615.3	267.1	348.2
1958	90.2	150,781	55.9	14,964	13,499	1,465	728.3	297.6	430.7
1959	97.9	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9
1960	94.5	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4
1961	90.8	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0
1962	92.6	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1
1963	94.4	186,404	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6
1964	98.2	197,724	53.2	13,501	11,346	2,155	1,329.2	313.6	1,015.6
1965	99.8	203,897	53.3	13,514	11,340	2,174	1,321.7	321.7	1,000.0
1966	99.3	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	108.3	233,635	38.6	9,636	7,829	1,807	941.0	241.1	699.9
1969	115.8	274,267	37.3	9,154	7,192	1,962	1,142.1	231.3	910.8
1970	108.8	264,209	43.8	10,748	8,019	2,729	1,887.8	269.3	1,618.4
1971	111.1	287,577	41.7	10,326	7,611	2,715	1,916.9	271.3	1,645.6
1972	119.3	316,601	38.3	9,566	7,040	2,526	2,000.2	258.8	1,741.5
1973	119.1	329,358	36.4	9,345	6,627	2,718	2,298.6	235.6	2,063.0
1974	113.2	319,149	38.4	9,915	6,733	3,182	3,053.1	256.9	2,796.3
1975	109.9	326,345	42.6	11,432	7,504	3,928	4,380.2	298.6	4,081.6
1976	120.4	375,766	34.8	9,628	6,176	3,452	3,011.3	257.8	2,753.4
1977	130.8	436,170	28.4	7,919	4,861	3,058	3,095.3	208.3	2,887.0
1978	138.1	478,019	23.9	6,619	3,712	2,907	2,656.0	164.7	2,491.3
1979	138.3	524,565	27.8	7,564	3,930	3,634	2,667.4	179.9	2,487.5
1980	129.9	533,520	42.1	11,742	5,682	6,060	4,635.1	272.5	4,362.6
1981	124.8	581,242	61.3	16,794	8,233	8,561	6,955.2	405.8	6,549.3
1982	116.4	566,942	88.4	24,908	11,509	13,399	15,610.8	541.7	15,069.1
1983	117.5	600,420	109.7	31,334	15,572	15,762	16,072.9	635.1	15,437.8
1984	121.3	634,991	107.0	52,078	33,527	18,551	29,268.6	409.8	28,858.8
1985	120.9	664,235	115.0	57,253	36,551	20,702	36,937.4	423.9	36,513.5
1986	120.4	702,738	120.0	61,616	38,908	22,708	44,724.0	838.3	43,885.7
1987	121.2	685,572	102.0	61,111	38,949	22,162	34,723.8	746.0	33,977.8
1988	124.1	685,095	98.0	57,097	38,300	18,797	39,573.0	686.9	38,886.1
1989	124.8	676,565	65.0	50,361	33,312	17,049	42,328.8	670.5	41,658.2
1990	120.7	647,366	74.0	60,747	40,833	19,914	56,130.1	735.6	55,394.5
1991	115.2	628,604	107.0	88,140	60,617	27,523	96,825.3	1,044.9	95,780.4
1992	116.3	666,800	110.0	97,069	68,264	28,805	94,317.5	1,096.7	93,220.8
1993	121.1	706,537	109.0	86,133	61,188	24,945	47,755.5	947.6	46,807.9
1994	125.5	741,249	86.0	71,558	50,814	20,744	28,977.9	845.0	28,132.9
1995	(3)	767,996	90.0	71,128	49,495	21,633	37,283.6	866.1	36,417.4
1996	(3)	....	....	71,811	49,547	22,264	34,021.1	913.1	33,108.0
	Seasonally adjusted								
1995: Jan	(3)	66,236	....	6,299	4,517	1,782	2,237.4	69.1	2,168.3
Feb	(3)	64,566	....	5,663	4,035	1,628	1,253.9	67.2	1,186.7
Mar	(3)	65,292	....	6,686	4,714	1,972	1,943.8	80.3	1,863.5
Apr	(3)	57,839	....	5,591	3,843	1,748	1,725.6	70.3	1,655.3
May	(3)	65,422	....	6,408	4,376	2,032	2,842.6	81.9	2,760.7
June	(3)	63,493	....	5,913	4,060	1,853	1,302.9	76.0	1,226.9
July	(3)	59,946	....	4,680	3,186	1,494	2,268.0	58.4	2,209.6
Aug	(3)	69,174	....	6,338	4,372	1,966	2,187.8	79.3	2,108.6
Sept	(3)	61,759	....	5,429	3,749	1,680	2,685.8	67.2	2,618.7
Oct	(3)	67,146	....	6,549	4,637	1,912	14,763.6	79.0	14,684.6
Nov	(3)	65,992	....	6,076	4,274	1,802	1,982.6	73.1	1,909.5
Dec	(3)	61,142	....	5,496	3,732	1,764	2,089.5	64.4	2,025.1
1996: Jan	(3)	69,515	....	6,043	4,219	1,824	4,302.9	66.8	4,236.1
Feb	(3)	69,709	....	5,552	3,888	1,664	2,067.0	65.3	2,001.7
Mar	(3)	60,556	....	6,631	4,562	2,069	1,683.9	81.1	1,602.7
Apr	(3)	67,454	....	6,706	4,617	2,089	3,199.9	90.4	3,109.6
May	(3)	68,269	....	7,234	4,951	2,283	2,568.3	88.9	2,479.3
June	(3)	61,602	....	6,279	4,331	1,948	1,646.8	80.4	1,566.5
July	(3)	73,208	....	4,547	3,170	1,377	4,793.2	48.7	4,744.5
Aug	(3)	....	....	4,954	3,333	1,621	1,221.2	73.6	1,147.7
Sept	(3)	....	....	4,755	3,365	1,390	2,903.1	54.3	2,848.8
Oct	(3)	....	....	6,495	4,456	2,039	2,097.2	92.7	2,004.5
Nov	(3)	....	....	6,222	4,278	1,944	1,395.7	87.7	1,308.0
Dec	(3)	....	....	6,393	4,377	2,016	6,142.0	83.3	6,058.7

[1] Commercial and industrial failures only through 1983, excluding failures of banks, railroads, real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc.

Data beginning 1984 are based on expanded coverage and new methodology and are therefore not generally comparable with earlier data.

Data for 1996 are subject to revision due to amended court filings.

[2] Failure rate per 10,000 listed enterprises.

[3] Series discontinued in 1995.

Sources: Department of Commerce (Bureau of Economic Analysis) and The Dun & Bradstreet Corporation.

Table B–95.—*Farm income, 1945–96*

[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]		
		Total	Livestock and products	Crops			
1945	25.4	21.7	12.0	9.7	–0.4	13.1	12.3
1946	29.6	24.8	13.8	11.0	.0	14.5	15.1
1947	32.4	29.6	16.5	13.1	–1.8	17.0	15.4
1948	36.5	30.2	17.1	13.1	1.7	18.8	17.7
1949	30.8	27.8	15.4	12.4	–.9	18.0	12.8
1950	33.1	28.5	16.1	12.4	.8	19.5	13.6
1951	38.3	32.9	19.6	13.2	1.2	22.3	15.9
1952	37.8	32.5	18.2	14.3	.9	22.8	15.0
1953	34.4	31.0	16.9	14.1	–.6	21.5	13.0
1954	34.2	29.8	16.3	13.6	.5	21.8	12.4
1955	33.5	29.5	16.0	13.5	.2	22.2	11.3
1956	34.0	30.4	16.4	14.0	–.5	22.7	11.3
1957	34.8	29.7	17.4	12.3	.6	23.7	11.1
1958	39.0	33.5	19.2	14.2	.8	25.8	13.2
1959	37.9	33.6	18.9	14.7	.0	27.2	10.7
1960	38.6	34.0	19.0	15.0	.4	27.4	11.2
1961	40.5	35.2	19.5	15.7	.3	28.6	12.0
1962	42.3	36.5	20.2	16.3	.6	30.3	12.1
1963	43.4	37.5	20.0	17.4	.6	31.6	11.8
1964	42.3	37.3	19.9	17.4	–.8	31.8	10.5
1965	46.5	39.4	21.9	17.5	1.0	33.6	12.9
1966	50.5	43.4	25.0	18.4	–.1	36.5	14.0
1967	50.5	42.8	24.4	18.4	.7	38.2	12.3
1968	51.8	44.2	25.5	18.7	.1	39.5	12.3
1969	56.4	48.2	28.6	19.6	.1	42.1	14.3
1970	58.8	50.5	29.5	21.0	.0	44.5	14.4
1971	62.1	52.7	30.5	22.3	1.4	47.1	15.0
1972	71.1	61.1	35.6	25.5	.9	51.7	19.5
1973	98.9	86.9	45.8	41.1	3.4	64.6	34.4
1974	98.2	92.4	41.3	51.1	–1.6	71.0	27.3
1975	100.6	88.9	43.1	45.8	3.4	75.0	25.5
1976	102.9	95.4	46.3	49.0	–1.5	82.7	20.2
1977	108.8	96.2	47.6	48.6	1.1	88.9	19.9
1978	128.4	112.4	59.2	53.2	1.9	103.2	25.2
1979	150.7	131.5	69.2	62.3	5.0	123.3	27.4
1980	149.3	139.7	68.0	71.7	–6.3	133.1	16.1
1981	166.3	141.6	69.2	72.5	6.5	139.4	26.9
1982	164.1	142.6	70.3	72.3	–1.4	140.3	23.8
1983	153.9	136.8	69.6	67.2	–10.9	139.6	14.2
1984	168.0	142.8	72.9	69.9	6.0	142.0	26.0
1985	161.2	144.1	69.8	74.3	–2.3	132.6	28.6
1986	156.1	135.4	71.6	63.8	–2.2	125.2	30.9
1987	168.4	141.8	76.0	65.8	–2.3	131.0	37.4
1988	177.9	151.2	79.6	71.6	–4.1	139.9	38.0
1989	191.9	160.8	83.9	76.9	3.8	146.7	45.3
1990	198.2	169.5	89.2	80.3	3.3	153.4	44.8
1991	191.9	167.9	85.8	82.1	–.2	153.3	38.5
1992	200.6	171.3	85.6	85.7	4.2	152.5	48.0
1993	204.2	177.6	90.2	87.5	–4.5	160.5	43.6
1994	215.8	180.8	88.1	92.6	8.2	167.4	48.4
1995	210.4	185.8	86.8	98.9	–3.4	175.6	34.8
1994: I	221.2	179.9	92.1	87.9	10.2	164.5	56.7
II	208.6	170.8	82.9	88.0	9.6	166.8	41.8
III	214.1	186.9	97.7	89.2	7.3	168.8	45.3
IV	219.4	185.5	79.9	105.5	5.8	169.6	49.8
1995: I	208.3	180.6	83.2	97.4	–4.1	172.4	35.9
II	206.4	181.0	81.6	99.4	–3.9	175.4	30.9
III	218.5	199.8	96.1	103.7	–3.0	177.5	41.0
IV	208.4	181.5	86.5	95.1	–2.4	177.0	31.4
1996: I *p*	233.1	193.5	85.3	108.2	6.4	178.4	54.7
II *p*	245.4	209.5	89.7	119.8	6.1	185.6	59.8

[1] Cash marketing receipts and inventory changes plus Government payments, other farm cash income, and nonmoney income furnished by farms.

[2] Physical changes in end-of-period inventory of crop and livestock commodities valued at average prices during the period.

Note.—Data include net Commodity Credit Corporation loans and operator households.

Source: Department of Agriculture, Economic Research Service.

Table B–96.—*Farm business balance sheet, 1950–95*

[Billions of dollars]

End of year	Assets								Claims			
	Total assets	Physical assets					Financial assets		Total claims	Real estate debt [5]	Nonreal estate debt [6]	Proprietors' equity
		Real estate	Nonreal estate				Investments in cooperatives	Other [4]				
			Livestock and poultry [1]	Machinery and motor vehicles	Crops [2]	Purchased inputs [3]						
1950	121.6	75.4	17.1	12.3	7.1	....	2.7	7.0	121.6	5.2	5.7	110.7
1951	136.1	83.8	19.5	14.3	8.2	....	2.9	7.3	136.1	5.7	6.9	123.7
1952	133.0	85.1	14.8	15.0	7.9	....	3.2	7.1	133.0	6.2	7.1	119.7
1953	128.7	84.3	11.7	15.6	6.8	....	3.3	7.0	128.7	6.6	6.3	115.7
1954	132.6	87.8	11.2	15.7	7.5	....	3.5	6.9	132.6	7.1	6.7	118.9
1955	137.0	93.0	10.6	16.3	6.5	....	3.7	6.9	137.0	7.8	7.3	121.9
1956	145.7	100.3	11.0	16.9	6.8	....	4.0	6.7	145.7	8.5	7.4	129.8
1957	154.5	106.4	13.9	17.0	6.4	....	4.2	6.6	154.5	9.0	8.2	137.3
1958	168.7	114.6	17.7	18.1	6.9	....	4.5	6.9	168.7	9.7	9.4	149.7
1959	173.0	121.2	15.2	19.3	6.2	....	4.8	6.2	173.0	10.6	10.7	151.7
1960	174.3	123.3	15.6	19.1	6.3	....	4.2	5.8	174.3	11.3	11.1	151.9
1961	181.6	129.1	16.4	19.3	6.5	....	4.5	5.9	181.6	12.3	11.8	157.5
1962	188.9	134.6	17.3	19.9	6.5	....	4.6	5.9	188.9	13.5	13.2	162.2
1963	196.7	142.4	15.9	20.4	7.4	....	5.0	5.7	196.7	15.0	14.6	167.1
1964	204.2	150.5	14.4	21.2	7.0	....	5.2	5.8	204.2	16.9	15.3	172.0
1965	220.8	161.5	17.6	22.4	7.9	....	5.4	6.0	220.8	18.9	16.9	185.0
1966	234.0	171.2	19.0	24.1	8.1	....	5.7	6.0	234.0	20.7	18.5	194.8
1967	245.9	180.9	18.8	26.3	7.9	....	5.8	6.1	245.9	22.6	19.6	203.7
1968	257.1	189.4	20.2	27.7	7.4	....	6.1	6.3	257.1	24.7	19.2	213.2
1969	267.8	195.3	22.8	28.6	8.3	....	6.4	6.4	267.8	26.4	20.0	221.4
1970	278.9	202.4	23.7	30.4	8.7	....	7.2	6.5	278.9	27.5	21.2	230.1
1971	301.7	217.6	27.3	32.4	9.9	....	7.9	6.7	301.7	29.3	24.0	248.5
1972	339.9	243.0	33.7	34.6	12.9	....	8.7	6.9	339.9	32.0	26.7	281.2
1973	418.4	298.3	42.4	39.7	21.3	....	9.7	7.1	418.4	36.1	31.6	350.8
1974 [7]	449.1	335.6	24.6	48.5	22.5	....	11.2	6.9	449.1	40.8	35.1	373.3
1975	510.7	383.6	29.4	57.4	20.5	....	13.0	6.9	510.7	45.3	39.7	425.7
1976	590.7	456.5	29.0	63.3	20.6	....	14.3	6.9	590.7	50.5	45.6	494.6
1977	651.5	509.3	31.9	69.3	20.4	....	13.5	7.0	651.5	58.4	52.4	540.6
1978	767.3	601.8	50.1	68.5	23.8	....	16.1	7.1	767.3	66.7	60.7	639.9
1979	898.1	706.1	61.4	75.4	29.9	....	18.1	7.3	898.1	79.7	71.8	746.6
1980	981.5	782.8	60.6	80.3	31.1	....	19.3	7.4	981.5	89.7	77.1	814.7
1981	980.7	785.6	53.5	85.5	27.9	....	20.6	7.6	980.7	98.8	83.6	798.3
1982	942.8	750.0	53.0	86.0	24.0	....	21.9	7.8	942.8	101.8	87.0	754.0
1983	941.7	753.4	49.5	85.8	22.0	....	22.8	8.1	941.7	103.2	87.9	750.6
1984	855.2	661.8	49.5	85.0	24.3	2.0	24.3	8.3	855.2	106.7	87.1	661.4
1985	771.0	586.2	46.3	82.9	21.2	1.2	24.3	9.0	771.0	100.1	77.5	593.4
1986	723.6	542.3	47.8	81.9	15.1	2.1	24.4	10.0	723.6	90.4	66.6	566.6
1987	754.7	563.5	58.0	78.7	16.2	3.2	25.3	9.9	754.7	82.4	62.0	610.3
1988	786.3	582.7	62.2	81.0	21.6	3.5	25.1	10.4	786.3	77.8	61.7	646.7
1989	812.4	600.8	66.2	84.1	21.9	2.6	26.3	10.5	812.4	76.0	61.9	674.5
1990	839.9	620.0	70.9	86.3	21.5	2.8	27.5	10.9	839.9	74.7	63.2	701.9
1991	843.5	625.5	68.1	85.9	20.7	2.7	28.7	11.8	843.5	74.9	64.3	704.3
1992	868.9	642.8	71.0	85.5	22.7	3.9	29.4	13.6	868.9	75.4	63.6	729.9
1993	904.6	674.0	72.8	86.7	20.4	4.2	31.3	15.3	904.6	76.0	65.9	762.6
1994	938.1	706.9	67.9	87.9	22.5	5.0	32.4	15.5	938.1	77.7	69.1	791.3
1995	978.0	755.7	58.1	86.9	25.1	3.4	33.9	14.9	978.0	79.3	71.5	827.2

[1] Excludes commercial broilers; excludes horses and mules beginning 1959; excludes turkeys beginning 1986.
[2] Non-Commodity Credit Corporation (CCC) crops held on farms plus value above loan rate for crops held under CCC.
[3] Includes fertilizer, chemicals, fuels, parts, feed, seed, and other supplies.
[4] Currency and demand deposits.
[5] Includes CCC storage and drying facilities loans.
[6] Does not include CCC crop loans.
[7] Beginning 1974, data are for farms included in the new farm definition, that is, places with sales of $1,000 or more annually.

Note.—Data exclude operator households.
Beginning 1959, data include Alaska and Hawaii.

Source: Department of Agriculture, Economic Research Service.

TABLE B–97.—*Farm output and productivity indexes, 1948–94*

[1992=100]

Year	Farm output: Total [1]	Farm output: Livestock and products	Farm output: Crops: Total [2]	Farm output: Crops: Feed crops	Farm output: Crops: Food grains	Farm output: Crops: Oil crops	Productivity indicators [3]: Farm output per unit of total factor input	Productivity indicators [3]: Farm output per unit of farm labor
1948	44	49	42	47	47	17	43	13
1949	44	52	40	43	41	15	40	14
1950	44	54	38	44	38	18	40	14
1951	46	57	40	42	37	16	41	15
1952	47	58	41	44	48	16	43	16
1953	48	59	42	43	44	16	44	17
1954	48	61	41	45	39	18	45	18
1955	50	62	42	47	37	20	44	18
1956	50	63	42	46	38	23	45	19
1957	50	63	42	51	36	23	45	20
1958	52	64	46	54	53	29	47	23
1959	54	66	46	54	43	25	47	23
1960	55	66	48	57	51	27	48	24
1961	56	69	48	53	47	32	50	26
1962	56	69	49	54	43	32	51	26
1963	58	71	51	56	45	33	52	28
1964	58	73	49	52	50	33	53	29
1965	59	71	52	59	52	40	54	30
1966	59	72	51	58	52	43	54	33
1967	61	74	54	64	59	45	57	36
1968	62	75	55	62	62	51	58	38
1969	63	75	57	64	57	52	59	39
1970	63	78	55	59	54	53	58	39
1971	67	79	61	72	63	59	63	43
1972	68	80	61	70	60	59	63	43
1973	70	80	65	73	66	71	64	45
1974	66	79	59	61	71	57	60	46
1975	71	75	68	72	84	71	65	49
1976	72	79	67	73	83	60	64	50
1977	76	80	73	78	78	82	69	55
1978	77	80	76	84	73	87	67	58
1979	82	82	83	89	85	105	69	64
1980	79	85	75	76	94	81	66	64
1981	86	87	87	91	111	92	74	69
1982	87	86	87	93	108	101	76	72
1983	76	88	68	61	92	76	69	64
1984	86	87	85	90	101	87	78	74
1985	89	89	89	100	95	96	84	82
1986	87	90	84	95	83	89	84	84
1987	88	91	85	84	84	88	87	87
1988	82	94	75	62	76	72	82	76
1989	89	94	86	85	83	88	90	87
1990	94	95	92	88	107	87	93	91
1991	94	98	91	86	82	94	93	89
1992	100	100	100	100	100	100	100	100
1993	94	101	89	76	96	85	94	99
1994	105	105	106	102	96	115	104	110

[1] Gross production.
[2] Includes items not included in groups shown.
[3] See Table B–98 for farm inputs.

Source: Department of Agriculture, Economic Research Service.

Table B–98.—*Farm input use, selected inputs, 1948–96*

Year	Farm population, April[1]		Farm employment (thousands)[3]			Crops harvested (millions of acres)[5]	Selected indexes of input use (1992=100)							
	Number (thousands)	As percent of total population[2]	Total	Self-employed and unpaid workers[4]	Hired workers		Total	Farm labor	Farm real estate	Durable equipment	Energy	Agricultural chemicals[6]	Feed, seed, and purchased livestock[7]	Other purchased inputs
1948	24,383	16.6	10,363	8,026	2,337	356	104	336	102	62	70	33	58	42
1949	24,194	16.2	9,964	7,712	2,252	360	110	329	103	74	78	35	60	72
1950	23,048	15.2	9,926	7,597	2,329	345	110	316	105	85	80	42	60	72
1951	21,890	14.2	9,546	7,310	2,236	344	112	303	107	95	83	41	62	77
1952	21,748	13.9	9,149	7,005	2,144	349	111	294	108	103	86	42	62	79
1953	19,874	12.5	8,864	6,775	2,089	348	110	278	109	107	89	41	63	75
1954	19,019	11.7	8,651	6,570	2,081	346	106	271	110	112	88	42	58	72
1955	19,078	11.5	8,381	6,345	2,036	340	112	274	111	114	91	44	65	75
1956	18,712	11.1	7,852	5,900	1,952	324	112	260	111	115	91	49	68	74
1957	17,656	10.3	7,600	5,660	1,940	324	111	243	111	113	89	47	71	77
1958	17,128	9.8	7,503	5,521	1,982	324	111	231	111	111	87	48	75	80
1959	16,592	9.3	7,342	5,390	1,952	324	114	231	111	111	88	55	76	92
1960	15,635	8.7	7,057	5,172	1,885	324	113	225	111	112	89	56	75	91
1961	14,803	8.1	6,919	5,029	1,890	302	111	219	108	110	91	59	72	89
1962	14,313	7.7	6,700	4,873	1,827	295	111	216	107	109	93	54	75	91
1963	13,367	7.1	6,518	4,738	1,780	298	111	211	108	109	94	60	77	90
1964	12,954	6.7	6,110	4,506	1,604	298	109	199	107	110	96	65	75	90
1965	12,363	6.4	5,610	4,128	1,482	298	108	193	107	112	97	69	74	90
1966	11,595	5.9	5,214	3,854	1,360	294	110	180	106	115	99	79	80	91
1967	10,875	5.5	4,903	3,650	1,253	306	109	171	108	119	98	76	80	93
1968	10,454	5.2	4,749	3,535	1,213	300	107	165	107	125	98	65	81	91
1969	10,307	5.1	4,596	3,419	1,176	290	108	163	105	127	100	70	86	89
1970	9,712	4.7	4,523	3,348	1,175	293	108	161	105	128	100	73	88	86
1971	9,425	4.5	4,436	3,275	1,161	305	107	158	107	129	98	77	86	84
1972	9,610	4.6	4,373	3,228	1,146	294	108	156	105	129	97	82	88	84
1973	9,472	4.5	4,337	3,169	1,168	321	110	156	109	132	99	91	88	91
1974	9,264	4.3	4,389	3,075	1,314	328	110	145	111	139	94	96	88	96
1975	8,864	4.1	4,331	3,021	1,310	336	108	145	110	144	110	88	83	94
1976	8,253	3.8	4,363	2,992	1,371	337	111	143	110	148	124	97	88	97
1977	[8]6,194	[8]2.8	4,143	2,852	1,291	345	110	138	110	152	130	95	83	98
1978	[8]6,501	[8]2.9	3,937	2,680	1,256	338	116	132	109	156	136	105	96	117
1979	[8]6,241	[8]2.8	3,765	2,495	1,270	348	118	128	110	161	124	115	103	125
1980	[8]6,051	[8]2.7	3,699	2,401	1,298	352	120	124	112	166	121	127	109	114
1981	[8]5,850	[8]2.5	[9]3,582	[9]2,324	[9]1,258	366	117	126	112	166	116	127	103	107
1982	[8]5,628	[8]2.4	[9]3,466	[9]2,248	[9]1,218	362	114	120	110	163	109	96	106	102
1983	[8]5,787	[8]2.5	[9]3,349	[9]2,171	[9]1,178	306	110	118	102	155	106	89	108	105
1984	5,754	2.4	[9]3,233	[9]2,095	[9]1,138	348	110	116	108	147	110	101	97	105
1985	5,355	2.2	3,116	2,018	1,098	342	106	109	107	139	98	96	99	97
1986	5,226	2.2	2,912	1,873	1,039	325	103	102	104	130	91	106	99	86
1987	4,986	2.1	2,897	1,846	1,051	302	101	102	100	120	102	96	97	93
1988	4,951	2.1	2,954	1,967	1,037	297	100	109	100	113	102	89	96	96
1989	4,801	2.0	2,863	1,935	928	318	99	103	102	108	101	92	91	99
1990	4,591	1.9	2,891	2,000	892	322	100	103	101	105	100	95	99	101
1991	4,632	1.9	2,877	1,968	910	318	102	105	100	103	101	99	99	102
1992	....	....	2,810	1,944	866	319	100	100	100	100	100	100	100	100
1993	....	....	2,800	1,942	857	308	100	95	98	97	100	105	101	108
1994	....	....	2,767	1,925	842	321	101	96	99	94	103	106	102	113
1995	....	....	2,836	1,967	869	314	....	....	....	....	....	....	....	....
1996 p	....	....	2,842	2,010	832	326	....	....	....	....	....	....	....	....

[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 8. Series discontinued in 1992.

[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–33) because of differences in the method of approach, in concepts of employment, and in time of month for which the data are collected.

[4] Prior to 1982 this category was termed "family workers" and did not include nonfamily unpaid workers.

[5] Acreage harvested plus acreages in fruits, tree nuts, and farm gardens.

[6] Fertilizer, lime, and pesticides.

[7] Includes purchases of broiler- and egg-type chicks and turkey poults and livestock imports for purposes other than immediate slaughter.

[8] Based on new definition of a farm. Under old definition of a farm, farm population (in thousands and as percent of total population) for 1977, 1978, 1979, 1980, 1981, 1982, and 1983 is 7,806 and 3.6; 8,005 and 3.6; 7,553 and 3.4; 7,241 and 3.2; 7,014 and 3.1; 6,880 and 3.0; 7,029 and 3.0, respectively.

[9] Basis for farm employment series was discontinued for 1981 through 1984. Employment is estimated for these years.

Note.—Population includes Alaska and Hawaii beginning 1960.

Sources: Department of Agriculture (Economic Research Service) and Department of Commerce (Bureau of the Census).

Table B–99.—*Indexes of prices received and prices paid by farmers, 1975–96*

[1990–92=100, except as noted]

Year or month	Prices received by farmers			Prices paid by farmers											Addendum: Average farm real estate value per acre (dollars)[3]
				All commodities, services, interest, taxes, and wage rates[1]	Production items									Wage rates	
	All farm products	Crops	Livestock and products		Total[2]	Feed	Livestock and poultry	Fertilizer	Agricultural chemicals	Fuels	Farm machinery	Farm services	Rent		
1975	73	88	62	47	55	83	39	87	72	40	38	48		44	340
1976	75	87	64	50	59	83	47	74	78	43	43	52		48	397
1977	73	83	64	53	61	82	48	72	71	46	47	57		51	474
1978	83	89	78	58	67	80	65	72	66	48	51	60		55	531
1979	94	98	90	66	76	89	88	77	67	61	56	66		60	628
1980	98	107	89	75	85	98	85	96	71	86	63	81		65	737
1981	100	111	89	82	92	110	80	104	77	98	70	89		70	819
1982	94	98	90	86	94	99	78	105	83	97	76	96		74	823
1983	98	108	88	86	92	107	76	100	87	94	81	82		76	788
1984	101	111	91	89	94	112	73	103	90	93	85	86		77	801
1985	91	98	86	86	91	95	74	98	90	93	85	85		78	713
1986	87	87	88	85	86	88	73	90	89	76	83	83		81	640
1987	89	86	91	87	87	83	85	86	87	76	85	84		85	599
1988	99	104	93	91	90	104	91	94	89	77	89	85		87	632
1989	104	109	100	96	95	110	93	99	93	83	94	91		95	668
1990	104	103	105	99	99	103	102	97	95	100	96	96	96	96	682
1991	100	101	99	100	100	98	102	103	101	104	100	98	100	100	703
1992	98	101	97	101	101	99	96	100	103	96	104	103	104	105	713
1993	101	102	100	104	103	99	104	97	107	92	106	108	100	108	736
1994	100	105	95	106	106	105	95	106	110	88	113	113	108	111	782
1995	102	112	92	110	109	104	82	122	115	91	121	118	116	113	832
1996	112	126	99	115	115	128	76	126	118	103	125	118	119	117	890
1995: Jan	98	103	93	109	108	97	92	116	113	88	119	116	116	116	832
Feb	97	101	94	109	108	97	88	120	114	87	119	117	116	116	....
Mar	99	107	93	109	108	98	84	124	115	87	119	117	116	116	....
Apr	99	112	90	109	108	100	82	126	115	91	119	117	116	112	....
May	100	117	88	109	108	99	81	126	115	95	119	118	116	112	....
June	100	113	90	110	109	100	83	125	115	94	120	119	116	112	....
July	101	114	91	110	109	102	81	121	115	90	120	119	116	111	....
Aug	103	114	92	110	109	104	80	120	116	90	121	120	116	111	....
Sept	104	115	94	110	109	105	80	118	116	93	121	120	116	111	....
Oct	104	114	92	111	110	110	80	119	116	92	123	119	116	114	....
Nov	106	117	94	111	111	115	77	121	117	92	124	118	116	114	....
Dec	108	118	96	112	112	121	79	123	117	95	125	119	116	114	....
1996: Jan	108	122	94	113	113	124	74	126	118	100	123	117	119	119	890
Feb	106	122	93	113	113	125	73	128	118	98	123	117	119	119	....
Mar	109	129	93	114	114	128	72	130	119	104	124	117	119	119	....
Apr	108	129	93	114	114	130	69	130	119	105	124	117	119	117	....
May	111	131	96	115	115	137	70	128	117	105	124	117	119	117	....
June	118	141	99	115	115	136	73	125	117	96	125	117	119	117	....
July	118	136	103	115	116	138	75	124	117	97	125	118	119	113	....
Aug	116	130	103	115	116	137	78	121	117	99	125	119	119	113	....
Sept	116	125	106	115	116	133	80	122	118	102	125	119	119	113	....
Oct	112	119	103	115	114	122	79	125	118	109	126	118	119	120	....
Nov	110	116	102	115	114	117	82	126	118	110	127	118	119	120	....
Dec	108	112	103	114	114	113	82	127	119	110	127	118	119	120	....

[1] Includes items used for family living, not shown separately.
[2] Includes other production items not shown separately.
[3] Average for 48 States. Annual data are: March 1 for 1975, February 1 for 1976–81, April 1 for 1982–85, February 1 for 1986–89, and January 1 for 1990–96.

Note—Data on a 1990–92 base prior to 1975 have not been calculated by Department of Agriculture.

Source: Department of Agriculture (National Agricultural Statistics Service and Economic Research Service).

Table B–100.—*U.S. exports and imports of agricultural commodities, 1940–96*

[Billions of dollars]

Year	Exports							Imports					Agri-cultural trade balance
	Total [1]	Feed grains	Food grains [2]	Oil-seeds and prod-ucts	Cot-ton	To-bacco	Ani-mals and prod-ucts	Total [1]	Crops, fruits, and vege-tables [3]	Ani-mals and prod-ucts	Cof-fee	Cocoa beans and prod-ucts	
1940	0.5	(4)	(4)	(4)	0.2	(4)	0.1	1.3	(4)	0.2	0.1	(4)	–0.8
1941	.7	(4)	0.1	(4)	.1	0.1	.3	1.7	0.1	.3	.2	(4)	–1.0
1942	1.2	(4)	(4)	(4)	.1	.1	.8	1.3	(4)	.5	.2	(4)	–.1
1943	2.1	(4)	.1	0.1	.2	.2	1.2	1.5	.1	.4	.3	(4)	.6
1944	2.1	(4)	.1	.1	.1	.1	1.3	1.8	.1	.3	.3	(4)	.3
1945	2.3	(4)	.4	(4)	.3	.2	.9	1.7	.1	.4	.3	(4)	.5
1946	3.1	0.1	.7	(4)	.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	(4)
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	23.8
1981	43.3	9.4	9.6	9.6	2.3	1.5	4.2	16.9	2.0	3.5	2.9	.9	26.4
1982	36.6	6.4	7.9	9.1	2.0	1.5	3.9	15.3	2.3	3.7	2.9	.7	21.3
1983	36.1	7.3	7.4	8.7	1.8	1.5	3.8	16.5	2.3	3.8	2.8	.8	19.6
1984	37.8	8.1	7.5	8.4	2.4	1.5	4.2	19.3	3.1	4.1	3.3	1.1	18.5
1985	29.0	6.0	4.5	5.8	1.6	1.5	4.1	20.0	3.5	4.2	3.3	1.4	9.1
1986	26.2	3.1	3.8	6.5	.8	1.2	4.5	21.5	3.6	4.5	4.6	1.1	4.7
1987	28.7	3.8	3.8	6.4	1.6	1.1	5.2	20.4	3.6	4.9	2.9	1.2	8.3
1988	37.1	5.9	5.9	7.7	2.0	1.3	6.4	21.0	3.8	5.2	2.5	1.0	16.1
1989	39.9	7.7	7.1	6.3	2.3	1.3	6.4	21.7	4.2	5.1	2.4	1.0	18.2
1990	39.4	7.0	4.8	5.7	2.8	1.4	6.7	22.8	4.9	5.6	1.9	1.1	16.6
1991	39.2	5.7	4.2	6.4	2.5	1.4	7.0	22.7	4.8	5.5	1.9	1.1	16.5
1992	42.9	5.7	5.4	7.2	2.0	1.7	7.9	24.6	4.9	5.7	1.7	1.1	18.3
1993	42.6	5.0	5.6	7.3	1.5	1.3	7.9	25.0	5.0	5.9	1.5	1.1	17.6
1994	45.7	4.7	5.3	7.2	2.7	1.3	9.1	26.8	5.4	5.7	2.5	1.0	18.9
1995	55.8	8.2	6.7	8.9	3.7	1.4	10.9	30.0	5.8	6.0	3.3	1.1	25.8
Jan–Nov:													
1995	50.5	7.3	6.0	8.0	3.2	1.3	10.0	27.6	5.3	5.5	3.0	1.0	22.9
1996	55.2	8.6	7.1	9.5	2.4	1.3	10.4	30.6	6.2	5.5	2.5	1.3	24.6

[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.

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, Economic Research Service.

Table B–101.—*U.S. international transactions, 1946–96*

[Millions of dollars; quarterly data seasonally adjusted, except as noted. Credits (+), debits (−)]

Year or quarter	Goods[1]			Services			Balance on goods and services	Investment income			Unilateral transfers, net[3]	Balance on current account
	Exports	Imports	Net	Net military transactions[2 3]	Net travel and transportation receipts	Other services, net		Receipts on U.S. assets abroad	Payments on foreign assets in U.S.	Net		
1946	11,764	–5,067	6,697	–424	733	310	7,316	772	–212	560	–2,991	4,885
1947	16,097	–5,973	10,124	–358	946	145	10,857	1,102	–245	857	–2,722	8,992
1948	13,265	–7,557	5,708	–351	374	175	5,906	1,921	–437	1,484	–4,973	2,417
1949	12,213	–6,874	5,339	–410	230	208	5,367	1,831	–476	1,355	–5,849	873
1950	10,203	–9,081	1,122	–56	–120	242	1,188	2,068	–559	1,509	–4,537	–1,840
1951	14,243	–11,176	3,067	169	298	254	3,788	2,633	–583	2,050	–4,954	884
1952	13,449	–10,838	2,611	528	83	309	3,531	2,751	–555	2,196	–5,113	614
1953	12,412	–10,975	1,437	1,753	–238	307	3,259	2,736	–624	2,112	–6,657	–1,286
1954	12,929	–10,353	2,576	902	–269	305	3,514	2,929	–582	2,347	–5,642	219
1955	14,424	–11,527	2,897	–113	–297	299	2,786	3,406	–676	2,730	–5,086	430
1956	17,556	–12,803	4,753	–221	–361	447	4,618	3,837	–735	3,102	–4,990	2,730
1957	19,562	–13,291	6,271	–423	–189	482	6,141	4,180	–796	3,384	–4,763	4,762
1958	16,414	–12,952	3,462	–849	–633	486	2,466	3,790	–825	2,965	–4,647	784
1959	16,458	–15,310	1,148	–831	–821	573	69	4,132	–1,061	3,071	–4,422	–1,282
1960	19,650	–14,758	4,892	–1,057	–964	639	3,508	4,616	–1,238	3,379	–4,062	2,824
1961	20,108	–14,537	5,571	–1,131	–978	732	4,195	4,999	–1,245	3,755	–4,127	3,822
1962	20,781	–16,260	4,521	–912	–1,152	912	3,370	5,618	–1,324	4,294	–4,277	3,387
1963	22,272	–17,048	5,224	–742	–1,309	1,036	4,210	6,157	–1,560	4,596	–4,392	4,414
1964	25,501	–18,700	6,801	–794	–1,146	1,161	6,022	6,824	–1,783	5,041	–4,240	6,823
1965	26,461	–21,510	4,951	–487	–1,280	1,480	4,664	7,437	–2,088	5,350	–4,583	5,431
1966	29,310	–25,493	3,817	–1,043	–1,331	1,497	2,940	7,528	–2,481	5,047	–4,955	3,031
1967	30,666	–26,866	3,800	–1,187	–1,750	1,742	2,604	8,021	–2,747	5,274	–5,294	2,583
1968	33,626	–32,991	635	–596	–1,548	1,759	250	9,367	–3,378	5,990	–5,629	611
1969	36,414	–35,807	607	–718	–1,763	1,964	91	10,913	–4,869	6,044	–5,735	399
1970	42,469	–39,866	2,603	–641	–2,038	2,330	2,254	11,748	–5,515	6,233	–6,156	2,331
1971	43,319	–45,579	–2,260	653	–2,345	2,649	–1,303	12,707	–5,435	7,272	–7,402	–1,433
1972	49,381	–55,797	–6,416	1,072	–3,063	2,965	–5,443	14,765	–6,572	8,192	–8,544	–5,795
1973	71,410	–70,499	911	740	–3,158	3,406	1,900	21,808	–9,655	12,153	–6,913	7,140
1974	98,306	–103,811	–5,505	165	–3,184	4,231	–4,292	27,587	–12,084	15,503	[4] –9,249	1,962
1975	107,088	–98,185	8,903	1,461	–2,812	4,854	12,404	25,351	–12,564	12,787	–7,075	18,116
1976	114,745	–124,228	–9,483	931	–2,558	5,027	–6,082	29,375	–13,311	16,063	–5,686	4,295
1977	120,816	–151,907	–31,091	1,731	–3,565	5,680	–27,246	32,354	–14,217	18,137	–5,226	–14,335
1978	142,075	–176,002	–33,927	857	–3,573	6,879	–29,763	42,088	–21,680	20,408	–5,788	–15,143
1979	184,439	–212,007	–27,568	–1,313	–2,935	7,251	–24,565	63,834	–32,961	30,873	–6,593	–285
1980	224,250	–249,750	–25,500	–1,822	–997	8,912	–19,407	72,606	–42,532	30,073	–8,349	2,317
1981	237,044	–265,067	–28,023	–844	144	12,552	–16,172	86,529	–53,626	32,903	–11,702	5,030
1982	211,157	–247,642	–36,485	112	–992	13,209	–24,156	86,200	–56,412	29,788	–17,075	–11,443
1983	201,799	–268,901	–67,102	–563	–4,227	14,124	–57,767	85,200	–53,700	31,500	–17,718	–43,985
1984	219,926	–332,418	–112,492	–2,547	–8,438	14,404	–109,073	104,756	–74,036	30,720	–20,598	–98,951
1985	215,915	–338,088	–122,173	–4,390	–9,798	14,483	–121,880	93,677	–73,087	20,590	–22,954	–124,243
1986	223,344	–368,425	–145,081	–5,181	–8,484	18,609	–140,136	91,976	–79,095	12,881	–24,833	–152,088
1987	250,208	–409,765	–159,557	–3,844	–7,613	18,097	–152,918	100,767	–91,302	9,465	–23,939	–167,392
1988	320,230	–447,189	–126,959	–6,320	–2,591	20,352	–115,518	129,070	–115,722	13,348	–26,266	–128,436
1989	362,120	–477,365	–115,245	–6,749	4,043	26,192	–91,758	152,517	–138,639	13,878	–27,696	–105,575
1990	389,307	–498,337	–109,030	–7,599	8,002	28,291	–80,336	160,300	–139,402	20,897	–35,219	–94,657
1991	416,913	–490,981	–74,068	–5,274	17,032	32,440	–29,872	137,003	–121,159	15,844	4,510	–9,518
1992	440,352	–536,458	–96,106	–1,448	20,484	38,805	–38,264	119,046	–107,851	11,195	–35,514	–62,583
1993	456,832	–589,441	–132,609	880	20,026	39,665	–72,039	119,900	–110,158	9,742	–37,640	–99,936
1994	502,463	–668,584	–166,121	1,963	16,711	43,068	–104,379	141,704	–145,863	–4,159	–39,866	–148,405
1995	575,940	–749,364	–173,424	3,585	18,361	46,415	–105,064	182,659	–190,674	–8,016	–35,075	–148,154
1994:												
I	118,462	–155,301	–36,839	–38	4,016	10,159	–22,702	31,841	–30,678	1,163	–8,169	–29,708
II	122,909	–163,993	–41,084	367	4,221	10,614	–25,882	33,287	–33,923	–636	–9,507	–36,025
III	127,237	–171,652	–44,415	1,171	3,758	11,039	–28,447	37,212	–38,801	–1,589	–9,975	–40,011
IV	133,855	–177,638	–43,783	463	4,717	11,257	–27,346	39,368	–42,462	–3,094	–12,215	–42,655
1995:												
I	138,551	–183,474	–44,923	628	3,770	11,010	–29,515	44,100	–45,000	–900	–8,639	–39,054
II	142,983	–190,910	–47,927	859	3,834	11,410	–31,824	46,779	–47,641	–862	–8,290	–40,976
III	144,984	–187,532	–42,548	1,120	5,087	12,006	–24,335	45,269	–49,630	–4,361	–8,992	–37,688
IV	149,422	–187,448	–38,026	978	5,670	11,987	–19,391	46,513	–48,403	–1,890	–9,154	–30,435
1996:												
I	150,028	–192,758	–42,730	489	5,362	12,652	–24,227	47,497	–47,235	262	–10,904	–34,869
II	153,095	–200,091	–46,996	725	5,349	12,345	–28,577	48,010	–50,274	–2,264	–9,369	–40,210
III *p*	149,937	–201,530	–51,593	710	5,077	11,972	–33,834	48,303	–53,008	–4,705	–9,422	–47,961

[1] Adjusted from Census data for differences in valuation, coverage, and timing; excludes military.
[2] Quarterly data are not seasonally adjusted.
[3] Includes transfers of goods and services under U.S. military grant programs.

See next page for continuation of table.

TABLE B–101.—*U.S. international transactions, 1946–96*—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 (+)]			Allocations of special drawing rights (SDRs)	Statistical discrepancy	
	Total	U.S. official reserve assets [2 5]	Other U.S. Government assets	U.S. private assets	Total	Foreign official assets [2]	Other foreign assets		Total (sum of the items with sign reversed)	Of which: Seasonal adjustment discrepancy
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	......	–457	......
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	[4] 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	......	5,917	......
1976	–51,269	–2,558	–4,214	–44,498	36,518	17,693	18,826	......	10,455	......
1977	–34,785	–375	–3,693	–30,717	51,319	36,816	14,503	......	–2,199	......
1978	–61,130	732	–4,660	–57,202	64,036	33,678	30,358	......	12,236	......
1979	–66,054	–1,133	–3,746	–61,176	38,752	–13,665	52,416	1,139	26,449	......
1980	–86,967	–8,155	–5,162	–73,651	58,112	15,497	42,615	1,152	25,386	......
1981	–114,147	–5,175	–5,097	–103,875	83,032	4,960	78,072	1,093	24,992	......
1982	–122,335	–4,965	–6,131	–111,239	92,418	3,593	88,826	......	41,359	......
1983	–61,573	–1,196	–5,006	–55,372	83,380	5,845	77,534	......	22,179	......
1984	–36,313	–3,131	–5,489	–27,694	113,932	3,140	110,792	......	21,331	......
1985	–39,889	–3,858	–2,821	–33,211	141,183	–1,119	142,301	......	22,950	......
1986	–106,753	312	–2,022	–105,044	226,111	35,648	190,463	......	32,729	......
1987	–72,617	9,149	1,006	–82,771	242,983	45,387	197,596	......	–2,974	......
1988	–100,087	–3,912	2,967	–99,141	240,265	39,758	200,507	......	–11,743	......
1989	–168,744	–25,293	1,259	–144,710	218,490	8,503	209,987	......	55,830	......
1990	–74,011	–2,158	2,307	–74,160	122,192	33,910	88,282	......	46,476	......
1991	–57,881	5,763	2,911	–66,555	94,241	17,389	76,853	......	–26,843	......
1992	–68,622	3,901	–1,657	–70,866	154,285	40,477	113,808	......	–23,080	......
1993	–194,609	–1,379	–342	–192,889	250,996	72,153	178,843	......	43,550	......
1994	–150,695	5,346	–341	–155,700	285,376	40,253	245,123	......	13,724	......
1995	–307,856	–9,742	–280	–297,834	424,462	109,757	314,705	......	31,548	......
1994:										
I	–36,897	–59	399	–37,237	83,235	11,036	72,199	......	–16,630	5,105
II	–28,627	3,537	491	–32,655	45,889	9,166	36,723	......	18,763	274
III	–25,569	–165	–288	–25,116	83,619	19,785	63,834	......	–18,039	–6,490
IV	–59,603	2,033	–943	–60,693	72,632	266	72,366	......	29,626	1,107
1995:										
I	–61,747	–5,318	–154	–56,275	90,995	21,822	69,173	......	9,806	6,519
II	–108,299	–2,722	–179	–105,398	115,421	37,380	78,041	......	–33,854	–266
III	–39,595	–1,893	252	–37,954	118,816	39,186	79,630	......	–41,533	–7,407
IV	–98,214	191	–199	–98,206	99,229	11,369	87,860	......	29,420	1,153
1996:										
I	–68,750	17	–152	–68,615	99,471	52,021	47,450	......	4,148	6,279
II	–50,726	–523	–353	–49,850	100,549	13,566	86,983	......	–9,613	–801
III *p*	–54,676	7,489	72	–62,237	123,999	23,642	100,357	......	–21,362	–8,699

[4] Includes extraordinary U.S. Government transactions with India.
[5] Consists of gold, special drawing rights, foreign currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–102.—*U.S. international trade in goods by principal end-use category, 1965–96*

[Billions of dollars; quarterly data seasonally adjusted]

Year or quarter	Exports							Imports						
	Total	Agricultural products	Nonagricultural products					Total	Petroleum and products	Nonpetroleum products				
			Total	Industrial supplies and materials	Capital goods except automotive	Automotive	Other			Total	Industrial supplies and materials	Capital goods except automotive	Automotive	Other
1965	26.5	6.3	20.2	7.6	8.1	1.9	2.6	21.5	2.0	19.5	9.1	1.5	0.9	8.0
1966	29.3	6.9	22.4	8.2	8.9	2.4	2.9	25.5	2.1	23.4	10.2	2.2	1.8	9.2
1967	30.7	6.5	24.2	8.5	9.9	2.8	3.0	26.9	2.1	24.8	10.0	2.5	2.4	9.9
1968	33.6	6.3	27.3	9.6	11.1	3.5	3.2	33.0	2.4	30.6	12.0	2.8	4.0	11.8
1969	36.4	6.1	30.3	10.3	12.4	3.9	3.7	35.8	2.6	33.2	11.8	3.4	4.9	13.0
1970	42.5	7.4	35.1	12.3	14.7	3.9	4.3	39.9	2.9	36.9	12.4	4.0	5.5	15.0
1971	43.3	7.8	35.5	10.9	15.4	4.7	4.5	45.6	3.7	41.9	13.8	4.3	7.4	16.4
1972	49.4	9.5	39.9	11.9	16.9	5.5	5.6	55.8	4.7	51.1	16.3	5.9	8.7	20.2
1973	71.4	18.0	53.4	17.0	22.0	6.9	7.6	70.5	8.4	62.1	19.6	8.3	10.3	23.9
1974	98.3	22.4	75.9	26.3	30.9	8.6	10.0	103.8	26.6	77.2	27.8	9.8	12.0	27.5
1975	107.1	22.2	84.8	26.8	36.6	10.6	10.8	98.2	27.0	71.2	24.0	10.2	11.7	25.3
1976	114.7	23.4	91.4	28.4	39.1	12.1	11.7	124.2	34.6	89.7	29.8	12.3	16.2	31.4
1977	120.8	24.3	96.5	29.8	39.8	13.4	13.5	151.9	45.0	106.9	35.7	14.0	18.6	38.6
1978 [1]	142.1	29.9	112.2	34.2	47.5	15.2	15.3	176.0	42.6	133.4	40.7	19.3	25.0	48.4
1979	184.4	35.5	149.0	52.2	60.2	17.9	18.7	212.0	60.4	151.6	47.5	24.6	26.6	52.8
1980	224.3	42.0	182.2	65.1	76.3	17.4	23.4	249.8	79.5	170.2	53.0	31.6	28.3	57.4
1981	237.0	44.1	193.0	63.6	84.2	19.7	25.5	265.1	78.4	186.7	56.1	37.1	31.0	62.4
1982	211.2	37.3	173.9	57.7	76.5	17.2	22.4	247.6	62.0	185.7	48.6	38.4	34.3	64.3
1983	201.8	37.1	164.7	52.7	71.7	18.5	21.8	268.9	55.1	213.8	53.7	43.7	43.0	73.3
1984	219.9	38.4	181.5	56.8	77.0	22.4	25.3	332.4	58.1	274.4	66.1	60.4	56.5	91.4
1985	215.9	29.6	186.3	54.8	79.3	24.9	27.2	338.1	51.4	286.7	62.6	61.3	64.9	97.9
1986	223.3	27.2	196.2	59.4	82.8	25.1	28.9	368.4	34.3	334.1	69.9	72.0	78.1	114.2
1987	250.2	29.8	220.4	63.7	92.7	27.6	36.4	409.8	42.9	366.8	70.8	85.1	85.2	125.7
1988	320.2	38.8	281.4	82.6	119.1	33.4	46.3	447.2	39.6	407.6	83.1	102.2	87.9	134.4
1989	362.1	42.2	319.9	91.8	138.9	34.9	54.3	477.4	50.9	426.5	84.5	112.2	87.4	142.5
1990	389.3	40.2	349.1	96.9	152.5	36.5	63.2	498.3	62.3	436.1	82.9	116.1	88.5	148.6
1991	416.9	40.1	376.8	101.7	166.5	40.0	68.6	491.0	51.7	439.2	81.2	120.8	85.7	151.5
1992	440.4	44.0	396.3	101.7	176.1	47.0	71.5	536.5	51.6	484.9	89.0	134.3	91.8	169.8
1993	456.8	43.7	413.1	105.0	182.1	52.5	73.5	589.4	51.5	538.0	101.0	152.3	102.4	182.3
1994	502.5	47.1	455.4	112.6	205.2	57.8	79.8	668.6	51.3	617.3	113.6	184.4	118.3	201.1
1995	575.9	57.2	518.7	135.5	233.8	61.8	87.6	749.4	55.1	694.3	128.7	221.4	124.8	219.3
1994: I	118.5	10.9	107.6	26.5	48.8	13.5	18.7	155.3	10.5	144.8	27.5	42.8	26.9	47.6
II	122.9	10.9	112.0	27.1	51.0	14.1	19.7	164.0	12.9	151.1	27.6	44.9	28.9	49.7
III	127.2	11.7	115.5	28.8	51.7	14.7	20.3	171.7	15.1	156.5	28.5	46.8	30.4	50.8
IV	133.9	13.5	120.4	30.2	53.7	15.4	21.0	177.6	12.8	164.9	30.0	49.8	32.0	53.1
1995: I	138.6	13.9	124.7	32.9	54.4	15.9	21.4	183.5	13.1	170.4	31.7	51.9	32.6	54.2
II	143.0	13.5	129.5	34.9	58.0	14.9	21.7	190.9	14.6	176.3	34.4	54.9	31.9	55.1
III	145.0	14.7	130.3	34.1	59.1	15.5	21.6	187.5	14.0	173.5	31.4	56.7	30.4	55.1
IV	149.4	15.2	134.3	33.6	62.3	15.5	22.9	187.4	13.4	174.1	31.3	58.0	29.8	54.9
1996: I	150.0	15.8	134.2	33.8	62.1	15.5	22.8	192.8	14.0	178.8	32.8	58.4	31.2	56.4
II	153.1	15.1	138.0	35.5	63.0	15.8	23.8	200.1	17.5	182.6	35.4	56.4	32.8	58.0
III *p*	149.9	15.0	135.0	33.5	61.1	16.5	23.8	201.5	17.9	183.7	34.2	56.3	33.9	59.2

[1] End-use categories beginning 1978 are not strictly comparable with data for earlier periods. See *Survey of Current Business,* June 1988.

Note.—Data are on an international transactions basis and exclude military.

In June 1990, end-use categories for goods exports were redefined to include reexports; beginning with data for 1978, reexports (exports of foreign goods) are assigned to detailed end-use categories in the same manner as exports of domestic goods.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–103.—*U.S. international trade in goods by area, 1987–96*

[Billions of dollars]

Item	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 first 3 quarters at annual rate [1]
EXPORTS	250.2	320.2	362.1	389.3	416.9	440.4	456.8	502.5	575.9	604.1
Industrial countries	165.6	207.3	234.2	253.8	261.3	265.1	270.6	295.2	338.1	352.8
Canada	62.0	74.3	81.1	83.5	85.9	91.4	101.2	114.8	127.6	133.4
Japan	27.6	37.2	43.9	47.8	47.2	46.9	46.7	51.8	63.1	66.9
Western Europe [2]	68.6	86.4	98.4	111.4	116.8	114.5	111.3	115.4	132.4	135.9
Australia, New Zealand, and South Africa	7.4	9.4	10.9	11.2	11.4	12.4	11.5	13.2	15.0	16.7
Australia	5.3	6.8	8.1	8.3	8.3	8.7	8.1	9.6	10.5	11.8
Other countries, except Eastern Europe	82.3	109.1	122.2	130.6	150.4	169.5	179.8	201.8	232.1	244.0
OPEC [3]	10.7	13.8	12.7	12.7	18.4	19.7	18.7	17.1	18.4	20.0
Other [4]	71.6	95.3	109.5	117.9	132.0	149.8	161.1	184.7	213.7	224.0
Eastern Europe [2]	2.3	3.8	5.5	4.3	4.8	5.6	6.2	5.3	5.7	7.2
International organizations and unallocated	....	.1	.2	.6	.4	.1	.2	.1	....	....
IMPORTS	409.8	447.2	477.4	498.3	491.0	536.5	589.4	668.6	749.4	792.5
Industrial countries	259.7	283.2	292.5	299.9	294.3	316.3	347.8	389.8	426.3	441.8
Canada	73.6	84.6	89.9	93.1	93.0	100.9	113.3	131.1	148.1	159.4
Japan	84.6	89.8	93.5	90.4	92.3	97.4	107.2	119.1	123.5	114.4
Western Europe [2]	96.1	102.6	102.4	109.2	102.0	111.4	120.9	132.9	147.7	160.5
Australia, New Zealand, and South Africa	5.4	6.2	6.6	7.3	7.0	6.6	6.4	6.7	7.1	7.4
Australia	3.0	3.5	3.9	4.4	4.1	3.7	3.3	3.2	3.4	3.6
Other countries, except Eastern Europe	148.2	161.8	182.8	196.1	194.9	218.2	238.1	272.9	316.1	344.3
OPEC [3]	24.4	23.0	29.2	37.0	33.4	32.4	32.6	31.7	35.2	41.2
Other [4]	123.8	138.8	153.6	159.1	161.5	185.8	205.4	241.2	280.9	303.1
Eastern Europe [2]	1.9	2.2	2.1	2.3	1.8	2.0	3.5	5.8	7.0	6.5
International organizations and unallocated	....	....	....	....	....	....	....	....	....	....
BALANCE (excess of exports +)	–159.6	–127.0	–115.2	–109.0	–74.1	–96.1	–132.6	–166.1	–173.4	–188.4
Industrial countries	–94.1	–75.9	–58.2	–46.1	–33.0	–51.2	–77.2	–94.6	–88.1	–89.0
Canada	–11.6	–10.3	–8.8	–9.6	–7.1	–9.5	–12.2	–16.3	–20.5	–26.1
Japan	–56.9	–52.6	–49.7	–42.6	–45.0	–50.5	–60.5	–67.3	–60.4	–47.4
Western Europe [2]	–27.5	–16.2	–4.0	2.2	14.8	3.1	–9.7	–17.6	–15.2	–24.7
Australia, New Zealand, and South Africa	2.0	3.2	4.2	3.9	4.4	5.8	5.2	6.6	7.9	9.2
Australia	2.3	3.3	4.2	3.9	4.2	5.0	4.8	6.4	7.1	8.2
Other countries, except Eastern Europe	–65.8	–52.7	–60.6	–65.5	–44.5	–48.7	–58.3	–71.1	–84.0	–100.2
OPEC [3]	–13.7	–9.2	–16.6	–24.3	–15.0	–12.7	–14.0	–14.6	–16.8	–21.2
Other [4]	–52.1	–43.5	–44.1	–41.2	–29.5	–36.0	–44.3	–56.6	–67.2	–79.1
Eastern Europe [2]	.3	1.6	3.5	2.1	3.0	3.7	2.7	–.5	–1.3	.8
International organizations and unallocated	....	.1	.2	.6	.4	.1	.2	.1	....	....

[1] Preliminary; seasonally adjusted.
[2] The former German Democratic Republic (East Germany) included in Western Europe beginning fourth quarter 1990 and in Eastern Europe prior to that time.
[3] Organization of Petroleum Exporting Countries, consisting of Algeria, Ecuador (through 1992), Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.
[4] Latin America, other Western Hemisphere, and other countries in Asia and Africa, less members of OPEC.

Note.—Data are on an international transactions basis and exclude military.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–104.—*U.S. international trade in goods on balance of payments (BOP) and Census basis, and trade in services on BOP basis, 1974–96*

[Billions of dollars; monthly data seasonally adjusted]

Year or month	Goods: Exports (f.a.s. value)[1 2]							Goods: Imports (customs value, except as noted)[5]							Services (BOP basis)	
		Census basis (by end-use category)							Census basis (by end-use category)							
	Total, BOP basis[3]	Total, Census basis[3 4]	Foods, feeds, and beverages	Industrial supplies and materials	Capital goods except automotive	Automotive vehicles, parts, and engines	Consumer goods (nonfood) except automotive	Total, BOP basis	Total, Census basis[4]	Foods, feeds, and beverages	Industrial supplies and materials	Capital goods except automotive	Automotive vehicles, parts, and engines	Consumer goods (nonfood) except automotive	Exports	Imports
		F.a.s. value[2]							F.a.s. value[2]							
1974	98.3	99.4	...	...	...	...	...	103.8	103.3	...	...	...	...	...	22.6	21.4
1975	107.1	108.9	...	...	...	...	...	98.2	99.3	...	...	...	...	...	25.5	22.0
1976	114.7	116.8	...	...	...	...	...	124.2	124.6	...	...	...	...	...	28.0	24.6
1977	120.8	123.2	...	...	...	...	...	151.9	151.5	...	...	...	...	...	31.5	27.6
1978	142.1	145.8	...	...	...	...	...	176.0	176.1	...	...	...	...	...	36.4	32.2
1979	184.4	186.4	...	...	...	...	...	212.0	210.3	...	...	...	...	...	39.7	36.7
1980	224.3	225.6	...	...	...	...	...	249.8	245.3	...	...	...	...	...	47.6	41.5
								Customs value								
1981	237.0	238.7	...	...	...	...	...	265.1	261.0	...	...	...	...	...	57.4	45.5
1982	211.2	216.4	31.3	61.7	72.7	15.7	14.3	247.6	244.0	17.1	112.0	35.4	33.3	39.7	64.1	51.7
1983	201.8	205.6	30.9	56.7	67.2	16.8	13.4	268.9	258.0	18.2	107.0	40.9	40.8	44.9	64.3	55.0
1984	219.9	224.0	31.5	61.7	72.0	20.6	13.3	332.4	[6] 330.7	21.0	123.7	59.8	53.5	60.0	71.2	67.7
1985	215.9	[7] 218.8	24.0	58.5	73.9	22.9	12.6	338.1	[6] 336.5	21.9	113.9	65.1	66.8	68.3	73.2	72.9
1986	223.3	[7] 227.2	22.3	57.3	75.8	21.7	14.2	368.4	365.4	24.4	101.3	71.8	78.2	79.4	85.9	81.0
1987	250.2	254.1	24.3	66.7	86.2	24.6	17.7	409.8	406.2	24.8	111.0	84.5	85.2	88.7	98.3	91.7
1988	320.2	322.4	32.3	85.1	109.2	29.3	23.1	447.2	441.0	24.8	118.3	101.4	87.7	95.9	110.9	99.5
1989	362.1	363.8	37.2	99.3	138.8	34.8	36.4	477.4	473.2	25.1	132.3	113.3	86.1	102.9	127.0	103.5
1990	389.3	393.6	35.1	104.4	152.7	37.4	43.3	498.3	495.3	26.6	143.2	116.4	87.3	105.7	147.5	118.8
1991	416.9	421.7	35.7	109.7	166.7	40.0	45.9	491.0	488.5	26.5	131.6	120.7	85.7	108.0	163.8	119.6
1992	440.4	448.2	40.3	109.1	175.9	47.0	51.4	536.5	532.7	27.6	138.6	134.3	91.8	122.7	177.3	119.5
1993	456.8	465.1	40.6	111.8	181.7	52.4	54.7	589.4	580.7	27.9	145.6	152.4	102.4	134.0	186.1	125.5
1994	502.5	512.6	41.9	121.4	205.2	57.6	60.0	668.6	663.3	31.0	162.0	184.4	118.3	146.3	195.8	134.1
1995	575.9	584.7	50.5	146.3	233.0	61.8	64.4	749.4	743.4	33.2	180.7	221.4	124.8	160.0	210.6	142.2
1995: Jan	44.9	45.6	3.8	11.6	17.1	5.5	5.1	61.0	60.7	2.8	14.5	17.1	11.2	13.3	16.9	11.6
Feb	45.6	46.2	4.0	11.7	18.0	5.2	5.2	59.9	59.7	2.8	14.3	17.1	10.8	13.0	16.4	11.6
Mar	48.0	48.8	4.1	12.6	19.1	5.2	5.4	62.6	61.7	2.9	15.3	17.7	10.7	13.3	17.1	11.8
Apr	47.2	47.8	4.1	12.4	18.9	5.0	5.3	63.2	62.4	2.7	15.3	18.1	11.0	13.4	17.2	11.8
May	48.1	48.8	4.0	12.4	19.4	5.1	5.5	64.1	62.9	2.7	15.8	18.2	10.6	13.6	17.4	11.9
June	47.8	48.6	3.9	12.7	19.5	4.8	5.4	63.6	62.7	2.8	15.7	18.6	10.3	13.3	17.2	11.9
July	46.6	47.3	4.1	11.9	19.1	4.8	5.2	62.5	62.3	2.7	15.2	18.8	10.0	13.4	17.8	11.9
Aug	48.7	49.5	4.5	12.1	20.0	5.1	5.5	62.2	61.9	2.7	14.8	18.8	10.2	13.4	18.1	12.1
Sept	49.7	50.3	4.7	12.4	19.8	5.6	5.4	62.9	62.7	2.8	15.3	19.0	10.2	13.4	18.4	12.0
Oct	49.5	50.3	4.4	12.5	20.3	5.2	5.5	62.6	62.2	2.8	14.7	19.5	9.6	13.4	18.0	11.8
Nov	49.8	50.6	4.4	11.9	20.7	5.1	5.5	62.1	61.8	2.7	14.9	19.2	9.9	13.1	18.2	12.0
Dec	50.1	50.9	4.5	12.1	21.2	5.2	5.5	62.7	62.5	2.7	14.8	19.3	10.3	13.2	18.0	11.8
1996: Jan	48.7	49.3	4.7	11.9	19.9	5.2	5.5	64.2	63.9	2.8	15.6	19.5	10.6	13.5	17.9	12.0
Feb	50.9	51.7	4.5	12.2	21.3	5.4	5.8	63.7	63.3	2.8	14.7	19.4	10.6	13.7	18.3	12.3
Mar	50.5	51.4	4.9	12.5	20.8	4.9	5.7	64.9	63.7	3.0	15.3	19.5	10.0	13.7	18.8	12.3
Apr	50.7	51.6	4.7	12.7	21.1	4.9	5.8	66.3	64.7	3.0	16.6	18.8	10.5	13.5	18.4	12.4
May	51.4	52.5	4.7	12.5	21.1	5.4	5.9	68.2	66.9	3.0	17.0	19.0	11.5	14.2	18.7	12.6
June	51.0	51.9	4.5	12.3	20.7	5.5	5.9	65.6	64.7	2.9	16.3	18.6	10.8	13.9	18.8	12.5
July	48.8	50.2	4.7	11.4	20.0	5.2	5.5	66.3	65.8	2.9	17.0	18.6	11.1	13.9	18.5	12.7
Aug	51.1	52.5	4.7	12.2	21.0	5.4	5.8	67.5	66.7	3.0	16.9	18.8	11.6	14.4	18.6	12.7
Sept	50.3	51.6	4.4	12.0	20.1	6.1	5.9	67.8	67.5	3.0	17.4	18.9	11.2	14.8	18.5	12.5
Oct	52.9	53.9	4.5	12.7	22.4	5.2	6.2	67.0	66.6	3.0	17.5	18.7	10.3	14.9	18.8	12.8
Nov p	52.7	54.0	5.0	12.2	22.2	5.5	6.1	67.5	67.2	3.0	16.8	19.1	11.3	14.7	19.2	12.9

[1] Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports through 1985 and included beginning 1986.
[2] F.a.s. (free alongside ship) value basis at U.S. port of exportation for exports and at foreign port of exportation for imports.
[3] Includes undocumented exports to Canada through 1988. Beginning 1989, undocumented exports to Canada are included in the appropriate end-use category.
[4] Total includes "other" exports or imports, not shown separately.
[5] Total arrivals of imported goods other than intransit shipments.
[6] Total includes revisions not reflected in detail.
[7] Total exports are on a revised statistical month basis; end-use categories are on a statistical month basis.

Note.—Goods on a Census basis are adjusted to a BOP basis by the Bureau of Economic Analysis, in line with concepts and definitions used to prepare international and national accounts. The adjustments are necessary to supplement coverage of Census data, to eliminate duplication of transactions recorded elsewhere in international accounts, and to value transactions according to a standard definition.

Data include trade of the U.S. Virgin Islands.

Source: Department of Commerce (Bureau of the Census and Bureau of Economic Analysis).

TABLE B–105.—*International investment position of the United States at year-end, 1987–95*

[Billions of dollars]

Type of investment	1987	1988	1989	1990	1991	1992	1993	1994	1995
NET INTERNATIONAL INVESTMENT POSITION OF THE UNITED STATES:									
With direct investment at current cost	–11.1	–134.5	–250.3	–251.1	–355.1	–512.8	–503.5	–580.1	–814.0
With direct investment at market value	71.3	14.8	–77.1	–211.7	–349.0	–568.4	–412.5	–492.5	–773.7
U.S. ASSETS ABROAD:									
With direct investment at current cost	1,637.1	1,784.1	1,979.3	2,066.4	2,131.7	2,146.4	2,437.6	2,546.2	2,931.9
With direct investment at market value	1,722.3	1,949.7	2,251.4	2,178.1	2,315.0	2,285.6	2,750.3	2,825.8	3,352.9
U.S. official reserve assets	162.4	144.2	168.7	174.7	159.2	147.4	164.9	163.4	176.1
Gold [1]	127.6	107.4	105.2	102.4	92.6	87.2	102.6	100.1	101.3
Special drawing rights	10.3	9.6	10.0	11.0	11.2	8.5	9.0	10.0	11.0
Reserve position in the International Monetary Fund	11.3	9.7	9.0	9.1	9.5	11.8	11.8	12.0	14.6
Foreign currencies	13.1	17.4	44.6	52.2	45.9	40.0	41.5	41.2	49.1
U.S. Government assets other than official reserves	88.9	86.1	84.5	82.0	79.1	80.7	80.9	81.3	81.5
U.S. credits and other long-term assets	88.1	85.4	83.9	81.4	77.4	79.0	79.0	79.2	79.6
Repayable in dollars	86.5	83.9	82.4	80.0	76.2	77.9	78.0	78.3	78.8
Other	1.6	1.5	1.5	1.3	1.2	1.1	1.0	.9	.8
U.S. foreign currency holdings and U.S. short-term assets	.8	.7	.6	.6	1.6	1.6	1.9	2.1	2.0
U.S. private assets:									
With direct investment at current cost	1,385.9	1,553.8	1,726.1	1,809.7	1,893.4	1,918.3	2,191.7	2,301.5	2,674.3
With direct investment at market value	1,471.0	1,719.4	1,998.2	1,921.5	2,076.7	2,057.5	2,504.4	2,581.2	3,095.3
Direct investment abroad:									
At current cost	505.1	526.8	560.4	620.0	644.3	659.4	714.8	779.3	880.1
At market value	590.2	692.5	832.5	731.8	827.5	798.6	1,027.5	1,058.9	1,301.1
Foreign securities	154.0	176.0	217.6	228.7	302.4	336.5	550.6	556.2	721.7
Bonds	84.3	90.0	97.8	118.7	143.6	156.8	247.8	232.3	310.7
Corporate stocks	69.6	86.0	119.9	110.0	158.8	179.7	302.8	324.0	411.1
U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	177.4	197.8	234.3	265.3	256.3	254.3	242.0	273.7	311.1
U.S. claims reported by U.S. banks, not included elsewhere	549.5	653.2	713.8	695.7	690.4	668.0	684.2	692.3	761.3
FOREIGN ASSETS IN THE UNITED STATES:									
With direct investment at current cost	1,648.2	1,918.6	2,229.7	2,317.5	2,486.8	2,659.2	2,941.2	3,126.3	3,745.9
With direct investment at market value	1,650.9	1,935.0	2,328.5	2,389.8	2,664.0	2,854.0	3,162.9	3,318.3	4,126.6
Foreign official assets in the United States	283.1	322.0	341.9	375.3	401.7	442.8	516.6	546.0	677.9
U.S. Government securities	220.5	260.9	263.7	295.0	315.9	335.7	388.3	415.0	498.9
U.S. Treasury securities	213.7	253.0	257.3	287.9	307.1	323.0	371.2	393.4	471.5
Other	6.8	8.0	6.4	7.1	8.8	12.7	17.1	21.6	27.4
Other U.S. Government liabilities	15.7	15.2	15.4	17.2	18.6	20.8	22.5	24.9	25.9
U.S. liabilities reported by U.S. banks, not included elsewhere	31.8	31.5	36.5	39.9	38.4	55.0	69.7	73.3	106.1
Other foreign official assets	15.0	14.4	26.3	23.2	28.7	31.3	36.1	32.9	46.9
Other foreign assets in the United States:									
With direct investment at current cost	1,365.1	1,596.6	1,887.8	1,942.2	2,085.1	2,216.4	2,424.6	2,580.3	3,068.0
With direct investment at market value	1,367.9	1,612.9	1,986.6	2,014.4	2,262.3	2,411.2	2,646.3	2,772.3	3,448.7
Direct investment in the United States:									
At current cost	313.5	375.2	435.9	467.3	491.9	499.4	539.2	579.8	638.5
At market value	316.2	391.5	534.7	539.6	669.1	694.2	760.9	771.9	1,019.2
U.S. Treasury securities	82.6	100.9	166.5	162.4	189.5	225.1	253.9	266.6	388.9
U.S. securities other than U.S. Treasury securities	341.7	392.3	482.9	467.4	559.2	620.2	730.6	752.8	998.6
Corporate and other bonds	166.1	191.3	231.7	245.7	287.3	319.8	389.9	413.9	533.2
Corporate stocks	175.6	201.0	251.2	221.7	271.9	300.4	340.6	338.9	465.4
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	110.2	144.5	167.1	213.4	208.9	220.7	229.0	197.3	232.9
U.S. liabilities reported by U.S. banks, not included elsewhere	517.2	583.7	635.5	631.6	635.6	651.0	671.9	783.7	809.0

[1] Valued at market price.

Note.—For details regarding these data, see *Survey of Current Business*, June issues 1991–1995 and July 1996.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–106.—*Industrial production and consumer prices, major industrial countries, 1970–96*

Year or quarter	United States	Canada	Japan	European Union[1]	France	Germany[2]	Italy	United Kingdom
	Industrial production (1987=100)[3]							
1970	61.4	59.0	54.5	71.5	72	75.5	68.3	78.4
1971	62.2	62.3	56.0	73.1	77	77.0	68.0	78.0
1972	68.3	67.8	60.1	76.9	81	79.9	70.8	79.4
1973	73.8	75.8	69.0	82.8	87	85.0	77.7	86.6
1974	72.7	77.3	66.3	84.1	90	84.8	81.2	84.7
1975	66.3	71.6	59.3	78.7	83	79.6	73.7	80.1
1976	72.4	76.5	65.9	84.4	90	86.8	82.9	82.8
1977	78.2	79.0	68.6	86.3	92	88.0	83.8	87.1
1978	82.6	81.8	73.0	88.2	94	90.4	85.4	89.5
1979	85.7	85.7	78.2	92.4	99.9	94.7	91.1	93.1
1980	84.1	82.8	81.8	92.9	99.9	95.0	96.2	87.0
1981	85.7	84.5	82.6	91.3	99.3	93.2	94.7	84.2
1982	81.9	76.2	83.0	89.9	98.3	90.3	91.7	85.8
1983	84.9	81.2	85.5	90.6	97.5	90.9	88.9	88.9
1984	92.8	91.0	93.5	92.7	98.1	93.5	91.8	89.0
1985	94.4	96.1	96.9	95.8	98.1	97.7	92.9	93.9
1986	95.3	95.3	96.7	97.9	98.8	99.6	96.2	96.2
1987	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1988	104.4	105.3	109.4	104.4	104.6	103.9	105.9	104.8
1989	106.0	105.2	115.7	108.5	108.5	108.8	109.2	107.0
1990	106.0	101.7	120.6	110.7	110.1	114.5	109.4	106.7
1991	104.2	97.4	122.9	110.5	108.7	117.8	108.4	102.8
1992	107.7	98.5	115.8	109.1	107.5	115.8	108.2	102.7
1993	111.5	102.9	111.0	105.5	103.4	107.1	105.5	104.9
1994	118.1	110.1	112.3	110.9	107.3	110.4	111.0	110.1
1995	121.9	113.8	116.0	114.7	109.0	111.5	117.0	113.0
1996 p	125.8	...	...	...	...	...	...	...
1995: I	121.8	114.4	116.0	113.8	109.4	110.6	115.2	112.3
II	121.4	113.5	116.3	114.6	109.4	112.2	116.5	112.7
III	122.3	113.9	114.7	115.1	109.8	112.2	120.4	113.6
IV	122.5	113.6	117.0	114.7	107.9	110.3	118.9	113.5
1996: I	123.4	114.0	117.7	113.8	108.7	110.4	115.9	113.7
II	125.4	114.4	117.4	114.5	108.9	111.5	115.0	113.8
III	126.8	116.3	118.9	115.8	110.9	112.6	114.4	114.3
IV p	128.1	...	...	...	...	...	...	...
	Consumer prices (1982–84=100)							
1970	38.8	35.1	38.5	27.3	28.8	52.8	17.1	21.8
1971	40.5	36.1	40.9	28.9	30.4	55.6	17.9	23.8
1972	41.8	37.9	42.9	30.8	32.2	58.7	19.0	25.5
1973	44.4	40.8	47.9	33.5	34.5	62.8	20.9	27.9
1974	49.3	45.2	59.0	38.0	39.3	67.1	25.0	32.3
1975	53.8	50.1	65.9	43.4	43.9	71.1	29.3	40.2
1976	56.9	53.8	72.2	48.6	48.2	74.2	34.1	46.8
1977	60.6	58.1	78.1	54.5	52.7	76.9	40.3	54.2
1978	65.2	63.3	81.4	59.4	57.5	79.0	45.3	58.7
1979	72.6	69.1	84.4	65.6	63.7	82.2	52.4	66.6
1980	82.4	76.1	90.9	74.3	72.3	86.7	63.5	78.5
1981	90.9	85.6	95.3	83.5	82.0	92.2	75.3	87.9
1982	96.5	94.9	98.1	92.3	91.6	97.1	87.7	95.4
1983	99.6	100.4	99.8	100.2	100.5	100.3	100.8	99.8
1984	103.9	104.8	102.1	107.4	107.9	102.7	111.5	104.8
1985	107.6	108.9	104.1	114.0	114.2	104.8	121.1	111.1
1986	109.6	113.4	104.8	118.2	117.2	104.7	128.5	114.9
1987	113.6	118.4	104.8	122.0	120.9	104.9	134.4	119.7
1988	118.3	123.2	105.6	126.5	124.2	106.3	141.1	125.6
1989	124.0	129.3	108.1	133.2	128.6	109.2	150.4	135.4
1990	130.7	135.5	111.4	140.8	133.0	112.2	159.5	148.2
1991	136.2	143.1	115.0	148.1	137.2	116.2	169.8	156.9
1992	140.3	145.2	116.9	154.7	140.6	120.9	178.8	162.7
1993	144.5	147.9	118.4	160.2	143.5	125.2	186.3	165.3
1994	148.2	148.2	119.3	165.0	145.9	128.6	193.6	169.3
1995	152.4	151.4	119.1	170.2	148.4	130.8	204.0	175.2
1996 p	156.9	153.7	...	...	151.5	132.6	...	179.4
1995: I	150.9	150.4	119.1	168.2	147.4	130.1	199.6	172.5
II	152.2	151.5	119.4	170.0	148.2	130.8	203.4	175.6
III	152.9	151.8	119.1	170.7	148.6	131.3	205.4	176.1
IV	153.6	151.9	119.0	171.6	149.5	131.1	208.0	176.4
1996: I	155.0	152.5	118.7	172.9	150.5	131.9	209.6	177.3
II	156.5	153.7	119.5	174.5	151.7	132.6	212.1	179.6
III	157.4	153.9	119.3	174.8	151.4	133.1	212.6	179.9
IV p	158.5	154.9	...	...	152.0	133.0	...	181.0

[1] Consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom.
[2] Data are for West Germany only.
[3] All data exclude construction. Quarterly data are seasonally adjusted.

Sources: National sources as reported by Department of Commerce (International Trade Administration, Office of Trade and Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Board of Governors of the Federal Reserve System.

TABLE B–107.—*Civilian unemployment rate, and hourly compensation, major industrial countries, 1970–96*

[Quarterly data seasonally adjusted]

Year or quarter	United States	Canada	Japan	France	Germany[1]	Italy	United Kingdom
	Civilian unemployment rate (percent)[2]						
1970	4.9	5.7	1.2	2.5	0.5	3.2	3.1
1971	5.9	6.2	1.3	2.8	.6	3.3	3.9
1972	5.6	6.2	1.4	2.9	.7	3.8	4.2
1973	4.9	5.5	1.3	2.8	.7	3.7	3.2
1974	5.6	5.3	1.4	2.9	1.6	3.1	3.1
1975	8.5	6.9	1.9	4.2	3.4	3.4	4.6
1976	7.7	7.2	2.0	4.6	3.4	3.9	5.9
1977	7.1	8.1	2.0	5.2	3.4	4.1	6.4
1978	6.1	8.4	2.3	5.4	3.3	4.1	6.3
1979	5.8	7.5	2.1	6.1	2.9	4.4	5.4
1980	7.1	7.5	2.0	6.5	2.8	4.4	7.0
1981	7.6	7.6	2.2	7.6	4.0	4.9	10.5
1982	9.7	11.0	2.4	8.3	5.6	5.4	11.3
1983	9.6	11.9	2.7	8.6	[3]6.9	5.9	11.8
1984	7.5	11.3	2.8	10.0	7.1	5.9	11.8
1985	7.2	10.5	2.6	10.5	7.2	6.0	11.2
1986	7.0	9.6	2.8	10.6	6.6	[3]7.5	11.2
1987	6.2	8.9	2.9	10.8	6.3	7.9	10.3
1988	5.5	7.8	2.5	10.3	6.3	7.9	8.6
1989	5.3	7.5	2.3	9.6	5.7	7.8	7.3
1990	[3]5.6	8.1	2.1	9.1	5.0	7.0	7.0
1991	6.8	10.4	2.1	9.6	p4.3	[3]6.9	8.9
1992	7.5	11.3	2.2	[3]10.4	p4.6	p7.3	10.1
1993	6.9	11.2	2.5	11.8	p5.7	[3]p10.2	10.5
1994	[3]6.1	10.4	2.9	12.3	p6.5	p11.3	p9.6
1995	5.6	9.5	3.2	11.7	p6.5	p12.0	p8.8
1996	5.4	9.7	....	....	....	....	....
1995: I	5.5	9.7	3.0	11.9	6.5	12.0	8.9
II	5.6	9.5	3.2	11.6	6.5	12.1	8.8
III	5.7	9.5	3.2	11.5	6.6	11.9	8.8
IV	5.6	9.4	3.4	11.7	6.7	11.9	8.6
1996: I	5.6	9.5	3.3	12.2	7.0	12.0	8.4
II	5.4	9.6	3.5	12.5	7.1	12.5	8.4
III	5.3	9.7	3.4	12.7	7.2	11.9	8.1
IV	5.3	9.9	....	....	....	....	....
	Manufacturing hourly compensation in U.S. dollars (1992=100)[4]						
1970	23.8	21.2	5.8	10.1	8.9	9.1	8.8
1971	25.3	23.6	6.9	11.3	10.4	10.6	10.3
1972	26.6	25.8	9.2	13.7	12.6	12.6	12.2
1973	28.6	27.7	12.5	17.8	17.1	14.9	13.6
1974	31.8	32.6	15.3	19.4	20.0	17.4	15.7
1975	35.7	35.8	17.5	26.7	23.1	21.9	19.8
1976	38.6	42.3	18.8	27.5	24.3	21.4	18.6
1977	42.0	43.5	23.0	30.3	28.8	23.8	20.3
1978	45.4	43.6	31.5	37.3	35.9	28.5	26.1
1979	49.8	46.8	32.0	44.7	42.2	35.3	34.3
1980	55.8	51.8	32.9	51.9	46.2	40.3	45.3
1981	61.3	58.2	36.1	46.6	39.5	36.6	45.8
1982	67.2	62.5	33.5	45.8	38.7	36.2	43.5
1983	69.0	66.4	36.1	43.6	38.7	37.8	40.5
1984	71.4	66.1	37.2	41.3	36.3	37.5	38.6
1985	75.3	66.0	38.5	43.5	37.2	38.8	41.0
1986	78.6	67.4	57.3	58.8	52.5	51.7	50.3
1987	80.8	72.7	68.3	70.2	66.3	62.8	62.5
1988	84.0	81.8	78.4	73.5	70.5	65.0	72.3
1989	86.7	88.2	77.3	72.4	69.0	67.8	69.9
1990	90.9	94.5	79.3	89.3	86.0	86.3	84.5
1991	95.7	102.4	90.3	90.3	89.3	92.5	93.5
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	102.4	93.7	119.3	96.8	100.1	83.9	89.5
1994	105.1	90.6	132.6	101.4	106.4	81.4	93.1
1995	109.0	91.3	148.8	114.6	126.6	83.0	99.1

[1] Data are for West Germany only.

[2] Civilian unemployment rates, approximating U.S. concepts. Quarterly data for France and Germany should be viewed as less precise indicators of unemployment under U.S. concepts than the annual data.

[3] There are breaks in the series for Germany (1983), France (1992), Italy (1986, 1991, and 1993), and United States (1990 and 1994). Based on the prior series, the rate for Germany was 7.2 percent in 1983, the rate for France was 10.5 in 1992, 11.9 in 1993, 12.7 in 1994 and 12.3 in 1995, and the rate for Italy was 6.3 percent in 1986 and 6.6 in 1991. The break in 1993 raised Italy's rate by approximately 1 percentage point. For details on break in series in 1990 and 1994 for United States, see footnote 5, Table B–33.

[4] 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, Canada, Japan, France, and Germany, and to all employees (wage and salary earners) in the other countries. For France and United Kingdom, compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–108.—*Foreign exchange rates, 1970–96*

[Currency units per U.S. dollar, except as noted]

Period	Belgium (franc)	Canada (dollar)	France (franc)	Germany (mark)	Italy (lira)	Japan (yen)
March 1973	39.408	0.9967	4.5156	2.8132	568.17	261.90
1970	49.656	1.0444	5.5288	3.6465	627.12	358.16
1971	48.598	1.0099	5.5100	3.4830	618.34	347.79
1972	44.020	.9907	5.0444	3.1886	583.70	303.13
1973	38.955	1.0002	4.4535	2.6715	582.41	271.31
1974	38.959	.9780	4.8107	2.5868	650.81	291.84
1975	36.800	1.0175	4.2877	2.4614	653.10	296.78
1976	38.609	.9863	4.7825	2.5185	833.58	296.45
1977	35.849	1.0633	4.9161	2.3236	882.78	268.62
1978	31.495	1.1405	4.5091	2.0097	849.13	210.39
1979	29.342	1.1713	4.2567	1.8343	831.11	219.02
1980	29.238	1.1693	4.2251	1.8175	856.21	226.63
1981	37.195	1.1990	5.4397	2.2632	1138.58	220.63
1982	45.781	1.2344	6.5794	2.4281	1354.00	249.06
1983	51.123	1.2325	7.6204	2.5539	1519.32	237.55
1984	57.752	1.2952	8.7356	2.8455	1756.11	237.46
1985	59.337	1.3659	8.9800	2.9420	1908.88	238.47
1986	44.664	1.3896	6.9257	2.1705	1491.16	168.35
1987	37.358	1.3259	6.0122	1.7981	1297.03	144.60
1988	36.785	1.2306	5.9595	1.7570	1302.39	128.17
1989	39.409	1.1842	6.3802	1.8808	1372.28	138.07
1990	33.424	1.1668	5.4467	1.6166	1198.27	145.00
1991	34.195	1.1460	5.6468	1.6610	1241.28	134.59
1992	32.148	1.2085	5.2935	1.5618	1232.17	126.78
1993	34.581	1.2902	5.6669	1.6545	1573.41	111.08
1994	33.426	1.3664	5.5459	1.6216	1611.49	102.18
1995	29.472	1.3725	4.9864	1.4321	1629.45	93.96
1996	30.968	1.3638	5.1158	1.5049	1542.76	108.78
1995: I	30.418	1.4073	5.1539	1.4756	1643.04	95.87
II	28.749	1.3714	4.9202	1.3978	1666.46	84.50
III	29.461	1.3557	4.9474	1.4321	1609.96	94.25
IV	29.286	1.3560	4.9269	1.4238	1597.47	101.54
1996: I	30.206	1.3691	5.0379	1.4694	1572.47	105.83
II	31.274	1.3647	5.1557	1.5216	1555.26	107.46
III	30.845	1.3705	5.0930	1.4973	1521.33	108.97
IV	31.540	1.3508	5.1763	1.5312	1522.27	112.91

Period	Netherlands (guilder)	Sweden (krona)	Switzerland (franc)	United Kingdom (pound) [1]	Multilateral trade-weighted value of the U.S. dollar (March 1973=100)	
					Nominal	Real [2]
March 1973	2.8714	4.4294	3.2171	2.4724	100.0	100.0
1970	3.6166	5.1862	4.3106	2.3959	121.1	....
1971	3.4953	5.1051	4.1171	2.4442	117.8	....
1972	3.2098	4.7571	3.8186	2.5034	109.1	....
1973	2.7946	4.3619	3.1688	2.4525	99.1	98.8
1974	2.6879	4.4387	2.9805	2.3403	101.4	99.3
1975	2.5293	4.1531	2.5839	2.2217	98.5	94.0
1976	2.6449	4.3580	2.5002	1.8048	105.7	97.5
1977	2.4548	4.4802	2.4065	1.7449	103.4	93.3
1978	2.1643	4.5207	1.7907	1.9184	92.4	84.3
1979	2.0073	4.2893	1.6644	2.1224	88.1	83.2
1980	1.9875	4.2310	1.6772	2.3246	87.4	84.9
1981	2.4999	5.0660	1.9675	2.0243	103.4	100.9
1982	2.6719	6.2839	2.0327	1.7480	116.6	111.7
1983	2.8544	7.6718	2.1007	1.5159	125.3	117.3
1984	3.2085	8.2708	2.3500	1.3368	138.2	128.8
1985	3.3185	8.6032	2.4552	1.2974	143.0	132.4
1986	2.4485	7.1273	1.7979	1.4677	112.2	103.6
1987	2.0264	6.3469	1.4918	1.6398	96.9	90.8
1988	1.9778	6.1370	1.4643	1.7813	92.7	88.2
1989	2.1219	6.4559	1.6369	1.6382	98.6	94.4
1990	1.8215	5.9231	1.3901	1.7841	89.1	86.0
1991	1.8720	6.0521	1.4356	1.7674	89.8	86.5
1992	1.7587	5.8258	1.4064	1.7663	86.6	83.4
1993	1.8585	7.7956	1.4781	1.5016	93.2	90.0
1994	1.8190	7.7161	1.3667	1.5319	91.3	88.7
1995	1.6044	7.1406	1.1812	1.5785	84.2	82.5
1996	1.6863	6.7082	1.2361	1.5607	87.3	86.2
1995: I	1.6548	7.3774	1.2389	1.5833	86.3	84.4
II	1.5651	7.3040	1.1560	1.5962	82.3	80.4
III	1.6043	7.1815	1.1803	1.5733	84.1	82.3
IV	1.5947	6.6936	1.1505	1.5606	84.4	82.9
1996: I	1.6451	6.7817	1.1914	1.5305	86.4	84.8
II	1.7022	6.7327	1.2428	1.5237	88.0	86.6
III	1.6797	6.6341	1.2227	1.5539	87.1	86.1
IV	1.7179	6.6858	1.2875	1.6359	87.9	87.3

[1] Value is U.S. dollars per pound.
[2] Adjusted by changes in consumer prices.

Note.—Certified noon buying rates in New York.

Source: Board of Governors of the Federal Reserve System.

TABLE B–109.—*International reserves, selected years, 1952–96*

[Millions of SDRs; end of period]

Area and country	1952	1962	1972	1982	1992	1994	1995	1996 Oct	1996 Nov
All countries	49,388	62,851	146,658	361,239	725,852	855,932	980,846	1,100,535	....
Industrial countries [1]	39,280	53,502	113,362	214,025	424,229	460,700	514,121	577,923	....
United States	24,714	17,220	12,112	29,918	52,995	52,510	59,467	53,763	....
Canada	1,944	2,561	5,572	3,439	8,662	8,552	10,243	13,849	13,920
Australia	920	1,168	5,656	6,053	8,429	8,007	8,279	9,455	9,520
Japan	1,101	2,021	16,916	22,001	52,937	87,062	124,125	149,503	150,271
New Zealand	183	251	767	577	2,239	2,540	2,967	4,313	....
Austria	116	1,081	2,505	5,544	9,703	12,165	13,020	16,042	15,902
Belgium	1,133	1,753	3,564	4,757	10,914	10,382	11,601	12,812	12,706
Denmark	150	256	787	2,111	8,090	6,260	7,468	10,471	10,005
Finland	132	237	664	1,420	3,862	7,374	6,809	5,014	4,973
France	686	4,049	9,224	17,850	22,522	20,851	20,930	21,459	....
Germany	960	6,958	21,908	43,909	69,489	56,325	60,517	62,690	63,105
Greece	94	287	950	916	3,606	10,045	10,064	12,676	13,468
Iceland	8	32	78	133	364	202	209	259	....
Ireland	318	359	1,038	2,390	2,514	4,201	5,818	7,167	6,122
Italy	722	4,068	5,605	15,108	22,438	24,435	25,815	37,847	35,722
Netherlands	953	1,943	4,407	10,723	17,492	24,872	23,897	20,756	20,521
Norway	164	304	1,220	6,273	8,725	13,074	15,190	21,187	....
Portugal	603	680	2,129	1,179	14,474	11,189	11,225	11,467	....
Spain	134	1,045	4,618	7,450	33,640	29,006	23,746	38,095	39,630
Sweden	504	802	1,453	3,397	16,667	16,141	16,348	15,375	....
Switzerland	1,667	2,919	6,961	16,930	27,100	26,704	27,411	26,924	26,691
United Kingdom	1,956	3,308	5,201	11,904	27,300	28,739	28,910	....	....
Developing countries: Total [2]	9,648	9,349	33,295	147,213	301,623	395,231	466,725	522,611	....
By area:									
Africa	1,786	2,110	3,962	7,737	12,874	16,530	17,490	19,528	....
Asia [2]	3,793	2,772	8,130	44,490	164,472	229,514	253,464	286,656	....
Europe	269	381	2,680	5,359	15,354	30,695	57,397	61,139	....
Middle East	1,183	1,805	9,436	64,039	44,149	46,339	50,750	54,551	....
Western Hemisphere	2,616	2,282	9,089	25,563	64,774	72,152	87,623	100,737	....
Memo:									
Oil-exporting countries	1,699	2,030	9,956	67,108	46,144	44,445	44,689	51,411	....
Non-oil developing countries [2]	7,949	7,319	23,339	80,105	255,480	350,786	422,036	471,200	....

[1] Includes data for Luxembourg.
[2] Includes data for Taiwan Province of China.

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.

U.S. dollars per SDR (end of period) are: 1952 and 1962—1.00000; 1972—1.08571; 1982—1.10311; 1992—1.37500; 1994—1.45985; 1995—1.48649; October 1996—1.44623; and November 1996—1.44462.

Source: International Monetary Fund, *International Financial Statistics.*

TABLE B–110.—*Growth rates in real gross domestic product, 1978–96*

[Percent change at annual rate]

Area and country	1978–87	1988	1989	1990	1991	1992	1993	1994	1995	1996[1]
World	3.3	4.7	3.7	2.6	1.5	2.4	2.4	3.7	3.5	3.8
Industrial countries	2.7	4.3	3.6	2.5	.8	1.7	.9	2.8	2.1	2.3
United States	2.8	3.8	3.4	1.3	–1.0	2.7	2.3	3.5	2.0	2.4
Canada	3.2	5.0	2.4	–.2	–1.8	.8	2.2	4.1	2.3	1.4
Japan	3.7	6.2	4.8	5.1	4.0	1.1	.1	.5	.9	3.5
European Union	2.1	4.2	3.5	3.0	1.6	1.0	–.5	2.8	2.5	1.6
France	2.1	4.4	4.3	2.5	.8	1.2	–1.3	2.8	2.2	1.3
Germany[2]	1.8	3.7	3.6	5.7	5.0	2.2	–1.1	2.9	1.9	1.3
Italy	2.7	4.1	2.9	2.1	1.2	.7	–1.2	2.2	3.0	1.1
United Kingdom[3]	2.3	5.0	2.2	.4	–2.0	–.5	2.1	3.9	2.5	2.2
Developing countries	4.5	5.4	4.3	4.3	5.1	6.4	6.3	6.6	5.9	6.3
Africa	2.1	4.1	3.4	1.8	1.8	.8	.9	2.9	3.0	5.0
Asia	6.8	9.1	6.2	5.9	6.9	8.8	8.7	9.1	8.6	8.0
Middle East and Europe	2.5	.4	2.7	5.3	3.5	6.2	4.2	.5	3.6	3.9
Western Hemisphere	3.1	1.1	1.6	1.1	3.3	2.8	3.2	4.7	.9	3.0
Countries in transition	3.0	4.2	2.1	–3.7	–11.5	–14.7	–8.5	–8.8	–1.3	.4
Central and eastern Europe	....	....	....	....	–10.8	–9.9	–4.9	–2.9	1.2	1.6
Russia, Transcaucasus, and central Asia	....	....	....	....	–12.0	–18.7	–11.7	–14.8	–4.1	–.9

[1] All figures are forecasts as published by the International Monetary Fund.
[2] Through 1991 data are for West Germany only.
[3] Average of expenditure, income, and output estimates of GDP at market prices.

Sources: Department of Commerce (Bureau of Economic Analysis) and International Monetary Fund.